RELATIONSHIP BETWEEN PUBLIC SCHOOL TEACHERS' PERCEIVED CRISIS LEADERSHIP, TRUST IN MANAGEMENT AND ATTITUDES TOWARDS DISTANCE EDUCATION

A THESIS SUBMITTED TO THE GRADUATE SCHOOL OF SOCIAL SCIENCES OF MIDDLE EAST TECHNICAL UNIVERSITY

BY

İLAYDA ERDOĞAN

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE
IN
THE DEPARTMENT OF EDUCATIONAL SCIENCES, EDUCATIONAL
ADMINISTRATION AND PLANNING

SEPTEMBER 2022

Approval of the thesis:

RELATIONSHIP BETWEEN PUBLIC SCHOOL TEACHERS' PERCEIVED CRISIS LEADERSHIP, TRUST IN MANAGEMENT AND ATTITUDES TOWARDS DISTANCE EDUCATION

submitted by İLAYDA ERDOĞAN in partial fulfillment of the requirements for the degree of Master of Science in Educational Sciences, Educational Administration and Planning, the Graduate School of Social Sciences of Middle East Technical University by,

Prof. Dr. Sadettin KİRAZCI Dean	
Graduate School of Social Sciences	
Prof. Dr. Hanife AKAR	
Head of Department Department of Educational Sciences	
Assoc. Prof. Dr. Merve ZAYİM KURTAY	
Supervisor Department of Educational Sciences	
Prof. Dr. Yaşar KONDAKÇI	
Co-Supervisor Department of Educational Sciences	
Examining Committee Members:	
Assoc. Prof. Dr. Deniz ÖRÜCÜ (Head of the Examining Committee) Başkent University	
Department of Educational Sciences	
Assoc. Prof. Dr. Merve ZAYİM KURTAY (Supervisor)	
Middle East Technical University Department of Educational Sciences	
Assist. Prof. Dr. Elif ÖZTÜRK	
Middle East Technical University	
Department of Educational Sciences	

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.
Name, Last Name: İlayda ERDOĞAN
Signature:

ABSTRACT

RELATIONSHIP BETWEEN PUBLIC SCHOOL TEACHERS' PERCEIVED CRISIS LEADERSHIP, TRUST IN MANAGEMENT AND ATTITUDES TOWARDS DISTANCE EDUCATION

ERDOĞAN, İlayda

M.S., The Department of Educational Sciences, Educational Administration and Planning

Supervisor: Assoc. Prof. Dr. Merve ZAYİM KURTAY
Co-supervisor: Prof. Dr. Yaşar KONDAKÇI

September 2022, 131 pages

Crises threaten organizational life dramatically and the COVID-19 pandemic demonstrated educational organizations are also affected by the consequences of a crisis. Teachers' attitudes are important for the continuation of education in times of crisis when distance education is a necessity. Although literature presents numerous factors related to teachers' attitudes towards distance education, there have not been many empirical studies examining the relationship between other contextual factors such as principal's crisis leadership, trust in principal, trust in MoNE, and teachers' attitudes towards distance education. Therefore, this study aims to examine the relationship between perceived crisis leadership, trust in principal and MoNE, and teachers' attitudes towards distance education. For this purpose, the study was designed as a correlational one. Participants of the study involved 468 teachers working at primary, middle, and high school level public schools. The cluster sampling method was used to collect data through face-to-face administration of the scales. Data collection instruments were Distance Education Attitude Scale, Trust in Principal Scale, Trust in MoNE Scale, and Crisis Leader Efficacy in Assessing and Deciding (C-LEAD) Scale. Hierarchical regression analyses were performed, and results indicated that perceived crisis leadership is a significant predictor of teachers'

positive attitudes towards distance education while trust in MoNE is a significant

predictor of teachers' negative attitudes towards distance education. This study can

present findings on the importance of increasing the principals' crisis leadership

behaviors. Moreover, this study may provide a deeper understanding for decision-

makers in the ministry to arrange the regulations in consideration of crisis

management.

Keywords: Crisis, Crisis Leadership, Trust, Attitudes towards Distance Education

٧

DEVLET OKULLARINDA GÖREV YAPAN ÖĞRETMENLERİN ALGILADIKLARI KRİZ LİDERLİĞİ, YÖNETİME GÜVEN VE UZAKTAN EĞİTİME KARŞI TUTUMLARI ARASINDAKİ İLİŞKİ

ERDOĞAN, İlayda

Yüksek Lisans, Eğitim Bilimleri, Eğitim Yönetimi ve Planlaması Bölümü Tez Yöneticisi: Doç. Dr. Merve ZAYİM KURTAY Ortak Tez Yöneticisi: Prof. Dr. Yaşar KONDAKÇI

Eylül 2022, 131 sayfa

Krizler örgütsel yaşamı önemli ölçüde tehdit eder. COVID-19 pandemisinde olduğu gibi eğitim kurumları da öğretim uygulamalarında ve öğrenme ortamlarında hızlı değişime yol açan bu küresel krizin sonuçlarından derinden etkilenmiştir. Bu bağlamda uzaktan eğitimin tek seçenek olduğu kriz dönemlerinde eğitimin devamlılığı için öğretmenlerin uzaktan eğitime yönelik tutumları ön plana çıkmaktadır. Literatürde öğretmenlerin uzaktan eğitime yönelik tutumları ile ilgili hem bireysel düzeydeki faktörler hem de bağlamsal faktörler sunulsa da müdürün kriz liderliği davranışları, müdüre güven, MEB'e güven gibi diğer bağlamsal faktörler arasındaki ilişkiyi inceleyen bir çalışmaya rastlanmamıştır. Bu nedenle bu çalışmanın amacı, algılanan kriz liderliği, müdüre ve MEB'e güven ile öğretmenlerin uzaktan eğitime yönelik tutumları arasındaki ilişkiyi incelemektir. Bu amaçla mevcut araştırma ilişkisel bir araştırma olarak tasarlanmış olup araştırmanın katılımcıları ilkokul, ortaokul ve lise düzeyindeki devlet okullarında görev yapan 468 öğretmenden oluşmaktadır. Küme örneklemesi yöntemi kullanılarak ölçekler yüz yüze uygulanmıştır. Veri toplama araçları Uzaktan Eğitime Karşı Tutum Ölçeği, Müdüre Güven Ölçeği, MEB'e Güven Ölçeği ve Kriz Ortamında Liderlik Yeterliliği

Ölçeğidir. Hiyerarşik regresyon analizleri yapılmış ve sonuçlar, algılanan kriz liderliğinin öğretmenlerin uzaktan eğitime yönelik olumlu tutumlarının önemli bir yordayıcısı olduğunu, öğretmenlerin MEB'e olan güveninin ise öğretmenlerin uzaktan eğitime yönelik olumsuz tutumlarının önemli bir yordayıcısı olduğunu göstermiştir. Bu bağlamda, bu çalışma müdürlerin kriz liderliği davranışlarının arttırılmasının önemine yönelik bulgular sunabilir. Ayrıca bu çalışma, öğretmenlerin tutumlarını doğrudan etkileyeceği göz önünde bulundurularak kriz yönetimine ilişkin etkili kararlar alınması ve düzenlemeler yapılması için bakanlıktaki karar vericilere daha derin bir anlayış kazandırabilir.

Anahtar Kelimeler: Kriz, Kriz Liderliği, Güven, Uzaktan Eğitime Karşı Tutum

To my lovely family...

ACKNOWLEDGMENTS

It's been a great and challenging journey filled with learning and growing, providing me with countless personal and professional experiences. Additionally, it was a great opportunity for me to gain a deeper understanding of being a researcher in educational administration. First and foremost, I wish to thank Assoc. Prof. Dr. Merve Zayim Kurtay and Prof. Dr. Yaşar Kondakçı for their supervision, support, guidance and patience throughout the process of this study.

I am sincerely grateful that our paths crossed with Assoc. Prof. Dr. Merve Zayim Kurtay. Her guidance was invaluable to me. She listened to all my concerns with great understanding and always motivated me. I am thankful for her precious support. Additionally, I would like to deeply thank Prof. Dr. Yaşar Kondakçı for giving me the opportunity to meet dear Assoc. Prof. Dr. Merve Zayim Kurtay.

I would like to thank my thesis committee members Assoc. Prof. Dr. Deniz Örücü and Assist. Prof. Dr. Elif Öztürk for their valuable contribution and comments.

I would like to express my deepest gratitude to my dearest parents, little brother and lovely grandparents. Without their unconditional support and faith in me, it would be impossible for me to complete my study.

Additionally, I would like to express my sincere thanks to my dearest friends Beyza Yoldaş, Büşra Manay, İclal Keskin and Sevcan Eren for all their support, understanding, and encouragement all the time. And, to dear Öznur Buse İbiş who has always been there for me with the warmest smile and deepest support any time I knocked on her door. Thank you for cheering me up with all of your positivity anytime and anywhere.

My special thanks go to my beloved fiancé, Semih Köklücan who has always believed in me, encouraged me and supported me on this journey even though when I was struggling with confusion and lack of motivation on some difficult days. Thank you for your endless motivation and love. Thank you for making me smile every single day.

