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Evaluating Crisis Management Performance of Turkish School Administrations: Covid-19 Pandemic

Türk Okul Yönetimlerinin Kriz Yönetme Performansının Değerlendirilmesi: Covid-19 Pandemisi

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ABSTRACT: In this study, the crisis management performance of the Turkish Education System and School Administration in the case of the Covid-19 Pandemic was evaluated by considering the importance of post-crisis evaluation and research gap. For this purpose, qualitative (N=17) and quantitative (N=444) data of the experiences and opinions of school administrators working in formal compulsory schools selected by purposeful, random and available sampling techniques from different provinces representing first-level statistical regions were evaluated. Crisis management performance evaluation criteria, which were created by a literature review, were utilized in the evaluation. Semi-structured interviews and questionnaires were used to collect data. We implemented both content analysis and descriptive statistics in line with the mixed method exploratory sequential research design. We first carried out the content analysis then, we investigated the prevalence of the matter by surveying. At the last phase of the analysis, we synthesized the qualitative and quantitative results. At the end of the study, it was observed that the crisis management practices of the Turkish Education System were not based on a long-term foresight, no preliminary preparation was made, and the problems in performing the basic functions during the crisis could not be completely resolved. For this reason, it has been concluded that the performance of the Turkish Education System and school administrations in managing the crisis is low.

Keywords: School administration, crisis management, exploratory sequential mixed method.

ÖZ: Kriz sonrası değerlendirmenin önemi ve araştırma boşluğu dikkate alınarak bu çalışmada Covid-19 Salgını örneğinde Türk Eğitim Sistemi ve okul yönetiminin kriz yönetim performansının değerlendirilmesi amaçlanmıştır. Bu amaç doğrultusunda istatistiki bölge birimleri birinci düzey sınıflamasına göre farklı illerden çoklu örneklemeyle ulaşılan zorunlu örgün öğretim okullarında görev yapan okul yöneticilerinin deneyimleri ve görüşlerinden karma yöntemle elde edilen nitel (N=17) ve nicel (N=444) veriler değerlendirilmiştir. Değerlendirmede, alanyazın derlemesiyle oluşturulan kriz yönetimi performansı değerlendirme ölçütlerinden yararlanılmıştır. Verilerin toplanmasında yapılandırılmış görüşme ve anket kullanılmıştır. Karma yöntemin keşfedici sıralı deseni doğrultusunda hem içerik analizi yapılmış hem de betimsel istatistikler hesaplanmıştır. Önce içerik analizi gerçekleştirilmiş, ardından nitel bulgulara dayalı olarak durumun yaygınlığını gösteren tanımlayıcı istatistikler hesaplanmıştır. Analizin son aşamasında nitel ve nicel sonuçlar sentezlenmiştir. Çalışmada, Türk Eğitim Sisteminin kriz yönetme uygulamalarının uzun erimli bir öngörüye dayanmadığı, ön hazırlık yapılmadığı, kriz esnasında temel işlevlerin gerçekleştirilmesindeki sorunların tam çözülemediği gözlemlenmiştir. Bu nedenle Türk Eğitim Sistemi ve okul idarelerinin krizi yönetme performansının iyileştirilmesi gerektiği sonucuna ulaşılmıştır.

Anahtar kelimeler: Okul yönetimi, kriz yönetimi, keşfedici sıralı karma yöntem.

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Crisis management performance of education systems has been tested with the Covid-19 Pandemic. In this process, school administrators gained significant experience as actors in the field of crisis management. Under the effect of the central organization's directions and interventions, each school had to initiate to educate students and to prevent them from poor learning in line with the basic functions of the education system. This process forced the school administrators to perform leadership. In order to get valid and reliable information about crisis management performance and to take lessons for improvement, the experiences of school administrators should be examined. Taking into account the reflection in the field and the research gap, this study aimed at evaluating the experiences of school administrators in the C19 case in terms of crisis management criteria.

Crisis Management

The crisis is defined as unplanned and unexpected changes that cause disruptions in basic functions. The crisis can occur on a personal, organizational, regional, national or international level. It can transform individuals, institutions, and systems into inability to perform their basic functions for various reasons such as natural disasters, epidemics, wars or fires. In the event of a crisis, it has to be managed effectively to overcome its negative effects (Drucker, 2008; Kıral, 2019; Schermerhorn, 2012).

Crisis management aims to make the crisis-stride organism or organization able to perform its basic functions again. There are three stages of good crisis management before, during and after the crisis. Before a crisis, small signals provide preliminary information about the crisis. Crisis management requires taking precautions by estimating the probabilities of crises before they occur. The most effective way to intervene in the crisis is to prepare before the crisis (Drucker, 2008; Özalp & Levent, 2021). In this context, education administrators have to keep communication channels open and activate the information management system in order to be informed about the events taking place within the education system and the events taking place outside the system. Identifying trends and designing future scenarios by monitoring events inside and outside the organization is a phase of crisis management. In the pre-crisis period, behavioural models should be developed, introduced and practiced according to possible scenarios. When small notifications about the crisis are ignored and no action is taken, the crisis is created. In other words, the crisis is the result of negligence. Drucker (2008) emphasizes that continuing with traditional management approaches and structures in a constantly changing environment will cause crisis. The decrease in the organization's ability to change and adapt is a signal of the crisis.

Crises involve situations of uncertainty that lead organizational structures (units) to act autonomously. For this reason, the ability of the units to act autonomously and lead when necessary in the organizational process constitutes a dimension of crisis management. One of the pre-crisis measures is the transformation of an organizational structure to deal with the crisis. In such a structuring, instead of a rigid, centralized, hierarchical and bureaucratic organization, it is suggested to create an organizational structure supporting multi-directional communication, flexibility, reliability, autonomy, accountability and leadership (Aksoy & Aksoy, 2003; Bıyıkoğlu, 2020; Kıral, 2019; Schermerhorn, 2012). Predefined roles, tasks, workflows can become meaningless during a crisis. On the other hand, in organizations where sharing and cooperation

between units are strong, multi-directional communication takes place, and participatory decisions are dominant, crisis can be managed effectively by recognizing the crisis, eliminating uncertainty and developing appropriate reactions (Kıral, 2019; Schermerhorn, 2012). In the educational crises, school stakeholders, especially school administrators and teachers, should be able to make decisions that will serve to fulfil the basic functions of the education system in their sphere of influence and to reduce uncertainty, they should be able to communicate and lead. This will help the education system overcome the crisis (Yılmaz & Yıldırım, 2019). The pressure to make quick decisions in uncertainty can lead to confusion, along with fear and anxiety. Failure to manage the crisis well can cause severe damage to the structure and basic functions of the system. To intervene quickly in this situation, it is necessary to collect information from very different perspectives, then to analyse them and to lead people. In this context, there are questions to be answered: (*a*) What problems are experienced? (*b*) Where is the source of the problems? (*c*) Who is responsible for solving problems? (*d*) How can problems be resolved? It is important to benefit from different perspectives when deciding on action. An effective communication infrastructure with all stakeholders should be operated for directing. It is critical that directions build trust. For this reason, it is essential to make functional directions that can respond to the need of the real situation (Kıral, 2019; Schermerhorn, 2012). The most basic job after the crisis is to make an evaluation. For a healthy evaluation, measurements, information collection and reporting about the crisis and its effects should be made in various dimensions. By considering eligible criteria, gains, weaknesses and opportunities should be identified, then actions should be designed to improve the weaknesses and strengthen opportunities based on acquisitions without delay (Kıral, 2019; Yılmaz & Yıldırım, 2020).