A final reminder to myself: "The struggle is part of the journey. There will be tough days, and there will be happy days. Laughter and tears. Achievements and failures. That's alright. That's what growth is."

TABLE OF CONTENTS

PLAGIARISM	iii
ABSTRACT	iv
ÖZ	vi
DEDICATION	viii
ACKNOWLEDGMENTS	ix
TABLE OF CONTENTS	xi
LIST OF TABLES	xiv
LIST OF FIGURES	XV
LIST OF ABBREVIATIONS	xvi
CHAPTERS	
1. INTRODUCTION	1
1.1. Background of the Study	1
1.2. Purpose of the Study	6
1.3. Significance of the Study	7
1.4. Definitions of Terms	10
2. LITERATURE REVIEW	11
2.1. Definition of Crisis	11
2.2. Crisis Leadership	13
2.2.1. Crisis Leadership in Schools	15
2.3. Trust	20
2.3.1. Definition of Trust	21
2.3.2. Types of Trust	23
2.3.4. Trust in Educational Organizations	25
2.3.4.1. Trust in Colleagues	26
2.3.4.2. Trust in Clients	27
2.3.4.3. Trust in Principal	28
2.4. Distance Education	31
2.4.1. History of Distance Education	33
2.4.2. Theories of Distance Education	35
2.5. Teachers Roles in Distance Education	37
2.6. Teacher Attitudes towards Distance Education	38

	2.7. Summary of the Literature Review	41
3.	METHOD	43
	3.1. Design of the Study	43
	3.2. Description of the Variables	44
	3.3. Sampling Procedure	45
	3.4. Demographic Characteristics of the Participants	45
	3.5. Data Collection Instruments	47
	3.5.1. Demographic Information Form	48
	3.5.2. Crisis Leader Efficacy in Assessing and Deciding (C-LEAD) Scale	48
	3.5.2.1. Exploratory Factor Analysis for C-LEAD Scale	49
	3.5.3. Trust Scales	51
	3.5.4. Distance Education Attitude Scale	52
	3.6. Confirmatory Factor Analysis	53
	3.6.1. Confirmatory Factor Analysis for C-LEAD Scale	54
	3.6.1.1. CFA Results for C-LEAD Scale	54
	3.6.2. Confirmatory Factor Analysis for Trust Scales	55
	3.6.2.1. CFA Results for Trust in Principal Scale	56
	3.6.2.2. CFA Results for Trust in MoNE Scale	58
	3.6.3. Confirmatory Factor Analysis for Distance Education Attitude Scale	59
	3.6.3.1. CFA Results for Distance Education Attitude Scale	60
	3.5. Data Collection Procedure	62
	3.6. Data Analysis	63
	3.7. Limitations of the Study	63
1.	RESULTS	65
	4.1. Preliminary Analyses	65
	4.1.1. Sample Size and Missing Value Analysis	65
	4.1.2. Descriptive Statistics and Inter-correlations	66
	4.2. Hierarchical Multiple Regression Analyses	67
	4.2.1. Assumption Checks for the Advantages of Distance Education Variable	69
	4.2.2. Results of Hierarchical Multiple Regression Analysis for Advantage Distance Education Variable	
	4.2.3. Assumption Checks for the Limitations of Distance Education Variable	e72
	4.2.4. Results of Hierarchical Multiple Regression Analysis for Limitation Distance Education Variable	
5.	DISCUSSION	76
	5.1 Discussion of the Results	76

5.2. Implications for Practice	80
5.3. Recommendations for Future Research	82
REFERENCES	84
APPENDICES	
A. APPROVAL OF THE METU HUMAN SUBJECTS ETHICS COMMIT	ΓΕΕ 109
B. APPROVAL ANKARA PROVINCIAL DIRECTORATE OF NATIONA	
EDUCATION	110
C. INFORMED CONSENT FORM	111
D. PERMISSION TO USE C-LEAD SCALE	112
E. PERMISSION TO USE TRUST SCALES	113
F. PERMISSION TO USE DISTANCE EDUCATION ATTITUDE SCALE	114
G. DEMOGRAPHIC INFORMATION FORM	115
H. SAMPLE ITEMS FROM C-LEAD SCALE	116
I. SAMPLE ITEMS FROM TRUST SCALES	117
J. SAMPLE ITEMS FROM DISTANCE EDUCATION ATTITUDE SCALI	Ξ 118
K. TURKISH SUMMARY / TÜRKÇE ÖZET	119
L. THESIS PERMISSION FORM / TEZ İZİN FORMU	131

LIST OF TABLES

Table 3.1	Demographic Characteristics of the Participants4	١7
Table 3.2	EFA Results for the C-LEAD Scale	0
Table 3.3	CFA Results for Models of C-LEAD Scale	5
Table 3.4	CFA Results for Models of Trust in Principal Scale5	7
Table 3.5	CFA Results for Models of Trust in MoNE Scale	58
Table 3.6	CFA Results for Models of Distance Education Attitude Scale6	1
Table 4.1	Descriptive Statistics of the Major Study Variables6	6
Table 4.2	Pearson Correlations Between Study Variables6	7
Table 4.3	Results of the Hierarchical Regression Analysis for Advantages of DE7	12
Table 4.4	Results of the Hierarchical Regression Analysis for Limitations of DE7	5

LIST OF FIGURES

Figure 3. 1 Scree plot representing eigenvalues in EFA	. 50
Figure 3. 2 CFA Model of C-LEAD Scale with Standardized Estimates	. 55
Figure 3. 3 CFA Model of Trust in Principal Scale with Standardized Estimates	. 57
Figure 3. 4 CFA Model of Trust in MoNE Scale with Standardized Estimates	. 59
Figure 3. 5 CFA Model of Distance Education Attitude Scale with Standardized	
Estimates	.61
Figure 4. 1 Histogram for advantages of DE sub-dimension	.70
Figure 4. 2 P-P Plot for advantages of DE sub-dimension	.70
Figure 4. 3 Scatter Plot for advantages of DE sub-dimension	.70
Figure 4. 4 Partial Regression Plot for advantages of DE sub-dimension	.71
Figure 4. 5 Histogram for limitations of DE sub-dimension	.73
Figure 4. 6 P-P Plot for limitations of DE sub-dimension	.73
Figure 4. 7 Scatter Plot for limitations of DE sub-dimension	.74
Figure 4. 8 Partial Regression Plot for limitations of DE sub-dimension	.74

LIST OF ABBREVIATIONS

AMOS Analysis of Moments Structures

CFA Confirmatory Factor Analysis

CFI Comparative Fit Index

CI Confidence Interval

COVID-19 Coronavirus Disease-2019

CoHE Council of Higher Education

DE Distance Education

EFA Exploratory Factor Analysis

EIN Education Information Network

M Mean

MoNE Ministry of National Education (Turkey)

RMSEA Root Mean Square of Error Approximation

SD Standard Deviation

SPSS Statistical Package for the Social Sciences

SRMR Standardized Root Mean Square Residual

TES Turkish Educational System

VIF Variance Inflation Factor

CHAPTER 1

INTRODUCTION

1.1. Background of the Study

Throughout history, humanity has faced multiple crises. Financial crises, health crises, epidemics, wars, disasters, hunger, and climate change are considered crises that shaped history. Recently, Coronavirus Disease-2019 (COVID-19) outbreak occurred and a global pandemic was declared in 2020. Therefore, the entire world has confronted a big challenge at the same time since World War II (Lippi et al., 2020). As rapid spread of COVID-19 threatens the people's health and causes excess deaths in a short time, it became a big crisis which brings unique and myriad challenges to deal with. Everything has changed drastically all around the world all of a sudden. Firstly, the spread of the virus was tried to be controlled by the governments, thus they took decisive actions to practice social restrictions. Countries ordered lockdowns and social distance rules to keep people safe at home whereas face masks become a vital part of our lives. People faced an interruption in their daily routine that they didn't know how long it would last. Crises can affect all areas of life at different levels yet many organizations try to survive the threatening and struggling times. While health sectors were affected deeply by the COVID-19 pandemic and one of the most striking health crises evolved before our eyes in a short time, the uniqueness of the pandemic crisis confronts humanity in these very modern times bringing along a massive transition. Large numbers of businesses were closed, and employees lost their jobs temporarily or permanently (OECD, 2020). Ultimately, daily routines are forced to change dramatically by the shifting remote work and distance education. Moreover, as Telli-Yamamoto and Altun (2020) stated those immediate and universal changes in educational and training activities due to the COVID-19 have greatly affected the education sector.

Across 188 countries, spreading of the COVID-19 was tried to be controlled through immediate school closures while 1.6 billion children and nearly 60.2 million teachers were affected by it (UNESCO, 2020). Similarly, in Turkey, the education process was interrupted at all levels and schools closed after the first case appeared on March 11, 2020 (Ministry of Health, 2020). Therefore, the government called for alternative ways in order to keep education. Leaders have worked hard to manage the situation by making quick decisions in terms of providing continuity of learning, thus school programs have moved to distance education from traditional teaching quickly. While the Ministry of National Education (MoNE) carried out K-12 level distance education through TV channels owned by the state and Education Information Network (EIN) platform which is known as EBA (Eğitim Bilişim Ağı), universities carried out distance education through open education and digital education systems. State TV channels and digital platforms through the Internet comprised the main elements of distance education during this process. In Turkey, distance education started asynchronously through TV channels and the EIN platform continued with synchronous lessons on online communication platforms. These platforms were Zoom, Microsoft Teams, Google Classroom, Edmodo, and many more where teachers and students could meet virtually. As a result, after a while teachers started to give live courses through online digital platforms and faced the need to adjust teaching models to online distance education quickly (Qi, 2021).

Mulenga and Marban (2020) stated while face-to-face classes become impossible to maintain and educational technologies with the usage of digital devices placed the traditional classroom materials, it has contributed to the efficient use of the technology during the pandemic. Moreover, it accelerated digital transformation and offered diverse options when traditional education was not possible to maintain (Kang, 2021). Actually, along with the rapid development of digitalization in the world educational technologies have got involved in daily classroom practices already, for example, instructional tools like interactive whiteboards, computers, tablets, and smartphones were integrated into the classroom for the purpose of facilitating student learning. Moreover, technology integration into teaching influenced from preschool to universities affects the quality of instruction and changes the traditional learning environment (Bates, 2015). Educators were already facilitated by the Information and Communication Technologies (ICT), computers,

smartphones, and the Internet to deliver printed materials simply, use slides, videos, and audios in the classroom or share online reading links in their daily teaching methods and communicate their students as well. Several countries are focusing on integrating technology into education in order to provide students with 21st-century skills that will prepare them for future careers and society (Partnership for 21st Century Skills, 2009). Similarly, in Turkey, considering the recent years of education, there have been many developments in technology integration into education. One of them was FATIH (Movement for Enhancing Opportunities and Improving Technology) Project which was carried out by MoNE in 2010. In this regard, many schools supplied interactive whiteboards and multifunction printers, tablets were distributed for students and several teachers took in-service training about the project (Karalar & Doğan, 2017). However, it remained superficial and lots of criticisms emerged afterward. For example, teachers stated that in-service training was insufficient for using tablets and e-contents (Kurt et al., 2013; Yıldız et al., 2013), hardware and software infrastructure deficiencies exist (Demirer & Dikmen, 2018), and also students' use of tablets in classroom affected classroom management negatively (Celik et al., 2017). Consequently, there has not been complete technology integration in public schools in Turkey. However, the pandemic has clearly demonstrated how important it is to have digital competencies that will enable students and teachers to adopt new technologies during distance education. Because essential digital competencies such as effective ICT use and communication in the digital environment were needed in virtual social environments and online learning platforms as a result of new education conditions. Moreover, those digital competencies were critical in order to maintain the sustainability of education in recent circumstances (Çınar & Alcı, 2022). Together with this, teachers are the main education actors and their positive contribution becomes more essential in the distance education process where the ICT tools for didactic use are a necessity. Consequently, teachers' adaptation to technology-integrated teaching gained importance with the rapid shift to distance education. However, numbers of study indicated the challenges of distance education experienced by the teachers. One of those studies conducted in Turkey during the pandemic period indicated that teachers had difficulties in internet access stemming from infrastructural shortcomings, classroom management, and using the Learning Management System (LMS) due to limited training on distance education (Sari & Nayir, 2020). Another study reveals that teachers' competency in using digital resources during distance education was inadequate and they were not trained in the process of changing conditions (Koçoğlu & Tekdal, 2020). Hebebci et al. (2020), additionally, documented that teachers draw attention to technical and infrastructural problems and limited interaction during online courses regarding to lack of time due to short online class hours. All these studies revealed dramatic factors which may be related to teachers' attitudes towards distance education during the pandemic. However, although relevant literature provides numerous of research concerning teachers' attitudes towards distance education, there is not sufficient investigation of other contextual factors including teachers' perceptions of principals' crisis leadership behaviors and teachers' level of trust in principal and MoNE that may have a potential association with teachers' towards distance education in a crisis. Because apart from access to high-speed Internet, appropriate technological infrastructure, and to have digital competencies, teachers needed social and emotional support while they were overwhelmed with the unique challenges posed by the COVID-19 pandemic.

Educational leaders' effective leadership behaviors became even more important during that crisis situation. Marshall et al. (2020) stated that even though distance education was unchartered territory for educational leaders and their time was limited to take effective actions during the pandemic, maintaining education and decreasing harm to the school community is critical in the inevitable crisis times. Crises bring along complexity and uncertainty, leaders must foster support and guidance for their followers. Similarly, Boin et al. (2017) suggested frame functions for leaders' meaning-making in a crisis and offering guidance, giving hope, and showing empathy to followers are expected from leaders under different crisis circumstances. In the same manner, crisis leadership behaviors of school principals can affect teachers' teaching experiences under bad circumstances when they look for direction and guidance. Apart from effective crisis leadership behaviors of principals, trust in leaders is an important factor that can affect teachers' behaviors and attitudes in times of crisis. Trust is a complex phenomenon that is important in constructing social relationships. Several studies emphasized that trust in leadership is important and revealed effective organizational commitment, prediction of employee attitudes and job satisfaction (Avoli et al., 2004; Dirks & Ferrin, 2002;

Yang & Mossholder, 2010). According to Holmes and Rempel (1989) trust is a factor in reducing uncertainty and feeling secure without anxiety. In the school context, trust studies concentrated on three reference groups for the purpose of understanding trust in educational organizations, and these are trust in clients (students and parents), colleagues, and the principal (Hoy & Tschannen-Moran, 1999). Based on these studies, trust contributes to students' academic achievements which lead to an effective school. Together with this, Hoy and Tschannen-Moran (2003) stated trust in principal is the basis of trust in schools and depends on teachers' perceptions of reliability, kindness, competency and honesty. Similarly, the principal's supportiveness and open and understanding approach are determined by teachers as trust-building factors (Hoy & Kupersmith, 1984; Hoy et al., 1991; Tarter et al., 1995). Various study presented positive outcomes of teachers' trust in principal. These positive outcomes emerge at the individual level or the school level. While Tarter et al. (1995) indicated that students' achievement and teaching qualities are related to effective schools based on the trust in principal; Hoy et al. (1996) revealed that trust in principal has an important factor in creating a positive organizational school climate which breeds healthy interpersonal relations. From the teacher-level outcomes of trust, Van Maele and Van Houtte (2015) demonstrated that trust in principal reduces emotional exhaustion. Furthermore, studies in the Turkish public school context, Zayim and Kondakçı (2015) showed that teachers' readiness for change which refers to belief and attitudes towards implementation of change is strongly associated with trust in principal.

Additionally, in Turkey, there is another effective reference group in the scope of trust studies, which is MoNE, the top management of the highly centralized Turkish Education System (TES) (Zayim, 2015). As proposed by Dirks and Ferrin (2002) there is a radical distinction between employee trust in immediate leaders and top management based on the degree of the relationships. For example, based on the findings of Zayim (2015), teachers' trust in principal was associated with work-related attitudes towards job satisfaction. However, teachers' trust in MoNE was more related to teachers' emotions on change implementations in the school context and commitment to change. In this respect, it can be stated that to reveal the teachers' attitudes in the context of TES, paying attention to trust in both school principals and MoNE brings about important outcomes concerning distance

education process in the course of a crisis. Therefore, along with the perceived crisis leadership behaviors, trust in principal and MoNE can be associated with teachers' attitudes towards distance education in times of crisis when something new, challenging and obligation come into teachers' life.

1.2. Purpose of the Study

Crises are inevitable both in societies and organizations and they can lead to extreme changes in people's life. While they are usually associated with terms such as panic, stress, and anxiety, leaders' and authorities' crisis management skills and leadership behaviors gained importance in controlling the situation and understanding followers' reactions. Similarly, in school organizations, principals have to face the fact that crises are needed to be led carefully. Large-scale crises such as the recent COVID-19 global crisis have the potential to affect a great number of people in the school community. As a result, a radical change such as the transition to distance education was mandated within the crisis intervention which can be inferred that distance education is a possible way of maintaining teaching and learning in any possible crisis henceforth. To gain insight into how distance education was conducted considering teachers' attitudes towards distance education is an important requirement to examine. Because their attitudes might reveal whether they are willing to teach in distance education even under challenging conditions. Likewise, teachers' opinions about distance education can be associated with the quality of the education that guides researchers. While the literature review presents several variables that might be related to teachers' attitudes toward distance education, considering any crisis context, there is a lack of empirical research. Moreover, the trust concept in school organization has considerably important since several positive outcomes are related to trust. Especially trust in management in Turkish school context was associated with teachers' attitudes related to change initiatives, as suggested by Zayim (2015). Since distance education was a big change for all the members of the school community, in the light of the change-related literature, trust in management can also be examined as a contextual variable. Thus, the purpose of this study is to examine the relationship between perceived crisis leadership, trust in

principal and MoNE and teachers' attitudes towards distance education. Also, this study aims to answer the following question:

What are the predictive roles of perceived crisis leadership, trust in principal, and trust in MoNE in teachers' attitudes towards distance education after controlling for the effects of individual-level and school-level variables?