The criteria pointed out by the literature in evaluating the performance of the education system that has experienced a crisis can be listed as follows: (*a*) Were possible crisis scenarios generated before the crisis? (*b*) Have there been drills on the scenarios designed? (*c*) Has organizational structure (multifaceted communication, participatory decision, autonomy, accountability, leadership) been carried out to deal with the possible crisis? (*d*) Have the basic functions been carried out by solving the problems encountered during the crisis? (*e*) Have uncertainties been resolved during the crisis? (*f*) Could communication be provided in a multi-dimensional way during the crisis? (*g*) Have reliable data-driven directions been made during the crisis? (*h*) Was it allowed sub-units to lead in their own domains during a crisis? (Aksoy & Aksoy, 2003; Baysal & Ocak, 2020; Bıyıkoğlu, 2020; Kıral, 2019; Sarı & Sarı, 2020; Yılmaz & Yıldırım, 2020).

Education System and School Administration

The education system and schools are in incessant interaction with their environment. Therefore, the crisis affects the education system even if its source is outside (Kıral, 2019). Schools should always be ready for unexpected and suddenly developed situations and should be able to continue their teaching-learning activities (Baysal & Ocak, 2020). The crises experienced in different geographies related to education systems and schools serve as signals. For example, schools were closed for eight months due to the Ebola epidemic that spread in Sierra Leone in 2014-15. The

government started a five-day-a week emergency training program. The 30-minute lessons on the radio were not very effective, but such programs prevented children from completely distracting themselves from the learning activity (World Bank, 2018). The Covid-19 Pandemic (C19) has also created a crisis for the Turkish Education System and School Administration (TESSA), (Sarı & Sarı, 2020). The performance of TESSA, which has deep-rooted problems in face-to-face education, in managing the crisis with C19 is worth reviewing. TESSA, which is dominated by a centralized management structure, has problems in terms of both structural and effective use of human resources. Ministry of National Education (MoNE) is the most powerful actor in forming the education services (Turkish Education Association Think Tank [TEDMEM], 2020). In a study examining problems in TESSA based on the opinions of participants from different sectors, frequent political interventions, family apathy, administrative problems, and less qualified teachers were listed (Kara, 2020). The main administrative problems are the selection and training of school administrators and the management of schools with a temporary administrative status (Cemaloğlu, 2005; Gök, 2019). School administrators experience a role ambiguity about their authority and responsibilities due to temporary assignment (Tabancalı & Su, 2021). This situation is considered as a condition that prevents them from leading (Yenipınar, Yıldırım & Tabak, 2020). Exam-oriented teaching disrupts the order of educating people in line with the upper aims (Kutlu Abu, Bacanak & Gökdere, 2016; Yeşil & Şahan, 2015; Yılmaz & Altınkurt, 2011). Significant differences in student learning between districts and schools have been an ongoing problem for years in terms of education quality and equal opportunity (TEDMEM, 2020). Furthermore, accountability and clear functioning have not been operated, yet (Savaş-Yalçın & Akan, 2018; Yıldırım & Yenipınar, 2019)

A significant financial investment has been made for the use of smart boards in classrooms and the presentation of enriched content through the Education Information Network (EIN), within the scope of the integration of technology into education and training processes. On the other hand, the goal of technology integration has weakened because of the inadequate internet infrastructure and the failure in distributing tablets to students (Bozkuş & Karacabey, 2019; TEDMEM, 2018).

Theoretical Aspect and Relevant Studies

There are many studies examining the effects of C19 in the field of education. The most frequently emphasized problems in studies examining the effects of the C19 crisis based on the views of teachers and school administrators are communication problems between school stakeholders, inadequacy of technological infrastructure, insensitivity of parents, inadequacy of technological tools and equipment of families, lack of knowledge and skills of teachers about online teaching, students not attending classes, incomplete curriculum, measurement-evaluation difficulty, and future uncertainty (Baysal & Ocak, 2020; Karakaya, Adıgüzel, Üçüncü, Çimen & Yılmaz, 2021; Keleş, Atay & Karanfil, 2020; Turan, 2020). On the basis of the findings, it was suggested that "all schools from rural areas to the city centre should be digital schools and gain digital literacy skills". Especially when face-to-face education is interrupted due to war or epidemic, technology integration in teaching practices has played a key role (World Bank, 2018). The way of teaching that starts with a bell and is run by teachers has changed in the C19 process (Spencer, 2020). In the C19 process in Turkey,

schools started by using online teaching and tried to maintain educational functions. System-wide efforts were performed such as informing and guiding about C19 via EIN TV, starting live lessons via EIN, providing 8 GB internet access support for accessing lessons over EIN by GSM operators (Sarı & Sarı, 2020).

Examining the problems experienced by teachers during the online teaching process, Çakın and Külekçi Akyavuz (2020) found that there were problems with communication with students, problems with parents and student learning. Among the problems experienced in the online teaching process, the lack of constructive support and attention, especially in the home environment, was emphasized. Students, on the other hand, stated the problems of boredom, unwillingness, ineffectiveness of teaching and inadequacy of technological opportunities in this process (Karakaya et al., 2021). In addition, problems such as adaptation difficulties to the social environment, technology addiction, deterioration of school culture are also listed. In order to solve the problems experienced, the methods of giving warnings for the future, making the lessons fun and giving feedback on the assignments were frequently mentioned. In the C19 process, school administrators made attempts to provide students with technological tools and materials, to provide printed materials to those who do not have internet access, to inform them about EIN, to enable students to participate in online teaching, and to develop teachers' technological skills in order to fulfil the basic functions of the school (Keleş, Atay & Karanfil, 2020; Turan, 2020).

On the other hand, poor learning could not be prevented due to the long-term closure of schools and technical problems encountered in online teaching (Baysal & Ocak, 2020; TEDMEM, 2021). Poor learning stand out as a worldwide problem. There is a significant difference between students supported by their families and disadvantaged students who lack such care (Reimers, Schleicher, Saavedra & Tuominen, 2021). The TEDMEM (2021) report also draws attention to the poor learning of disadvantaged students in Turkey. It was emphasized that approximately five million students could not actively benefit from EIN in this process, and that there were inequalities arising from differences in accessing to the internet and digital devices (AID). In addition to student learning, C19 has also led to uncertainties in terms of exams, curricula, payment of teachers' salaries and wages, make-up training, and working style of administrators (Sarı & Sarı, 2020). On the other hand, Bailey (2020) underlines that despite the measures taken against C19, many countries may face school closures again in the coming months or in the following years. Similar processes have been experienced after the 6 February 2023 Kahramanmaraş earthquakes (Yamamoto & Altun, 2023). Based on the report (The United Nations International Children's Emergency Fund [UNICEF], 2020) that inequalities in education increased in the C19 process, The Organization for Economic Cooperation and Development (OECD, 2020) indicated that after the epidemic, make-up education should be organized at the same time as the transition of schools to face-to-face education. As a prerequisite for this, he recommends designing measurement applications where learning losses can be determined.

The literature review points to studies examining the reflections of the C19 event in different dimensions of the field of education. In related studies, perceptions of school administrators regarding crisis management skills were examined (Bıyıkoğlu, 2020; Karakuş & İnandı, 2018; Maya, 2014; Özalp & Levent, 2021; Özsezer, 2014;

Ulusoy, 2020). In these quantitative studies, the crisis management skills of school administrators are perceived at a moderate level by the teachers, but the administrators perceive their own skills at a high level. Studies have found significant positive relationships between school administrators' crisis management skills and leadership skills (Erdinç, 2018; Keleş et al., 2020; Ulusoy, 2020).