The hypotheses of the study as follows:

Hypothesis 1: Perceived crisis leadership significantly predicts teachers' attitudes towards distance education after controlling for the effects of individual-level and school-level variables.

Hypothesis 2: Teachers' trust in principal significantly predicts teachers' attitudes towards distance education after controlling for the effects of individual-level and school-level variables.

Hypothesis 3: Teachers' trust in MoNE significantly predicts teachers' attitudes towards distance education after controlling for the effects of individual-level and school-level variables.

1.3. Significance of the Study

The COVID-19 pandemic has emergently changed the education worldwide that everyone is used to. Likewise, in Turkey, teacher and student interaction, teaching methods, and learning pedagogy were dramatically changed with school closures and shifting to distance education as precautionary measures. Consequently, the current global pandemic showed that distance education is not an alternative way of teaching and learning but a necessity. Studies emphasized that the quality of distance education is significantly related to teachers' satisfaction, opinions and perspectives. For instance, Harris and Krousgill (2008) found that instructors' views and satisfaction are important factors in order to provide successful distance education. Similarly, Dooley and Murphey (2000) stated that instructors perceive distance education as advantageous, which they believe increases teaching and learning. Therefore, it is important to investigate teachers' attitudes towards distance education during COVID-19 school closures as they are considered providers of education (Nambiar, 2020). Moreover, teachers' attitudes toward distance education

are essential in determining the quality of the distance education implementations. Furthermore, digital learning tools and Internet-based platforms are part of education nowadays and remain after the COVID-19 pandemic obviously. Studies, additionally, showed that effective technology use in classroom-setting is significantly related to teachers' attitudes (Bullock, 2004). Therefore, it is essential to indicate teachers' attitudes towards distance education in order to implement distance education effectively when necessary and train qualified students by using advantages of technology-based education. Moreover, if teachers exhibit more positive attitudes they can translate that into their classroom practices regarding technology integration and contribute to the teaching-learning process. This might in return positively influence students' attitudes toward distance learning and academic success as well.

Related literature demonstrates both individual factors and contextual factors related to attitudes of teachers towards distance education in Turkey. Based on the findings, teachers' experience in the profession, school type they are working in, their experience in technology use, students access to technology, lack of teacher and student interaction, insufficient teaching time and inadequate training in distance education are considered as factors related to teachers' attitudes towards distance education (Ağır, 2007; Ateş & Altun, 2008; Erten, 2022; Hebebci et al., 2020; Karagül & Şen, 2021; Koçoğlu & Tekdal, 2020). However, there is a gap in the literature with regard to contextual variables aspects, which include teachers' perceived crisis leadership behaviors, trust in principal and trust in MoNE, and attitudes towards distance education.

Crises lead to a high degree of ambiguity and push the organization to change which requires strong leadership competencies (Demiroz & Kapucu, 2012). Effective school leaders in times of crisis are able to cope with ambiguity, make clear decisions quickly and support teachers and students concerning minimum harm in the organization (Smith & Riley, 2012). In essence, supporting and empowering teachers, especially in turbulent times, is fundamental due to effectively pursuing the teaching process. Therefore, in education, emerging crises need to be managed successfully by principals and educational authorities. Similarly, trust in leadership is an important factor too especially during challenging times that organizations face.

When people trust their leader, they exhibit more risk-taking behaviors (Mayer et al., 1995) and innovative behaviors (Beyer & Browning, 1999). Mishra (1996) argued that during a crisis, the decision making and communication process and collaborative behaviors can be affected in the organization. Hence, the least damage to these organizational behaviors depends on the trust in leaders. Moreover, Reinke (2003) asserted that there is a strong correlation between trust in the supervisor and employees' acceptance of a change intervention. Similarly, Zayim (2010) demonstrated that teachers' readiness for change related to the three reference groups that trust in principal, trust in colleagues, and trust in clients (students and parents) in her study examining the relationship between teachers' readiness for change and several contextual and individual level variables. Therefore, in the consideration of rapid change interventions as shifting to distance education driven by the global crisis, trust in principal and also MoNE which is regarded as top management in the TES can play a predictive role in teachers' attitudes towards distance education.

In addition, in the course of a crisis, school principals' crisis leadership behaviors become important as they are immediate supervisors in Turkish schools. Therefore, their behaviors, decisions, and actions can be associated with teachers' attitudes during the distance education process. In this regard, the current study aimed to contribute to the adaptation and validation of the Crisis Leader Efficacy in Assessing and Deciding (C-LEAD) Scale measuring teachers' perceptions of principals' crisis leadership behaviors.

Hence, the findings from this study make several contributions to the current literature by addressing the gap in the relationship between the attitude towards distance education, crisis leadership, and trust in management from the teachers' point of view during the post-crisis period in Turkey. In addition, this study provides reveals teachers' specific beliefs about distance education after a short time of their fresh experiences. Therefore, the findings of the study can provide information and suggestions to decision-makers in MoNE for preparation for upcoming crises that affect the education system dramatically in Turkey.

1.4. Definitions of Terms

Crisis is defined as "a low-probability, high-impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect and means of resolution, as well as by a belief that decisions must be made swiftly" (Pearson & Clair, 1998, p. 60).

Crisis Leadership is defined as the ability of a leader to handle unpredictable events with devastating effects in an organization. This leadership requires taking decisive actions in emergencies, clear communication, and risk-taking (Wooten & James, 2008).

Trust is defined as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other party will perform a particular action important to the trustor, irrespective of the ability to monitor or control the other party" (Mayer et al., 1995, p. 712).

Trust in Management refers to the willingness of individuals making themselves vulnerable to the authorities in an organization even if they believe that negative consequences may occur (Stanley et al., 2005).

Trust in principal refers to teachers' belief that "the principal will keep his or her word and act in the best interest of the teachers" (Hoy & Tschannen-Moran, 1998, p. 342).

Distance Education is defined as "teaching and planned learning, in which teaching normally occurs in a different place from learning, requiring communication through technologies as well as special institutional organization" (Moore & Kearsley, 2011, p. 2).

Attitude towards distance education is defined as individuals' beliefs, feelings, and behavioral tendencies towards teaching through distance education.

Digital Competence refers to technology-related skills and ability to use Information and Communication Technologies (ICT) and digital media (Ferrari, 2012).

CHAPTER 2

LITERATURE REVIEW

This study aims to investigate the relationship between teachers' perceptions of crisis leadership, trust in different levels of management in educational organizations, and teachers' attitudes towards distance education. For this aim, this chapter included a review of literature on leadership during crisis times, trust in management, and attitudes towards distance education. The literature review was organized into four sections. Firstly, the nature of the crisis was presented by definitions, crisis leadership was discussed and crisis leadership was examined in the school context. Secondly, definitions and descriptions of trust were provided, trust in organization was discussed and trust in educational organizations was examined. Next, distance education was explained by providing definitions and historical background of distance education, teachers' role in distance education was discussed and studies including teachers' attitudes towards distance education were reviewed.

2.1. Definition of Crisis

Crises might occur in all kinds of organizations at any time. Numerous unforeseen situations could suddenly turn into a potential crisis threatening organizational life. Whether an organization is small or large, day-to-day activities could be disrupted at any time by natural disasters such as earthquakes, floods, drought, storms, or emergencies including fire, terrorism, explosions, pandemics, accidents, kidnapping, or strikes (Johnson, 2018). The notion of crisis takes its root in ancient Greek times as *krisis* and *krinein* (Crisis, n.d.).

While *krisis* refers to turning point in a disease, *krinein* means reasoning, separating, and deciding (Sellnow & Seeger, 2021). Additionally, the Chinese character representing crisis has two meanings as danger and opportunity for growth and development (Roberson, 2020). However, Pearson and Clair's (1998) crisis

definition is widely accepted in the literature which is "a low-probability, highimpact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly" (p. 60). Hence a crisis is characterized as unexpected events that affect a mass of people and needed an emergency response. Similarly, Demiroz and Kapucu (2012) indicated crises as unforeseen emergency events leading to undesired consequences. In addition to that, from the organizational perspective, Hermann (1963) stated the organizational crisis threatens the organization's high-priority values, needs a quick response regarding limited time to take action, and surprises the organization by causing anxiety or panic responses. He emphasizes that a crisis is an event that threatens the life of an organization by preventing the achievement of its goals. Immediate school closures due to the COVID-19 pandemic are an example of a threat faced by educational organizations. According to Coombs (2007), "a crisis is the perception of an unpredictable event that threatens important expectancies of stakeholders and can seriously impact an organization's performance and generate negative outcomes" (p. 2–3). Therefore, it could be inferred that crises threaten organizational achievement as well. Furthermore, Raphael (1986) specified characteristics of crises as "rapid time sequences, an overwhelming of the usual coping responses of individuals and communities, severe disruption to the functioning of individuals or communities, perceptions of threat and helplessness, and a turning to others for help" (p.6). Apparently, in the literature, definitions of crisis are agreed on the significant characteristics which are complex situations resulting in high levels of uncertainty, threat, surprise, time pressures, and change processes (Fink et al., 1971; Hermann, 1963; Mitroff, 1988; Waller et al., 2014; Zhang et al., 2018).