The literature review showed a research gap. Therefore, this study aimed at examining and evaluating the crisis management performance of TESSA in the case of C19. The importance of studying such an issue can be recognized if we consider that approximately one-fourth of Turkey's population is directly related to school education and that decisions and practices related to education affect the whole country. Evaluation of this crisis in different dimensions is a need and problem area in order to prevent possible future crises. School administrators who have experienced this crisis directly are the witnesses and actors of the administrative practices that took place before and during the crisis. Evaluation based on their experiences can contribute to the knowledge of crisis management, which is a field of education management. As a stage of crisis management, post-crisis assessment can enable the recognition and exploration of opportunities that can serve to improve the organization.

Aim

The main purpose of this study, in terms of crisis management, is to discover, describe and examine what problems school administrators have experienced and how these problems are solved during the change process in teaching practices due to the C19 in compulsory formal education. Along with this aim, we identified the following sub-objectives:

a) To find out the problems,

b) To identify the sources of the problems,

c) To explore the responsible bodies for solving the problems,

d) To examine the resolution of the problems,

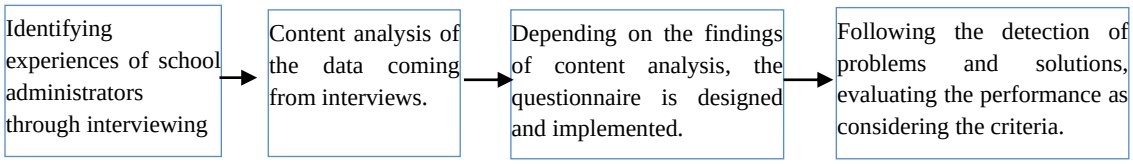
e) To evaluate the situation of handling and solving the problems by crisis management criteria.

Method

This study is a descriptive study conducted in a mixed-method exploratory sequential research design. It was performed in line with the pragmatic paradigm principles. In this context, the researcher, focusing on answering the research question or problem, investigates the problem from multiple views by employing both inductive and deductive reasoning (Mertens, 2023). The research model is depicted in Figure 1. We first found out school administrators' experiences relevant to crisis management during the C19 process by using the qualitative method. Thus, we explored the factual variables. Then, we surveyed to identify the extent to which the matter is widespread. In the last phase, by synthesizing the qualitative and quantitative findings we evaluated TESSA's crisis management performance based on the criteria (Creswell & Plano Clark, 2018; Fraenkel, Wallen & Hyun, 2012).

Figure 1

Research Model



The population consists of school principals working in compulsory formal education schools in Turkey's 2020-2021 school year. Two separate study groups were drawn from the population through a multiple sampling method in considering affordability and accessibility. Teddlie and Tashakkori (2009, p. 166) emphasized that using multiple sampling techniques in mixed methods designs is indispensable. The first study group was obtained by implementing two stages. At first, participants were accessed through snowball and convenience sampling. Then, we drew a study group from them by criterion-based purposeful sampling so they represent gender, position, experience, school size, school location (region, province and settlement). Demographic information of 17 school administrators who were in the first study group and interviewed are shown in Table 1.

Table 1

D*emographic Information about Interviewee School Administrators*

Code	Total Experience	Position	Experience in current school	Education Level	School settlement	Province	School size*
Mr. Ali	14	Principal	3	Undergraduate	Town	Sakarya	40
Mr. Ahmet	5	Vice principal	5	Undergraduate	City	Aksaray	24
Mrs. Ayşe	1	Vice principal	1	Master	Town	Muş	18
Mr. Orhan	5	Vice principal	2	Undergraduate	City	Niğde	33
Mrs. Fatma	1	Principal	1	Undergraduate	Village	Gaziantep	3
Mr. Hamit	17	Principal	3	Master	City	Aksaray	41
Mr. Mehmet	5	Vice principal	2	Undergraduate	Town	İstanbul	70
Mr. Metin	9	Vice principal	2	Undergraduate	City	Şanlıurfa	33
Mrs. Nihal	6	Principal	3	Master	Town	Muğla	25
Mrs. Sevgi	4	Principal	4	Undergraduate	Town	Aksaray	20
Mr. Hakan	4	Vice principal	4	Undergraduate	Town	Hatay	80
Mr. Selim	25	Principal	6	Undergraduate	Town	Kayseri	35
Mrs. Filiz	1	Vice principal	3	Undergraduate	Village	Şırnak	6
Mr. Burhan	5	Principal	2	Master	Town	Ankara	20
Mr. Emin	7	Vice principal	4	Undergraduate	City	İzmir	53
Mr. Erol	2	Vice principal	2	Undergraduate	Town	Antalya	30
Mr. Vedat	5	Vice principal	5	Master	City	Aksaray	32

*: *School size shows the total number of teachers working in the school*

At the second phase of the study, participants were accessed through multistage cluster random sampling. We first randomly selected two provinces from each region classified by The Statistical Units of Regions (12 regions at the first level). Then, two towns were randomly chosen from selected province. Additionally, three villages/settlements were randomly selected from town, too. Finally, three schools representing each educational level were randomly selected in the list of schools in the settlement. Hence, we aimed to reach 66 schools in a region (30 primary, 18 lower secondary and 18 secondary). Totally 759 schools were in the sample. We utilized the service of correspondence information about schools by web site of Ministry of National Education (MoNE) to contact the school administrators (https://mebbis.meb.gov.tr/KurumListesi.aspx). We sent an email informing about the study and a link to the questionnaire designed as Google Form. Table 2 shows the number of participant school administrators in the study by provinces and regions. Mediterranean region had the highest participation rate (12.4%) and Middle East Anatolian region had the lowest (2.9%).

Table 2

Provinces and Regions of Participants in the Quantitative Phase

Code	Region	Provinces	*f*	%
TR1	İstanbul	İstanbul	40	9.0
TR2	West Marmara	Balıkesir. Tekirdağ	31	7.0
TR3	Egea	Denizli. Afyonkarahisar	27	6.1
TR4	East Marmara	Bolu. Eskişehir	43	9.7
TR5	West Anatolia	Ankara. Konya	47	10.6
TR6	Mediterranean	Antalya. Mersin	55	12.4
TR7	Middle Anatolia	Aksaray. Sivas	49	11.0
TR8	West Black Sea	Karabük. Tokat	26	5.9
TR9	East Black Sea	Ordu	22	5.0
TRA	North East Anatolia	Ağrı. Erzurum	43	9.7
TRB	Middle East Anatolia	Elazığ. Van	13	2.9
TRC	South East Anatolia	Adıyaman. Şanlıurfa	48	10.8
Total			444	100.0

Table 3 shows the demographic characteristics of participant school administrators in the quantitative phase of the study. In the TALIS 2018 study, a questionnaire was applied to 815 school principals representing a total of 56180 schools (public and private) in compulsory formal education (TEDMEM, 2019). 444 school administrators participated in this study. Female school administrators were represented with the very small proportion (1/5). This low rate of female administrators in school administration has been subjected in the prior studies. OECD Teaching and Learning International Survey (TALIS) 2018 study, for instance, gives the rate of female school principals in Turkey as 7.2% (TEDMEM, 2019). In this study, principals and vice-principals were represented as nearly the same proportionate (49.8-50.2). Based on the

seniority in school administration, 35% of the participants were in the first four years of experience. 65% of them had at least five-year administrative experience. Nearly one third of participants had been working for five years at the same school. OECD TALIS 2018 informs that total administrative experience and experience at the same schools were 6.7 and 3.2 years, respectively (TEDMEM, 2019).

Table 3

Demographic Characteristics of Participants

Characteristics	*f*/%	1	2	3	4	5	Total
Gender	*f*	74	370				444
1: *Female* 2: *Male*	%	*16.7*	*83.3*				100
Position	*f*	221	223				444
1: *Principal* 2: *Vice principal*	%	*49.8*	*50.2*				100
Total administrative experience (year)	*f*	155	141	63	41	44	444
1: *0-4* 2: *5-9* 3: *10-14* 4: *15-19* 5: *20^{+}*	%	*34.9*	*31.8*	*14.2*	*9.2*	9.9	100
Administrative experience at the same school (year)	*f*	304	116	24			444
1: *0-4* 2: *5-9* 3: *10^{+}*	%	*68.5*	*26.1*	*5.4*			100
School location	*f*	69	184	191			444
1: *Village* 2: *Town* 3: *City*	%	*15.5*	*41.4*	*43*			100
School size (number of teachers)	*f*	112	135	197			444
1: *Small (0-15)* 2: *Medium (16-30)* 3: *Big (31^{+})*	%	*25.2*	*30.4*	*44.4*			100
Education level	*f*	18	348	76	2		444
1:*Associate* 2:*Under graduate* 3:*Master* 4:*Doctorate*	%	*4.1*	*78.4*	*17.1*	*0.5*		100
Socio-economic status of the school	*f*	226	158	60			444
1:*Low* 2:*Medium* 3:*High*	%	*50,8*	*35.5*	*13,4*			100

Depending on the school location, 41.4% of school administrators work in towns and 43% of them work in cities. In this study, school size was measured by the number of teachers in the school. ¼'th of school administrators work in the schools having 15 or fewer teachers. 44.4% of them work in big schools that have at least 31 or more teachers. Socio-economic status (SES) of school was measured by the statement of parents working in a regular job and house income based on the perceptions of participants. Nearly half of school administrators work in schools with low SES parents. The rate of schools with high SES parents was 13.4%. SES proportions from low to high in the Trends in International Mathematics and Science Study (TIMSS) 2019 were 27-28-45, respectively (TEDMEM, 2021).

Collecting Data

Data were collected during November-December 2020, which is a duration after eight months passed over the first Covid-19 case had been seen in Turkey. This length of time can be regarded as adequate to get over the shock and adapt the education system to the new situation, detect the problems and apply the solutions. Data were collected sequentially through two different tools. At the first phase of data collection, we used a structured interview form. This form included information about the study, ethical rules, participant consent, demographic and open-ended questions. Open-ended questions: (*a*) what problems did you experience during the online teaching process because of C19? (*b*) What did you do to solve these problems? Participant school administrators answered the questions by writing, and they sent the response forms through emails.

We developed a three-dimensional measurement tool in the second stage of the study to find out the prevalence of the situation that we explored through the content analysis at the previous stage. The first dimension of the questionnaire had a brief information about the study, ethical rules and consent of the participant. The second dimension asked demographical questions. The last section was designed as the checklist including items to find out how problems are prevalent, who are the responsible to solve these problems and what they do to solve these problems. The instrument was transformed into the "Google Forms" and its link was sent to the participants by email. Two reminder emails were sent by two weeks interval. Two weeks after the last reminder, the feedbacks were combined and the analysis phase was started.

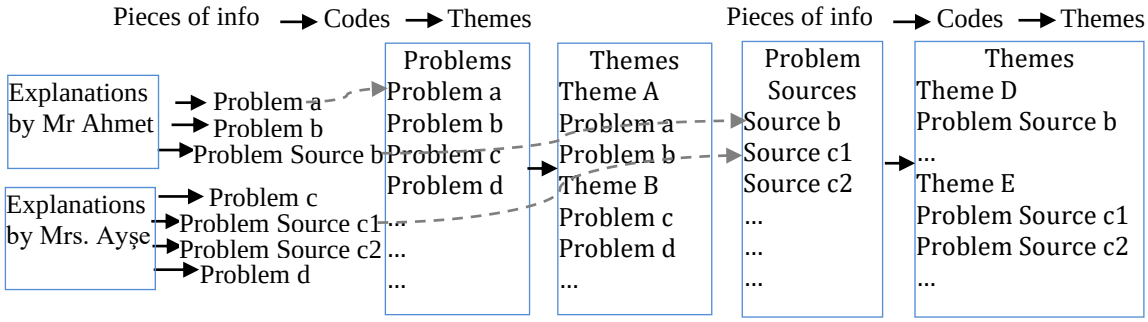
Analysing Data

In data analysis, we used the interlinked analysis strategy proposed by Teddlie and Tashakkori (2009, p. 238). This strategy is based on identifying critical variables through qualitative analysis that shapes the quantitative stage in the exploratory sequential design. Therefore, content analysis is used for qualitative data.

At the beginning of the qualitative data analysis, the response forms were coded (such as Mr. Ahmet, Mrs. Fatma), and the written expressions were transferred to the Microsoft Excel Worksheet. Codes were generated from pieces of information, and themes were created by classifying the codes. Four themes were identified: (a) The problem, (b) The source of the problem, (c) The parties to the problem, and (d) The state of the problem being resolved. Each theme also includes sub-themes. In this context, the procedures shown in Figure 2 were carried out. Frequency is used for repeating pieces of information and codes. For example, 57 problem statements were represented by 39 different problems.

Figure 2

Operations of the Content Analysis



To overcome the problem of bias, the contents generated by the researchers in the content analysis were examined by independent experts. Two independent experts, who had doctorate degree on educational sciences, rated the suitability of coding (1: Suitable, 2: Not suitable 3: Suggestion). Then, the interrater agreement was checked. To compute the consistency between experts, interrater agreement which is recommended by Creswell and Plano Clark (2018) was used. Along with this, we implemented the formula of reliability=the number of agreed items/total number of items. It was computed as r=0.846 (33/39) that refers to high level agreement. Independent experts also made suggestions for generating common items gathering similar contents of the items. For instance, the following items of "Collapsing of EIN system when intensive usage", "Inadequacy of Internet infrastructure" and "Weak functionality of applications in EIN" tapped under the item of "Inadequacy of technological infrastructure". Independent expert opinion was also obtained for other themes generated by the researchers. For instance, the same application was performed for the solution theme. Totally 34 solution items were reorganized under 25 items based on the independent experts' suggestions. Interrater agreement was computed for the suitability of coding of solutions, too. Independent experts agreed on 22 codes-contents suitability (r=0.880 (22/25).

In analysing quantitative data of the study, we carried out descriptive statistics (*%*, *f*, $\bar{x}$ and *S*). Before starting analysis, we checked the questionnaire forms whether they are within the norms. We eliminated three forms because they had nearly half of the items are blank and the same choice is applied for all items. Data that had been recorded into Microsoft Excel Working page by downloading from Google Forms were transferred into IBM SPSS 22 statistical package programme. After the data were screened through missing, duplications and outliers, totally 444 participants' data were analysed.

Integrating Qualitative and Quantitative Results

Various techniques are used to combine qualitative and quantitative findings in mixed-methods research. Creswell and Plano Clark (2018) describe transforming, articulating, blending, weaving, combining, and synthesizing as integration techniques. The researchers who conduct the exploratory sequential design use mostly articulation and rarely weaving and synthesizing. In this study, articulation and synthesis techniques were used. In the synthesis technique, qualitative and quantitative findings are assessed together, and meta-inferences are concluded to answer the research questions.

Validity and Reliability

Explaining the processes followed in data collection and analysis in detail, providing information about the study group, generating data collector based on the literature review, providing a detailed explanation about data gathering procedures, using multiple data sources, and using independent experts are practices that support validity and reliability. In addition, using criteria to assess crisis management performance, fulfilling this research by two researchers with educational experiences related to school management supports the validity (Creswell & Plano Clark, 2018).