In addition, James and Wooten (2005) identified two types of organizational crises which are sudden crises and smoldering crises. The COVID-19 pandemic is an example of a sudden crisis which is characterized by unexpected events that hard to control such as natural disasters or terrorist attacks. On the other hand, smoldering crises arise from a small problem within the organization and have the potential to become a crisis status due to a lack of managerial attention. These are, for example, workplace safety, rumors, bribery, and sexual harassment.

2.2. Crisis Leadership

Although crises are rare events, they threaten the survival of the organizations dramatically (Jackson & Dutton, 1988), and to be protected from the destructive effects of crises in an organization, crises needed to be led successfully. That is, to maintain the sustainability of an organization, managing the crisis is essential. Aksu (2009) argued that leaders should not pretend that they have not encountered a crisis. Moreover, they must be realistically aware of the potential crises and be prepared for them. Because, crisis management includes determining the factors that will threaten organizations and creating a structure that will eliminate those factors beforehand (Yağcı, 2020). Therefore, while effective management provides leaders be prepared, it helps to make a plan accordingly. Similarly, Smits and Ezzat (2003) emphasized that "Effective crisis management depends upon planning and people" (p. 2). However, a crisis caused by natural disasters may not give a clue beforehand and feel like it came out of nowhere. For instance, the COVID-19 global crisis occurred suddenly and gave no time to anybody for preparing. Considering those crises, once a crisis evolves only option for a leader is to take control and make quick and decisive actions (Grissom & Condon, 2021). That is, in times of crisis, the importance of leadership and management skills becomes prominent as stated by Demirtaş (2000). For instance, particular leadership skills such as being adaptive and resilient become more demanded of a leader in challenging times (Jahagirdar et al., 2020). Similarly, leaders' crisis management abilities are the most influential factor in coping with the crisis. Wooten and James (2004) stated that effective crisis management includes effective leadership behaviors such as informing members adequately about the actions and making them engage in the crisis resolution. Further, several studies examined the relationship between specific types of leadership and crisis management. Waldman et al. (2001) specified two forms of leadership as being important in periods of uncertainty which are transactional and charismatic leadership. Moreover, in the scope of an experimental study, Hunt et al. (1999) investigated different leadership types both in a crisis situation and non-crisis situation. In the literature, although particular types of leaders, demonstrating charismatic or transformational leadership, were stood out among others as being effective leaders in crises, the study of Hunt et al. (1999) showed that regardless of the leadership type, followers demand leaders to be confident and performance

beyond expectations in times of crisis. Leading in crisis requires extraordinary efforts with great responsibility. Lussier and Achua (2004) identified five tasks in which essential competencies in crisis leadership as crafting a vision, setting objectives, formulating and implementing a crisis plan, communicating openly and managing people effectively.

Marshall et al. (2020) also identified four key leadership behaviors that are important in crises: "providing clear direction, communicating effectively, working collaboratively, and engaging in adaptive leadership" (p. 32). Communication is an essential skill expected of leaders during crisis times as it is in all management processes. Maintaining accurate information through clear communication with stakeholders is highlighted as being a good practice of leadership in difficult times (Caringal-Go et al., 2021; Wittmer et al., 2021). Since ambiguity and anxiety among stakeholders increase, and due to their unstable state of emotions during a crisis, leaders should communicate effectively and frequently to provide comfort to the organization (Marshall et al., 2020). Moreover, communicating clearly and transparently during a crisis help reinforce trust in the workplace (Fernandez & Shaw, 2020).

The collaborative approach is essential in effective crisis leadership as well. Crisis management relies on working collaboratively in resolving the crisis. Especially, building crisis management teams help the organization in responding to a crisis. Further, Coombs (2007) stated that "a crisis management team is a cross-functional group of people within the organization who have been designated to handle any crisis" (p. 63). Therefore, these teams which involve personnel from all departments within the organization work collaboratively to overcome critical situations. Leaders, on the other hand, should work with the crisis management team, stay engaged in the event of the crisis, be visible, and lead from the front by controlling all aspects of the implemented plan (Carone & Iorio, 2013).

Correspondingly, adaptive leadership is another important practice in leading times of crisis. According to Strauss et al. (2013), when faced with circumstances requiring organizational change, adaptivity is regarded as a vital, first step. Since a crisis brings with it many changes, especially the functioning of the organization, leaders need to be engaged in learning and adapting to the new situation to lead to the

unknown and the uncertain. As stated by Hadley and her colleagues (2011), in times of crisis leaders with adaptive personalities feel the confidence to lead in critical situations.

Additionally, there is a plethora of studies showing the importance of decision-making skills in effective leadership in time of crisis (Quarantelli, 1988; James & Wooten, 2010). As proposed by Klann (2003) leader's capacity is best tested in times of crisis. Crises demand leaders to make the right decisions in an unstable condition and under enormous pressure, so effective decision-making is a critical skill for leading in a crisis (Beilstein et al., 2021; Klann, 2003). Moreover, as stated by James and Wooten (2010) failing to make quick and wise decisions can have more devastating effects than the crisis itself. Therefore, an effective leader should make quick and strategic decisions under time and resource constraints caused by the crisis conditions. Also, leaders' motivation to lead in a crisis is an important factor that may affect the resolution of any crisis. Chan and Drasgow (2001) argued that self-efficacy and personal resources such as personality traits and skills affect the leaders' motivation to lead during turbulent times. Therefore, if leaders believe in themselves to make a change in the resolution of the crisis situation, they become motivated to lead successfully (Hadley et al., 2011).

2.2.1. Crisis Leadership in Schools

Pandemics such as the recent COVID-19 outbreak are serious crises affecting society as a whole. While threatening many lives, it affected the health care system drastically. However, the education sector is one of the sectors most affected after the health sector (Baykal & Koc-Tutuncu, 2022). This crisis disrupted the function of the schools and left teachers, students, parents, and other stakeholders in the dark about educational continuity because of immediate school closures (Grissom & Condon, 2021).

As complexity theory suggests, schools are complex adaptive systems full of unpredictable events (Morrison, 2008). Thus, any problem daily has the potential to turn into a crisis in the school. Despite the fact that the definition of crisis involves infrequency by its nature, school crises have a high probability of occurring (Adamson & Peacock, 2007; Grissom & Condon, 2021). In that vein, crisis factors

affecting a school community are grouped into two categories. External factors coming from outside of the school are fires, natural disasters, wars, security issues, terrorist attacks, epidemics, political uncertainties or financial distresses in the country (Herman, 1994). On the other hand, internal factors, which are related to students, teachers, and administrative affairs are disturbing events falling schools into a state of crisis. Suicide, violence, loss of students or teachers, physical and sexual abuse, drug use, and addiction (Allen et al., 2002; Newgass & Schonfeld, 2000), and issued based on management (Erol & Karsantik, 2017) can be examples of internal factors causing a crisis in the school.

The literature presents definitions specifically for school crises. They are considered unpredictable emergent events that have a serious impact on the school community (Brock et al., 1996) and traumatic events accompanied by ambiguity and complexity (Seeger, 2002). Jones and Paterson (1992), on the other hand, defined a school crisis as, "a sudden, generally unanticipated event that profoundly and negatively affects a significant segment of the school population and often involves serious injury or death" (p. 1). The school community consists of students, parents, teachers, administrators, and other school-based personnel who are closely related to a school and share common values about the education of the children (Redding, 1991). The reality of the crisis affects all school communities. It is important to reassure stakeholders about navigating crisis, promote courage to cope with the stress, and give them support when they look for a direction (Fernandez & Shaw, 2020; Marshall et al., 2020) since stress increases during crisis times among teachers, students, and their families because of fear and ambiguity (Ingenito, 2004).

Principals as school leaders are the main actors to manage a crisis. According to Jones and Paterson (1992), establishing a crisis management plan is extremely crucial so that the school does not fall into chaos. Similarly, Aksoy and Aksoy (2003) emphasized in schools crisis management plans are important and reduce disruption to the functioning of the school and indecision. Herman (1994) illustrated the characteristics that school principals should have and what they will do in the process of preparing and responding to crisis situations in schools. As stated by the author, a principal should predict possible crises, prepare crisis response guidelines and action plans, and have a well-prepared directive for communication with the

written and visual media during the crisis. Thus, principals need to establish a preventive and systematic approach to crisis management.