Ethical Procedures

The legal requirement of meeting ethical rules was confirmed by The Board of Ethical Rules in Human Researches of Aksaray University with decree of 2021/04-79 numbered decision on 26/04/2021.

Results

This section has mainly three parts. We first give qualitative findings, then quantitative findings. At the last part, we integrated both qualitative and quantitative findings.

Qualitative Results

Results inferred from the structured interview were classified as problems, reasons for problems, responsible people for solving the problems and the statement of resolving the problems. We used both codes (numerical and themes) and direct quotations to present the qualitative results. Quantities were emphasized in brackets.

Problems

Problems relevant to students and parents (1) were detected as unwillingness to take part in online teaching/learning activities (11), students' passive role in courses of online teaching (111) negative attitudes of parents (13) and communication difficulty with students and their parents (14). For instance, Mr. Ahmet explained his relevant experience as "We frequently experienced problems were that students do not take part in the online teaching because of economic reasons and parents' negligence in meeting their needs." He also said that "Students switch off the camera when the course starts and they deal with nonsense things." He added that "Such kind of things weaken the effectiveness of the lessons." Mrs. Filiz shared similar experiences that "Some of our students, though having adequate facilities, do not take part in lessons. I asked teachers to call students' parents for this problem, but this problem still goes on." The most frequently emphasized problems related to the technological facilities (2) are inadequacy of internet facility (21), the inadequacy of system-application infrastructure (221) and lack of AID (23). The direct quotation by Mrs. Fatma can make this problem clearer: "Because of being a village school, we lack internet and families have serious economic disadvantages. Besides the dis-connection via the internet, even the smartphone is not accessible, here." Mrs. Ayşe emphasized students' disadvantages in having the technological facilities by emphasizing the malfunction of internet infrastructure across the country. About this issue, Mr. Burhan shared his experiences as following:

> There are so many problems caused by internet service providers and online teaching practices. There are many students could not attend lessons because of internet problems, or software application problems…Unfortunately we come across lots of problems every day. There are frequent changes in our timetable and EIN (Education Information Network) courses. Because of very frequent changes in EIN, we have to reorganize our course programme quickly, so we are under stress.

Lack of knowledge and ability (31), discordance to online teaching (32) not teaching effectively (331) are stated within the scope of knowledge, skills and attitude (3). Mr. Vedat talked that "Because of teachers who are unaware of EIN and ZOOM, thus the process slowdowns. Then, we provided classrooms for these teachers and they taught face to face." Relevant experiences of Mrs. Nihal are as following:

> Beside the prevalent problems in internet infrastructure and accessing of students, there are more serious problems such as students have disorders of attention and adaptation. Their solutions are not easy. We try to overcome these problems. Within this process, many burden falls on teachers and only two days face to face teaching is not adequate…Pity, but we can do nothing.

Another dimension related to the knowledge, skills and attitudes of school staff is the restricted ability of interacting with students. Online teaching required new communication style different from the face-to-face education (332). In line with this situation, Ms Ayşe emphasized the following: "There were many problems, probably due to the fact that there was a new order for everyone. Teachers accustomed to classical education found it difficult to adapt". Mr. Selim explained this mismatch that: "We informed teachers on the social platforms, but there was no control and some of our teachers were unwilling. There was inexperience in terms of communicating with students, teaching on the internet, and using technological tools. Of course, this inexperience decreased over time. Our teachers started to learn and overcome such problems by trial and error."

Within the scope of the planning of teaching processes (4), problems in the weekly schedule/timetable (41) and problems in the online timetable (42) were frequently emphasized. For example, Mr. Metin said, "We have frequently reorganized the timetable in order to maximize participation in online lessons. Sometimes we noticed that the weekly timetable does not work and it is not efficient therefore we frequently changed to fix it. But I can say that it is on track now." Mrs. Sevgi exemplified the problems experienced in controlling whether timetable does work and online teaching is carried out (44):

> The school administration checks the teachers about fulfilling the online lessons. It can be seen on EIN at what time the teacher starts the online lessons, how many students participate and when they leave. Teachers who do not fulfil the online lessons are asked a justification and they are warned. The administration checks whether the online lessons are fulfilled and records every week.

There are also problems in paying the additional course fee depending on the timetable of online teaching. Mr. Hakan expresses this situation as follows:

> Some practices caused the disturbances. For instance, they obliged teachers to do compulsory online lessons although it is well known that many students could not attend online lessons. Everybody has no equal opportunities of accessing online courses. On the other hand, particularly subject teachers are victims of incessant redesigned timetables. Payment for additional courses on personal declaration instead of formal recording is another issue.

There have been violating attempts (5) such as disruption of online lessons by students who concealed their identities (51) and other people outside the classroom attended the online lessons (52). Regarding this situation, Mr. Vedat explained his experiences: "Because our student and parent profile is low, we experienced financial and moral problems. For instance, some students share IDs and passwords with others and misusing lessons in the Zoom application."

Administrative functioning and governance (6) are other problem most frequently emphasized by school administrators. In this context, sudden decision making (61) and lack of planning (62) are the prominent problems. For example, Mr. Emin described the events as follows:

> I learned most of the developments from television, just as all education stakeholders including parents and students. If we were informed about the things they planned 1-2 days in advance, we could prepare faster. The first problem we experienced was about accessing EIN. Nobody did know that downloading an application, getting a passcode and attending the online lessons. But after a short time they learnt each other and everybody rushed to take the passcode and tried to enter the system, as a result of which the system collapsed. After a few days, system was again fixed, but this time higher administrators decided to start face to face education. It meant that eight graders will come to school the whole week but they will also attend six hours of online lesson, furthermore other graders will be split half and while one group attend a face to face classroom two days of the week and they convene at online lessons on Wednesdays. Therefore, the timetable and assignment of teachers were reorganized frequently. About the additional payment for lesson there are still differences among schools, too.

The unmet expectations from high-ranking executives were among the problems relevant to governance. Mr. Hamit explained his experience that: "Although they demanded and recorded our views and suggestions, we felt trouble about their irrelevant practices. Their decisions on planning the educational infrastructure were problematic". Mr. Erol referred to the governance problems and uncertainty as to the reasons for his stress:

> Inadequate infrastructure, the problems of students in accessing online lessons, most importantly, what will happen and when it will happen have always been uncertain. In addition, there were no timely explanations, we always have to proceed with last-minute explanations, which negatively affects time planning and program designing in practice. The online teaching process and duration have been handled centrally, instead this process should be left to local decision-makers.

Origins of the problems

Based on the experiences of the participants, six themes related to the origins of the problems were inferred:

1. Students and their parents
2. Technological devices and applications
3. School staff
4. Planning teaching processes
5. Disruptive attempts
6. Managerial function and governance

Responsible bodies for solving the problems

Another dimension of the phenomenon is that who are the responsible for solving (7) problems experienced by school administrators. Based on the content

analysis, we detected these solvers as parents (71), school administrators (72), and higher managerial bodies (73). They also indicated the conjoint responsibilities. These parties are parents-school administrators (74), school administrators-higher managerial bodies (75). These parties are parents-school administrators (74), school administrators-higher managerial bodies (75). In addition, solving some problems requires coordination of all parties (76).

Resolution of the problems

Findings about the resolution of the problems and solution practices are summarized in Table 5. The table also includes the contents of the solution and their codes. The participants also declared the unresolved problems coded by 8. Within this theme, some participants' direct quotations are that "we can't do anything", "our technical knowledge is insufficient", and "anything couldn't be done due to legal regulations and instructions".

The code of 9 indicates the kind of solutions. Some prominent solutions are that providing information, arranging the timetable, establishing EIN support points, checking whether the lessons are held, warning for disrupters, distributing tablets, donations for people in need, and making use of the school's facilities.

Table 5

Content Analysis Findings about the Resolution of Problems

Code	Theme	Sub-code	Content
8	Unresolved	80	They reasoned for unresolved problems as those "We couldn't do anything, we were helpless, lack of technical facilities and knowledge, legal regulations and Ministry instructions (right to absenteeism etc.). In addition, the internet quota supplied by the service providers could not be utilized for online lessons on ZOOM etc."
9	Solution Practices	90	Establishing support points for EIN
		91	Communicating with parents and informing them.
		92	Making use of schools' facilities.
		93	Improving the infrastructure of EIN by MoNE
		94	Online teaching on alternative applications for instance ZOOM instead of EIN
		95	Providing statistics about the current situation to MoNE and high-rank administrators
		96	Using internet for EIN supplied by GSM service providers
		97	Students were supported with material, homework, videos and other compensations.
		98	Checking online lessons by attending like a student and warning for the violators
		99	Announcing to distribute tablets for students
		100	MoNE supplied tablets for some students.
		101	Providing tablets, computers, TV by donations
		102	Teachers and students were informed (MoNE, school counsellors and technical staff)
		103	Reorganizing timetable, limiting durations, changing time, assembling classes

104	Emphasizing the importance of participating online lessons and announcing to check it
105	Sharing homework, subject contents etc. by establishing social media network (whatsapp)
106	Leading students to EIN TV
107	Enriching the type of questions and assessment techniques
108	Self-adapting in time
109	Sharing the ID knowledges just before starting lessons, keeping class from outer violators
110	Demanding and taking help from expert technical persons

Quantitative Results

Problems

The first item of the measurement tool applied to school administrators was “Did you have any problems in performing the education-training service in the C19 process?” Nine out of 444 participants stated that "there was no problem", while 19 participants stated that they "partially" experienced a problem. 96.6% (f=416) of the school administrators reported that they had problems in performing the education service during the C19 process. This situation confirms the criterion of “problems in the execution of basic functions occur” of crisis management.

The frequency of the problems experienced in the delivery of education and training services is shown in Table 6. The most frequently reported problem is AID that “the students need to attend online classroom at home” (*f*=145, 33.7%). The second most frequently reported problem was “lack of technological infrastructure” 19.1% (f=82). In the third place, the problems of “teachers' adaptation and effective teaching” (*f*=48, 11.2%) were reported. On the other hand, 45 participants (10.5%) reported the problems experienced in “organizing the timetable and defining the lesson duration in online teaching”. 39 (9.1%) participants stated the problem of “students' reluctance and not participating in lessons”. The “decision-making, planning and communication problems” attributed to the senior management units, including the central organization of the Ministry, were emphasized by 32 (7.4%) participants. “The indifference of the parents, their negative attitudes and the inconvenience of the home environment” were stated by 22 (5.3%) participants. The problem of “violating teaching by hiding identity or entering the system instead of someone else” was mentioned by eight participants. Eight administrators stated the problems such as “checking the online courses, recording additional lessons, increasing the paperwork due to the information and statistics demanded by the high rank managers, finding the necessary financing to ensure the hygiene of the school”.

Table 6

Frequency of Problems Experienced during the C19 Pandemic

Problems	*f*	%
AID	145	33.7
Inadequacy of technological infrastructure	82	19.1
Teachers' adaptation problems and inefficient teaching practices	48	11.2
Frequently redesigning timetable of online lessons and time limitation	45	10.5
Students' unwillingness and skipping online lessons	39	9.1
Problems related to making decisions, planning, communication	32	7.4
Parents' negative attitudes, inconvenient home environment	22	5.3
Violating the online lessons	8	1.9
Problems of school maintenance and governance (check online lessons, hygiene, report)	8	1.9
Total	444	100.0

Responsible bodies to solve the problems

The answer to the question of who should solve the problems or whom the problem concerns are important in terms of crisis management. Thus, it is revealed which problems should be dealt with at which managerial level in terms of organizational structure. Table 7 produced by cross-table analysis shows which administrative unit should deal with which problems. Within the table the following abbreviations are used: F (Family), S (School), and H (High rank managers)

The most striking finding is that the school administration did not consider itself as the direct responsible body to solve any problem. This situation can be associated with the limitation of school administrators' leadership role. School administrators stated that the problem of AID should be solved in cooperation with family, school and higher managerial units. They expressed that the problem of insufficient technological infrastructure should be solved by the higher managerial units. They reported that the problems of teachers' adaptations, lack of knowledge-skills and pedagogical inadequacy in online teaching should be solved by the school and senior management units. Similarly, it is thought that the problems of designing timetable, limitation and duration relevant to the online lessons should be solved by the school and higher managerial units.

Table 7

Who Should Solve the Problems?

Problems		Responsible parties to solve the problems					Total
		F	H	F+H	S+H	F+S+H	
Students' unwillingness and skipping online lessons	*f*	0	0	35	0	1	36
	%	*0.0*	*0.0*	*8.2*	*0.0*	*0.2*	*8.5*
Problems related to parents and home environment	*f*	10	0	10	0	1	21
	%	*2.3*	*0.0*	*2.3*	*0.0*	*0.2*	*4.9*
Inadequacy of technological infrastructure	*f*	0	81	0	0	0	81
	%	*0.0*	*19.0*	*0.0*	*0.0*	*0.0*	*19.0*
AID	*f*	0	0	0	0	143	143
	%	*0.0*	*0.0*	*0.0*	*0.0*	*33.6*	*33.6*
Problems related to teachers' adaptation and teaching effectiveness	*f*	0	0	0	47	0	47
	%	*0.0*	*0.0*	*0.0*	*11.0*	*0.0*	*11.0*
Problems related to the timetable and limitations in designing online lessons	*f*	0	0	0	44	0	44
	%	*0.0*	*0.0*	*0.0*	*10.3*	*0.0*	*10.3*
Economic cost of keeping hygiene. supplying the mask etc.	*f*	0	0	0	8	0	8
	%	*0.0*	*0.0*	*0.0*	*1.9*	*0.0*	*1.9*
Violations targeting the online lessons	*f*	0	0	0	0	8	8
	%	*0.0*	*0.0*	*0.0*	*0.0*	*1.9*	*1.9*
Problems related to making decision. planning. communication	*f*	0	0	0	33	0	33
	%	*0.0*	*0.0*	*0.0*	*7.7*	*0.0*	*7.7*
Protecting the health of school staff and preventing the pandemic	*f*	0	0	0	3	0	3
	%	*0.0*	*0.0*	*0.0*	*0.7*	*0.0*	*0.7*
Problems about deciding EIN support points	*f*	0	0	0	1	0	1
	%	*0.0*	*0.0*	*0.0*	*0.2*	*0.0*	*0.2*
Difficulties in assessment and examination in online courses	*f*	0	0	0	1	0	1
	%	*0.0*	*0.0*	*0.0*	*0.2*	*0.0*	*0.2*
Total	*f*	10	81	45	137	153	426
	%	*2.3*	*19.0*	*10.6*	*32.2*	*35.9*	*100.0*

Table 7 shows who is responsible for the solution of education-related problems in the C19 process according to the opinions of school administrators. School administrators mostly emphasized the cooperation of "family, school and higher managerial units" (36%). The joint responsibility of the "school and higher managerial units" in solving the problems is weighted with approximately 32%. While the weight of the solution parties in which the *school* is involved is 78.7%, the place of the solution parties in which the *higher managerial units* is involved is 87.1%. Based on the finding, the main responsible to solve the problems is the higher managerial units and then the school administrators.