In the literature, there are three main stages in crisis management considered as a cyclical process and, these are pre-crisis period, crisis, and the post-crisis period (Mitroff et al., 1987; Coombs, 2007). Consistent with crisis management in school organizations, these three dimensions in the crisis management process are related to the crisis management skills of school principals. Aksu and Deveci (2009) examined these dimensions as pre-crisis period, crisis period, and post-crisis period in Turkish school context. The early warning signals appear in the pre-crisis period and leaders need to detect them. Once the crisis signals are received, it is important to prepare the necessary crisis plans and teams and also keep those plans up to date. The crisis period refers to the moment of crisis in which fear and panic are experienced. While the effects of the crisis begin to appear quickly, chaos could occur. In that stage, ensuring the safety of the school community and continuity of education are related to principals' successful leadership behaviors during the crisis. As proposed by Aksu & Deveci (2009) the absence of conflicts within the organization and the high motivation of employees create a supportive atmosphere for crisis management. That is, principals are responsible for conditions that facilitate the school community's adaptation and lead the transition that is forced by the crisis (Weiner et al., 2021).

Grissom and Condon (2021) highlighted three sets of competencies that school principals need to possess for effective leadership in crisis: analysis, sensemaking, judgment, communication, and emotional intelligence. Analysis, sensemaking, and judgment refer to a leader's ability to forecast impending danger and determine its risks. These competencies especially become more prominent before crisis hits. As highlighted by several scholars for crisis leadership in general, communication is vital for school organizations in times of crisis as well. Flaxman et al. (2020) noted that school leaders should be careful about sharing accurate information. In fact, based on their research findings, communication was stated by the managers as an important factor that should be used effectively in times of crisis. On the other hand, stress is an important factor that might affect the school leaders' decision-making and judgment skills, thus emotional intelligence herein becomes key to success in providing emotional control and showing empathy (Boin et al., 2013).

Given the critical role attributed to the school leaders during crises, several quantitative and qualitative studies conducted with the aim of understanding the causes and impacts of the crisis affecting schools and the crisis management strategies of principals. The majority of the existing studies focused on both teachers' and principals' perspectives related to effective crisis leadership behaviors of school principals. However, while the current study focuses on teachers' perceived crisis leadership only during the crisis period, other studies in Turkey examined the principals' behaviors based on the scale developed by Aksu and Deveci (2009) of three dimensions: Pre-Crisis, Crisis Response, and Post-Crisis.

To illustrate, Ayyürek (2014) conducted a study that aims to obtain the perceptions of teachers about principals' crisis management skills after experiencing the Van Earthquake in 2011. According to teachers' opinions, the crisis caused by the earthquake was not managed well. Additionally, female teachers who participated in the research expressed more negative views on crisis management than male teachers.

Additionally, the study conducted by Erol and Karsantik (2017) examined primary and secondary school teachers' perceptions about crisis situations showed that teachers associated crises with student and management-based problems. Getting the crisis signals, making effective decisions, organizing the crisis management process, and communicating in the crisis management process were stated as required qualifications by the principals in times of crisis.

Similarly, Altınbas et al. (2019) conducted a study to reveal teachers' evaluation of the crisis management skills of the principals. The study demonstrated that as the managerial experience of principals increases they become more able to deal with difficulties, adapt to change, and make effective decisions when encountering problems. Likewise, Maya (2014) examined the teachers' perceptions of crisis management skills of principals and found at a moderate level. In addition to that, teachers' perceptions of the levels of crisis management skills differ in terms of work experience. The author suggested that school principals need to be adequately trained and prepared for potential crises affecting school.

Teachers' perceptions of the crisis and principal's crisis leadership behaviors are important in order to take decisive actions to overcome any crises related to schools and minimize their damaging effects on the school community. However, in Turkey, studies were limited to principals' crisis management skills in the context of a minor crisis or a district-level crisis, and any of these studies did not include teachers' attitudes towards distance education that emerged due to the crisis management strategy.

Additionally, as proposed by Ahlström et al. (2020), trust in schools has a great influence on dealing with challenges that were caused by change, uncertainty, and anxiety. Specifically, in times of change, open communication becomes forefront in the organization and provides a big advantage for the organization's competitiveness (Mishra, 1996) in which high level of trust environment. Similarly, communication is the key element of effective crisis leadership, so information flow easier (Bryk & Schneider, 2002). Moreover, trust in leadership is regarded as the crucial factor which enhances positive employee outcomes (Yang & Mossholder, 2010). It can be related to teachers' performance and commitment to work. As an example, based on the findings of Balyer (2017), when teachers trust in their principals they put more effort into educational goals and be motivated to do their best. Similarly, studies related to the change literature suggest that any instructional and organizational changes offered by the principal are more likely to be accepted where a trusting relationship between teachers and principal is salient in the school (Kochanek, 2005). Moreover, Zayim (2015) studying within the Turkish school context revealed that teachers' readiness to change is associated with trust in educational authorities.

As crises bring about changes and ambiguities by their nature, shifting to distance education can be considered a massive change is driven by the COVID-19 school closures which forced teachers to adapt in a short time. While leaders' crisis leadership behaviors become prominent with regard to teachers' views in times of crises, this global crisis led to a dramatic change in teaching and learning, trust in principal and in MoNE can be related to teachers' acceptance of the distance education, in turn, their attitudes towards it.

Since this study aims to predict teachers' attitudes toward distance education in the course of a crisis where their work routine dramatically changes, detailed arguments were presented in this regard next section.

2.3. Trust

Trust is considered an essential resource to sustain many relationships. It has been accepted as a core construct in different disciplines including biology, sociology, psychology, history, political sciences, management and economics which brings up the fact that there is no consensus with regard to its definition (Rousseau et al., 1998). However, Gabarro (1978) states that a single definition might threaten the wealth of the concept itself. Although each field has presented different perfectives on trust, trust is assigned as a major aspect of the society from the societal perspective and much of the literature demonstrates that trust is contingent on the presence of two parties involved in a relationship which could be two individuals, two teams, or two organizations.

As indicated in the literature, first studies with regard to trust concept were done by personality theorists, but especially after 1980, it started to be the subject of research in the fields of organization theory, management, and organizational behavior (Arı, 2003). Therefore, apart from the personal relationships, trust is an important factor in the professional and employment relationships as well (Bunker et al., 1996). Also, to elucidate its importance at the organizational level, numerous theories were established and studies were conducted (Kramer & Tyler, 1996; Lewicki et al., 1998; Mayer et al., 1995; Mishra & Spreitzer, 1998; Tschannen-Moran, 2004). According to the literature, there has been a lot of research highlighting the power of trust in creating well-functioning organizations, and findings reasonably point out positive employee outcomes (Dirks & Ferrin, 2001; Kath et al., 2010; Lee et al., 2013; Van Maele et al., 2014). In this respect, a deeper understanding of members' expectations about relationships and behaviors including job satisfaction, work commitment or openness to change depends on investigating trust dynamics in the organizations.

Based on the trust literature, this section aims to present a background on trust dynamics and also consequences of trust-based relationships in educational organizations with a specific focus on trust between administrators and teachers.

2.3.1. Definition of Trust

Throughout the years, the literature has provided numerous definitions of trust. Deutsch (1958) defined trust as "an expectation by an individual in the occurrence of an event such that expectation leads to behavior which the individual perceived would have greater negative consequences if the expectation was not confirmed than positive consequences if it was confirmed" (p. 266). Another definition of trust provided by Boon and Holmes (1991) is as follows, "a state involving confident positive expectations about another's motives with respect to oneself in situations entailing risk" (p. 194). Therefore, conditions of containing the high levels of risk promote trust if two parties have positive expectations from each other. In addition, Mayer et al. (1995) defined trust as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other party will perform a particular action important to the trustor, irrespective of the ability to monitor or control the other party" (p. 712). That means trust depends on the trustor's acceptance of his or her vulnerability whilst believing that the trustee would not cause any harm to him or her. According to Rousseau et al. (1998), risk and interdependence are two critical factors for trust to arise. Risk-taking under uncertain conditions depends on the trusting parties' perception of the probability to lose (Chiles & McMackin, 1996) and trust is meaningful under conditions where specific uncertainties that leads to taking risks (Lewis & Weigert, 1985). Similarly, interdependence is another factor required to promote trusting relationships because the interests of one party cannot occur without trust. Another definition that has been mostly considered in the literature is suggested by Hoy and Tschannen-Moran (1999), "a person's or group's willingness to make themselves vulnerable to another person or group, relying on the confidence that the other party exhibits the following characteristics or facets: benevolence, reliability, competence, honesty, and openness" (p. 189). Based on the description, Hoy and Tschannen-Moran (1999) stated that benevolence, competence, reliability, honesty, and openness are facets of trust.

Benevolence. It is related to the sense of caring and based on the assurance that one party would not exploit the latter party's well-being even if the circumstances are available for the latter party's self-interest (Cummings & Bromiley, 1996; Hoy &

Tschannen-Moran, 1999). In the school context, school principals promote trust by demonstrating benevolence which is related to caring about teachers' needs and interests and protecting their rights (Tschannen-Moran, 2004).

Competence. It is related to showing the ability to perform a task and fulfill another party's expectations according to the situation which, in turn, is associated with developing trust (Baier, 1994). In other words, one party's abilities or skills based on the specific standards foster trust in relationships. In school, for example, a new teacher who wants to do his best in helping students but does not have adequate skills may create higher levels of distrust among students (Tschannen-Moran & Hoy, 2000).