Attempts to solve the problems

We examined the attempts for solving the problems. These attempts are detailed in Table 8. 41% (*f*=180) of 435 participants did not report any solution to the problems. Establishing EIN support points (*f*=39, 9%), informing parents (*f*=35, 8%), redesigning timetable (*f*=26, 6%) and using alternative applications (e.g. ZOOM) instead of EIN (*f*=23, 5.3%) are the featured initiatives.

Table 8

Attempts for Solving the Problems

Attempts	*f*	%
Unresolved	180	41.4
Establishing support points for EIN	39	9.0
Communicating with parents and informing them.	35	8.0
Reorganizing timetable. limiting durations. changing time. assembling classes	26	6.0
Online teaching on alternative applications (e.g. ZOOM) instead of EIN	23	5.3
Providing statistics about the current situation to MoNE and high-rank administrators	23	5.3
Making use of schools' facilities.	21	4.8
Sharing homework. subject contents etc. by establishing social media network (whatsapp)	19	4.4
Improving the infrastructure of EIN by MoNE	12	2.8
Self-adapting in time	11	2.5
Checking online lessons by attending like a student and warning for the violators	10	2.3
Students were supported with material. homework. videos and other compensations.	6	1.4
Using internet for EIN supplied by GSM service providers	5	1.1
Teachers and students were informed (MoNE. school counsellors and technical staff)	5	1.1
Providing tablets. computers. TV by donations	4	.9
Leading students to EIN TV	4	.9
Announcing to distribute tablets for students	3	.7
Emphasizing the importance of participating online lessons and announcing to check it	3	.7
Demanding and taking help from expert technical persons	3	.7
Sharing the ID knowledge just before starting lessons. keeping class from outer violators	2	.5
Enriching the type of questions and assessment techniques	1	.2
Total	435	100.0

By considering the problems, attempts for solving these problems and responsible parties for solving these problems together, we found out crucial findings in terms of crisis management. While AID which is detected as the most prevalent problem, has a share of 33.6%, for the solution of this problem, establishing EIN support points, making use of school facilities, calling students to school, giving homework and materials, Internet support by Global System for Mobile Communication (GSM) operators, tablet and computer donations supply and directing to EIN TV has a

share of 18.1%. It is understood that the aforementioned problem has not been fully resolved. The share of problem of "inadequacy of technological infrastructure" has a 19% among the problems, but the share of attempts to solve it that consisted of utilizing alternative applications, using social media, improving the EIN infrastructure, and demanding experts' help is totally 14.2%. It can be said that the inadequacy of technological infrastructure has not been fully resolved, too.

The problem of teachers' adaptation to the process and effective teaching has a share of 11%, the share of all attempts for solving this problem is only 5.9 %. It is understood that the problem of teachers' adaptation in online lessons and teaching effectiveness has not been fully resolved. The timetable of online lessons and quota problem has a share of 10.3%, the share of rescheduling the weekly lesson program and holding the lessons at other times is 6% to solve this problem. In this regard, it can be said that a complete solution has not been reached. The weight of the problem including the negative parental attitude and home environment due to the unwillingness of the students and their failure to attend the online lessons is 13.4%, the share of solution of this problem is 8.7%. The problem of decision making, planning and communication has a share of 7.7%, the share of providing statistical information and reports to the units in line with the request of the central government for the solution of this problem is 5.3%. Although this practice is not a direct solution, it can be considered as an indication that information exchange is being made between the central government and schools. On the basis of the experience of school administrators, although the school and higher managerial units were indicated as the solution party in most of the education problems (89.1%), the fact that almost half of the problems remain unsolved. Therefore, the crisis management by TESSA was not success.

Discussion

The crisis management performance of the Turkish education system was evaluated based on the experiences and opinions of school administrators participating in this research from different regions and provinces of Turkey during the Covid-19 pandemic. The results obtained by integrating the qualitative and quantitative findings that form the basis of the evaluation are given in Table 9.

The most prominent problem is AID. Then, the problem of insufficient technological infrastructure follows. Another common problem is that teachers cannot teach effectively. These problems are also identified in previous studies (Baysal & Ocak, 2020; Karakaya et al., 2021; Keleş et al., 2020; Turan, 2020). The fate of the FATIH project in terms of the integration of technology into teaching-learning processes (Bozkuş & Karacabey, 2019; TEDMEM, 2018) explains some of the problems experienced with C19. 32% of the 18 million students in formal education are not able to actively use the EIN (TEDMEM, 2021b). The school administrators who participated in this study emphasized that the most important problem identified in the study, online access (the students' AID) can be solved with the joint responsibility of the family, school and senior management. Considering its prevalence among disadvantaged groups (Karakaya et al., 2021; TEDMEM, 2020), can be inferred that the problem of accessing to online classroom cannot be solved by disadvantaged parents. Therefore, to include parents as an agent of solving this problem is the imaginary expectation. On the other hand, the need of improving teachers' pedagogical skills of

online teaching was identified. It can be said that support services to enable teachers to teach effectively in digital environment is not sufficient (Çakın & Külekçi Akyavuz, 2020; Keleş et al., 2020; Sarı & Sarı, 2020; Turan, 2020). The lack of technological opportunities and the pedagogical limitations of online teaching bring up the deep-rooted social and political consequences of poor learning, especially in terms of its relation with equal opportunity (Reimers et al., 2021; OECD, 2020; TEDMEM, 2021; UNICEF, 2020; World Bank, 2018). The prominence of problems in terms of both dimensions indicate the poor performance of the education system in crisis management.

In this study, eight evaluation criteria within the scope of pre-crisis management and crisis process management were taken into account (Table 9). Depending on the evaluation, it has been observed that TESSA's crisis management practices are not based on a long-term prediction, there is no preliminary preparation, and the problems in the implementation of basic functions during the crisis cannot be fully resolved. For this reason, it has been concluded that TESSA's performance in managing the crisis due to the Covid-19 outbreak is low. This result contradicts with the high perceptions of school administrators regarding crisis management skills reached in previous studies (Erdinç, 2020; Ulusoy, 2020). School administrators find their own performance high (Bıyıkoğlu, 2020; Karakuş & İnandı, 2018; Özalp & Levent, 2021; Ulusoy, 2020). The source of this contradiction may be related to the method of the studies. For example, Sarı and Sarı (2020), by a compilation-type study, concluded that the C19 crisis management process was implemented effectively despite its shortcomings. Yılmaz & Yıldırım (2020) found the crisis management scores of school administrators to be high. In quantitative survey-patterned studies, besides the power of identification of Likert-type items in the measurement tool, perceptual differentiation depending on the positions of the participants in the workplace (teacher-school principal) can also be taken into account. Another result that can be discussed within this framework is that school administrators do not see themselves as directly responsible for the solution of any problem. School administrators stated the higher management units as the main responsible body to solve the problems. This situation suggests that the entrepreneurship, problem-solving and leadership aspects of school administrators are limited. Although there are lots of research results that support this inference (Cemaloğlu, 2005; Gök, 2019; Tabancalı & Su, 2021; Yenipınar et al., 2020) but contradictory result is also exist (Yılmaz Fındık & Kavak, 2017). In preparation for the next possible crises, one of the things that needs to be improved in order to make these aspects of school administrators functional is to organize in a wide area that covers organizational structure, training, selection, regulation of work powers and responsibilities and accountability.

Table 9

Integrating Qualitative and Quantitative Results: Management of the C19 Crisis

Criterion	Observation	Evaluation
Design possible crisis scenarios before the crisis	In this regard, the strategic plans of the MoNE were examined, but the risk situations and crisis scenarios for them could not be reached. This situation was not included within the scope of risk perception in the strategic plans covering years after 2014-2015 period, when epidemic examples were observed in the world.	Needs improvement
Conduct drills for designed scenarios	Based on the experiences and opinions of the school administrators, the scenario and the drill information related to these scenarios could not be reached. Also; The MONE administrative activity reports (http://sgb.meb.gov.tr) between the years 2014-2019 were examined by content analysis, but any practices related to the crisis scenarios including the online teaching could not be reached (*).	Needs improvement
Organizational structuring (communication, participatory decision, autonomy, leadership, accountability)	The heavily hierarchical and centralized organizational structure of the MoNE restricts the accountability and leadership aspects of school administration. Also, the initiative of data-based decision making could not be placed into the system. Collecting statistical information by the central government was assessed as disfunctional. Because participants stated that there was no improvement despite collection of the statistical information and reports.	Needs improvement
Carrying out basic functions during a crisis	Poor learning is prevalent especially among disadvantaged students. This problem stays unresolved. Particularly AID remained as problem.	Despite good practices, they are not inclusive and comprehensive.
Eliminating uncertainties in the crisis	Although there are information-based guidance attempts to eliminate uncertainties, but it is not resolved completely. Uncertain situations decreased in time by the school stakeholders' trial-error initiatives.	Systematic and well-organized information mechanism should be established.
Multi-sided communication during a crisis	Despite the existence of effective but one directional communication from higher managerial units to schools, but students and their parents are out of this communication network. Therefore, inclusive and effective communication network should be established.	Inclusive, multi-faceted communication is a necessary aspect to be developed.
Governance and decision-making	Frequent and sudden directions by the central government to design online courses caused adaptation difficulties and uncertainties in particularly EIN timetables and limitations. Including the school members in process of making system-wide decisions can alleviate such problems.	Including the school members in making system-wide decisions.
Leadership of school members in their sphere of influence during the crisis	Despite the restrictive central directions, some school members initiated to donate disadvantaged students with digital devices and the internet. But it was not adequate to solve the problem. Although the school is the responsible agent for most of the problems, school administrators do not perceive themselves as problem solvers.	Despite good examples, there is no systemic infrastructure encouraging school members to commit to leadership.
Performance in managing the crisis	It has been observed that the practices of the TESSA in managing the crisis, in general, are not based on a long-term foresight, there is no preliminary preparation, and the problems in providing education during the crisis are not fully resolved.	The crisis management performance of TESSA is low and it needs improvement.

(*)The keywords "crisis", "scenario", "drill" were used in the content analysis of these documents. Contents accessed include writing scenarios for EIN modules, conducting disaster-emergency-civil defence and security exercises and training, providing psychosocial support for refugees coming from Syria and Iraq crises, and teaching Turkish.

One of the striking results *in terms of the resolution of the problems* is that school administrators reported that 41% of the problems could not be solved. The most mentioned solution is the establishing of EIN support points. It is understood that students' accession to the online classroom, which is the main problem, could not be fully resolved. The major responsibility to solve that problem is largely attributed to (89%) the school and higher management units. Thus, the proportion of unresolved problems refers that TESSA admits its low performance in fulfilling responsibility. Considering the unresolved problems in the C19 process (Gök, 2019; Kara, 2020; TEDMEM, 2020) can be inferred that the problem-solving aspect of TESSA is limited. This result also refers that problem-solving-oriented rearrangements should be made in multidimensional aspects including organizational structure, human resources management, accountability and leadership (Kutlu et al., 2016; Tabancalı & Su, 2021; Yenipınar et al., 2020; Yeşil & Şahan, 2015; Yılmaz & Altınkurt, 2011). The imbalance between the authorities and responsibilities of school administrators in the centralized organization is emphasized as a major limitation in committing leadership required especially in crisis (Sayın, 2008; Tabancalı & Su, 2021; Ulusoy, 2020; Yenipınar et al., 2020). To mitigate the basic problems including specifically disadvantaged students' poor learning, organizational enhancements should be made depending on C19 experience (Baysal & Ocak, 2020).

In the case of C19, the low performance of TESSA's crisis management is a worrying situation for the future. In order to learn the presence of preparations for other crises that may occur, no indication has been reached that TESSA is preparing for future possible crises based on review of high-level plans (strategic plan, 2023 vision documents, and activity reports). However, the most important stage of crisis management is pre-crisis preparation, planning and training stakeholders according to possible situations (Özalp & Levent, 2021). The common crisis perception (earthquake, civil defence) has been overcome and the perception of crisis has expanded by C19. (Bıyıkoğlu, 2020). In this respect, it is necessary to identify risk situations that can create a crisis and prepare for each situation. These preparations must be carried out with comprehensive, valid, reliable and sustainable mechanisms. In this framework, TESSA should run a versatile communication network; review information obtained through communication to achieve findings and make initiatives based on evidence-based decision-making mechanism. These initiatives should include strategic plans and crisis scenarios and exercises. (Kıral, 2019; Schermerhorn, 2012). The organization's versatile, powerful communication network and trust environment before the crisis are a possible way to identify potential crises (Aksoy & Aksoy, 2003). In the studies, pre-crisis preparation, creating a crisis plan, practicing and providing professional training on crisis management have been identified as the weakest aspects in crisis management. (Bıyıkoğlu, 2020; Erdinç, 2018). It is recommended that school administrators and teachers receive professional training on crisis management as one of the pre-crisis preparations. (Bıyıkoğlu, 2020; Özalp & Levent, 2021).

Another significant problem identified in this study is the decision-making, planning and communication problem of higher management units. The participants reported that the instant requests and regulations of the central organization of the Ministry adversely affected the functioning of the schools and caused stress. Although centralization of decision-making processes is an expected response in times of crisis, it

is more appropriate for crisis management to put this form of decision-making, planning and communication into practice within the scope of alternative plans that have been created and implemented before. In order to carry out the basic functions of the education system with the least damage in possible future crises, it is suggested that the organizational structure should be able to act autonomously, to overcome uncertainties, to make evidence-based decisions and to take initiatives. (Çalışkan, 2020; Drucker, 2008; Yılmaz & Yıldırım, 2019). Such a structure is one in which leadership is supported. In previous studies, it reported that leadership, accountability and trust environment are the critical qualities that need to be put into practice rather than rhetoric for TESSA (Aksoy & Aksoy, 2003; Bıyıkoğlu, 2020; Kıral, 2019).

Conclusion and Implications

At the end of the study, it was concluded that TESSA's crisis management was not successful in the C19 example based on the experience and opinions of school administrators. In order to better manage possible future crises, the following aspects need to be improved: (*a*) Taking into account the international developments in the risk definitions of high-level plans, (*b*) defining crisis scenarios and making preparations required by these scenarios, (*c*) making the organizational structure enabling accountability, leadership, and functional communication (*d*) ensuring equality of opportunity and justice for the disadvantaged in times of crisis, (*e*) ensuring communication with family and student, (*f*) refraining from centrally generated fast decisions making style. The most important limitation of this study is that the findings and results are limited to the answers of the participants. It may be possible to obtain different answers in other participant groups and, accordingly, to reach different results.

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Statement of Responsibility

This research was carried out by authors who have equal contribution in both researching and writing the research report.

Conflicts of Interest

There is no conflict of interest by the authors.

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