Reliability. It is based on predicting whether someone else's behavior will be consistent. Hence, in a trust-based relationship that is essential to reflect the consistency between words and actions.

Honesty. It is a fundamental concept for establishing interpersonal trust which is related to somebody's integrity and authenticity (Tschannen-Moran, 2004). Integrity is about being consistent in what is said and what is done and someone's inconsistent behavior violates trust.

Openness. This facet is about the trustee part would not exploit the other party's vulnerability although he or she shared personal information (Hoy & Tschannen-Moran, 1999). Authors also make a connection between openness and reciprocal trust which refers to an exchange of trust among two parties. That is, each party has confidence that the other one would not betray.

To sum up, trust is a concept-based phenomenon as Rousseau and his colleagues (1998) asserted, and it is considered as being a way of decreasing uncertainty which includes perceptions of risks, and trust-related concepts are crucial in social interactions. The common aspect of all definitions is that one party leaves himself or herself vulnerable to the other party on certain issues for certain reasons. This state of being vulnerable comes out of the individual's own will.

2.3.2. Types of Trust

Shapiro and her colleagues (1992) suggested three types of trust considering professional relationships in an organization: deterrence-based trust, knowledge-based trust, and identification-based trust. Lewick and Bunker (1995) used calculus-based trust instead of deterrence-based trust of Shapiro et al.'s (1992) model. These trust types constitute stages of trust building. That is, development of trust in a relationship moves from calculus-based to knowledge-based to identification-based trust. The calculus-based trust is the first stage in trust formation and is driven by the consistency of behavior. The trustee party fears the consequences of what they do and say, so in order to prevent itself from negative consequences of the distrust, calculus-based trust increases rapidly. In the form of knowledge-based trust, trustor party knows the behaviors and possible actions of the other party well enough (Lewicki & Bunker, 1995). Similarly, identification-based trust occurs when two parties understand each other and each party empathizes with the other party effectively (Lewicki & Bunker, 1995).

According to McAllister (1995), trust is categorized into two types in the context of interpersonal trust: cognitive-based trust and affective-based trust. Cognitive-based trust is related to one party's cognitions of the performance of other party and in order to develop trust between two parties, features such as competence, reliability, and dependability are prominent (McAllister, 1995). In other words, cognitive-based trust is based on having meaningful information about the other party and on the search for a rational reason to trust. Affective-based trust emphasizes emotional attachment, thus trust depends on the level of care among two parties and the positive emotions they feel for each other (McAllister, 1995). In addition, it relates to personal experiences with someone, suggesting that a close work relationship with the manager could build this type of trust and promote strong bonds. McAllister (1995) stated that in for affective-based trust to present there must be a cognitive-based trust first.

In another classification based on the organizational level, two types of trust were suggested interpersonal and impersonal trust (Mayer et al., 1995; Costigan et al., 1998; Vanhala et al., 2016). What an employee trust for colleagues and managers is

studied as interpersonal trust; however, impersonal trust refers to trust in the organization namely organizational structures and processes.

2.3.3. Organizational Trust

Shea (1984) describes trust as a "miracle ingredient in organizational life" (p. 2) that unites people together to achieve a common goal and foster organizational effectiveness. Numerous studies examining the impact of trust in organization show that it results in various positive outcomes. While Ouchi (1981) highlighted that trust improves organizational productivity, Tschannen-Moran (2001) pointed out that trust facilitates cooperation and collaboration in the organization. On the other hand, Davis et al. (2000) stated its vitality as being a key factor of organizational success. Furthermore, there are studies demonstrating that trust in organization fosters employee motivation (Dirks, 1999), and commitment (Hrebiniak & Alutto, 1972; Liou, 1995; Tan & Tan, 2000) while improving communication (Roberts & O'Reilly, 1974; Zand, 1972) and employees' innovative behaviors such as generating creative ideas for work processes (Bak, 2020; Sonnenberg, 1996). Moreover, studies indicated that trust brings about positive attitudes, higher levels of cooperation associated with positive work environment behavior, motivation, and high performance of the employees (Brockner et al., 1997; Dirk & Ferrin, 2001; Shockley-Zalabak et al., 2000). Therefore, trust is a vital component in organizations and literature provides myriad studies regarding its positive outcomes.

According to existing literature, organizational trust can be examined in three subheadings: trust in organization, trust in manager, and trust in colleagues. Examining trust at different levels provides a deeper understanding of the consequences within organizations. Similarly, in educational organizations, it is important to gain a deeper understanding of level of teachers' trust while several studies offered lots of positive employee outcomes including higher levels of motivation, increase in individual job performance and, in turn, organizational performance (Currall & Epstein, 2003; Dirks, 1999).

2.3.4. Trust in Educational Organizations

Schools are one of the most important organizations in the society. It is essential to explore dimensions of trust in the school context because school effectiveness, school improvement, the well-being of stakeholders, and student achievement are either directly or indirectly influenced by the degree of trust stakeholders have in each other (Tschannen-Moran, 2001). Likewise, Vroom's (1964) expectancy theory suggests that employees be motivated to put more effort into work if trust exists in the organization.

Developing trust-based relationships within the school environment leads to several positive outcomes. According to Hoy et al. (1996), trust in organization provides a positive organizational school climate. Similarly, as Hoy et al. (1992) and Tarter et al. (1995) indicated school effectiveness is linked to teachers' trust in the organization. Moreover, a high-trust environment creates effective communication within the schools (Hoy et al., 2002). Bryk and Schneider (2002), additionally, emphasized that "Trust is a strong predictor of success" (p.132) which leads to an impact on individual task performance. For example, they found that trust enhances students' learning and performance in activities. Scholars also examined trust and organizational change in the scope of the schools. It is commonly accepted that trust decreases risk perception which is related to change initiatives (Rousseau et al., 1998), so they are willing to perform more work than normal (Tschannen-Moran, 2003). Specifically, trust among teachers is significantly associated with collaborative behaviors and which, in turn, leads to openness to change and it became easier for them to comply with innovation (Bryk & Schneider, 1996; Tschannen-Moran, 2001). Similarly, many studies demonstrated that trust is a key enabler for school reform. For example, Louis (2007) pointed out that teachers working in a school with strong trust relationships tend to accept the change.

Consequently, it is important to reveal the nature of trust dynamics in their work environment which leads to enhanced job-related attitudes, individual performance, and eventually student outcomes. Furthermore, studies show these positive outcomes for both individual and organizational levels.

Schools are characterized by intense social interactions between teachers, students, principals, and parents, thus their relations give insight into trust in schools. In the literature, three reference groups stand out in terms of trust in school organizations. Hoy et al. (2002) introduced these reference groups as being elements of faculty trust which refers to teachers' trust in principal, trust in colleagues, and trust in clients (parents and students).

2.3.4.1. Trust in Colleagues

First reference group identified by Hoy et al. (2002) in relation to faculty trust is colleagues. Tschannen-Moran's (2014) study revealed that teachers' trust in principal is strongly related to the degree of teachers' trust held in each other. Therefore, in addition to the importance of trust in principals at the school, the trust among teachers is also very important for the well-functioning of the school. Because according to Hoy et al. (1992, 1996), school effectiveness and positive school climate are highly related to those trust relationships within the school. In terms of trust formation, Margolis and Bannigan (1986), offered that trust formation requires to share of opinions and feelings among two parties. Since teachers interact more often with each other and have an opportunity to share opinions and feelings much more developing trust-based relationships depends on those interactions which are important for them.

Tschannen-Moran and Hoy (1998) defined trust in colleagues as "the faculty's belief that teachers can depend on each other in difficult situations and that teachers can rely on the integrity of their colleagues" (p. 342). When teachers support one another and collaborate to achieve common goals considering the success of the school, they enhance the quality of their relationship which cultivates trust among them. Because trust is accepted as a necessary ingredient making people cooperate willingly (Coleman, 1990), the breeding trust-based relationships among teachers is expected to strengthen collaboration for better organizational performance (Tschannen-Moran, 2009). Therefore, teachers' trust in colleagues reinforces an environment with an adaptive and productive atmosphere.

Concerning change literature, when teachers trust in colleagues since that improve cooperation between them, they become more open to change (Tschannen-Moran,

2001). Similarly, Bryk and Schneider (1996) investigated trust and school reform relationship in urban schools. Results showed that trust in colleagues makes teachers more open to innovation and change. Moreover, while they open up their weaknesses and talk about them with colleagues, they also are encouraged to develop their own teaching strategies.

Trust studies also conducted in the context of the Turkish schools. For example, Zayim and Kondakçı (2015) studied to reveal the relationship between readiness for change and organizational trust. Their findings supported previous studies which reveal the relationship between teachers' trust in colleagues and openness to change (Bryk & Schneider, 1996). Correspondingly, Zayim and Kondakçı (2015) demonstrated that faculty trust in colleagues significantly associated with teachers' readiness for change and decrement in trust may lead to increment in the negative attitudes related to change initiatives such as resistance and cynicism.

Another positive outcome emerges in the context of students. That is, trust-based relationship among teachers not only creates a better work environment but also contributes to student achievement (Tschannen-Moran et al., 2006). Therefore, student achievement is also a remarkable outcome of trust studies in school organizations. For instance, teacher professionalism and collective efficacy are associated with trust-based relationship which enhances students' academic achievement (Tschannen-Moran, 2009). Therefore, when atmosphere of trust prevails among teachers in a school, students could also benefit from this positive atmosphere as recipients (Tschannen-Moran, 2009). In addition to that, another reference group is trust in clients, which encompasses trust in parents and students, which plays a vital role in a positive school environment as well as trust in colleagues.

2.3.4.2. Trust in Clients

Second reference group of the trusting relationships in the school organizations, suggested by Hoy et al. (2002) is trust in clients (students and parents). In a healthy school climate, students, teachers and school leaders feel good to be there and have positive behaviors. In the context of healthy schools, teachers have positive attitudes towards each stakeholder and harmonious relationships are cultivated among

teachers and other members of the school community (Hoy et al., 1991; Hoy et al., 2002). Students and parents are important aspects of the school community. Teachers' trust in students is quite important within the schools in terms of positive educational outcomes. Because as Tschannen-Moran (2014) stated academic performance of students, quality of learning, student motivation, student well-being and their commitment to the school are direct results of the relationship between teachers and students. Also, although parents are not physically present in daily school times, parents who are more likely interested in their children's academic achievement in school can decide to be closely involved in their children's education. In addition to that, studies show that parental involvement has beneficial influences on children's educational development (Hoover-Dempsey & Sandler, 1997) and developing of positive attitudes and behaviors at school (Avvisati et al., 2014). Therefore, parents have a strong presence in school settings, as well, for their children which makes them an important party of the trust relationships within the school context.

Based on the findings of Goddard et al. (2001) there is a link between student achievement and trust. This link actually is created by trust based relationship between teachers and parents and also students. That is, when teachers foster trust-basted relationships between students and parents, student achievement increases. Therefore, it is important for to teachers learn to create a highly trusting environment that leads to higher student success. Similarly, Hoy and his colleagues (2006) found that faculty trust in students and parents, a strong sense of collective efficacy and academic emphasis is related to student achievement. The academic emphasis of a school refers to level of importance that the school places on student success. Moreover, Bryk and Schneider's (2002) three-year longitudinal study demonstrated trust in parents and students strongly predicts student achievement. Because the interpersonal relationships between teachers, students and parents might affect whether or not students attend class on a regular basis and continue to put out the necessary effort to study which, in turn, is linked to student achievement.

2.3.4.3. Trust in Principal

Another trust reference group within the school context is trust in principal. School principal's role is important for fostering trust between teachers. Hoy and

Tschannen-Moran (2003) put forward to trust in principal as the basis of trust in schools. The principal's behaviors are highly critical and decisive in establishing trust-based relationships. According to Hoy and Tschannen-Moran (2003) teachers' trust in principal is essential in the organizational context and is based on the principal's kindness, reliability, and honesty characteristics perceived by teachers. Similarly, principal's supportive and collegial leadership behaviors are crucial in establishing trust in the school which, in turn, predictors of trust in principal. Building trust between teachers and principals brings a sense of achieving a common goal (Tschannen-Moran, 2004) by improving collaborative work behavior and effective communication (Fuller et al., 2008). It is known that teachers have very demanding roles such as preparing and delivering instruction, having different skills and strengths, evaluating each student's performance, managing each student's behavior and adapting changes in the practices in educational settings and so on. Therefore in order to achieve these demanding roles strong interpersonal relationship between the teachers and principals is indicated as being an important element and trust is the key for those strong relationships (Brezicha & Fuller, 2019).

Additionally, achieving educational goals in a school setting is related to trust in principal. In this regard, Tschannen-Moran and Gareis (2015) highlighted that teachers' trust in principal was significantly related to teacher professionalism and student achievement. Studies have also investigated the teacher-level outcomes of trust in principal. To give an example, trust in principal was associated with teachers' organizational citizenship behavior (OCB) which refers to extra-role activities (Berkovich, 2018; Tschannen-Moran, 2003; Van Maele et al., 2014) and teachers' wellbeing (Berkovich, 2018; Louis & Murphy, 2017; Van Maele & Van Houtte, 2015). In addition, Van Maele and Van Houtte (2015) explored the relationship between faculty trust in students, colleagues, and the principal and teacher burnout in elementary schools. While results showed that there is a negative correlation between trust in principal and teacher burnout, trust in principal leads to a decrement in teacher burnout. It can be inferred that when teachers are faced with significant challenges which may lead to exhaustion, cynicism and inefficacy, their trust in principal helps them to overcome those challenges. Also, there are studies exploring trust in principal in the Turkish educational context. For example, Balyer (2017) investigated teachers' perception of trust in principal considering three perspectives:

their school leadership, their administrative implementations and their principals' personality. Unlike the majority of studies that provided positive outcomes, results showed that teachers do not trust their principal as school leaders as a consequence of their negative opinions. Correspondingly, teachers do not trust their principals in the consideration of daily administrative implementations. That is, they reported that principals lack competence and also experience in their administrative practices, thus they have difficulties in managing schools and human resources. Another aspect examined in Balyer's study was principals' personalities. Teachers mostly described their principals as disrespectful, selfish and unreliable which, in turn, leads to a low level of trust in principal. The author suggested that these negative teacher outcomes may arise due to the highly-centralized structure of MoNE. Because all decisions are made by the MoNE including appoints of the school principals without taking into account potential problems related to principals' inexperience or personalities (Balyer, 2017).

As an organizational level positive outcome, Tarter et al. (1995) offered that trust in principal allows the formation of more effective schools which have conducive learning environments. Positive school climate, additionally, another essential outcome that is caused by fostering trust-based relationships in schools (Hoy et al., 1996). As proposed by Hoy and his colleagues (1996), healthy schools refer to positive climate of the school. Authors stated that in a healthy school, people work together in harmony and principals demonstrate collegial leadership while highly influencing their superiors. Thus, trust-based relationship between school principals and teachers are positively associated with a healthy school environment.

Moreover, teacher trust in principal produces supportive attitudes for change (Moos & Kofod, 2009; Zayim & Kondakçı, 2015). Principals have a critical role, especially in uncertain times and they especially reduce the risk associated with change by making the implementation process easier and also positive student outcomes (Zayim-Kurtay, 2021). Parallel to this, in the existence of teacher-principal trust, any organizational changes offered by the principal are more likely to be accepted (Kochanek, 2005). Accordingly, change and organizational trust relationship are worth examining, because change is constantly encountered in schools and

education-related concepts. That is, very recent instructional change can be exemplified as shifting distance education due to the COVID-19 pandemic crisis.

As indicated in the aforementioned studies, trust in schools is examined in the literature from three referents' perspectives which are trust in principal, trust in colleagues and trust in clients (parents and students) (Hoy et al., 2002). Despite the abundance of literature related to trust in principal, studies examining trust in a higher level of management in educational organizations are scarce. In Turkey, the education system is highly centralized and the top management is MoNE. All important decisions related to education such as appointment of teachers and administrators, the selection of textbooks, and the preparation of the curriculum are taken by the MoNE (Tarman, 2011). Zayim (2015) introduced trust in MoNE as a new reference group of trust-based relationships in the school context and explored change interventions in TES. According to the results, while trust in principal was strongly associated with work-related outcomes such as job satisfaction, trust in MoNE was associated with change-related teacher emotions and commitment to change. Also, results demonstrated that trust in MoNE is a stronger predictor of teachers' readiness for change rather than trust in principal which may stem from principals' lack of autonomy in the education system which is very centralized. That is, decisions are made by MoNE and imposed on schools without considering school principals' opinions; thereby change initiations are made by MoNE and trust in MoNE is positively related to teachers' readiness for change (Zayim, 2015). Similarly, findings were supported by the arguments pointed out that trust in different reference groups at different levels of management results in different employee outcomes (Dirks & Ferrin, 2002; Yang & Mossholder, 2010). Therefore, in order to examine teachers' attitudes towards distance education in the post-crisis period, it has become important to consider the predictive role of trust in management based on two reference groups, because trust-based relationships between each party differ in teachers' outcomes.

2.4. Distance Education

The COVID-19 crisis demonstrated that distance education is no more an option but a primary necessity in the scope of any crisis which has a profound impact on the whole society. Therefore the reality of such kind of crisis results in immediate school

closures, which have confronted educators with the importance of distance education which provides a big opportunity for continuity of the teaching and learning process. There is a plethora of studies in the literature that have concentrated on different types of distance education, its advantages, shortcomings, and problems in practice, perceptions and attitudes of both learners and teachers, and also learner-teacher and learner-learner interactions. Lately, because of the COVID-19 pandemic conditions, an unexpected transition to distance education has emerged, thus studies about the field of distance education have increased considerably.

Moore and Kearsley (2011) defined distance education as "teaching and planned learning in which teaching normally occurs in a different place from learning, requiring communication through technologies as well as a special institutional organization" (p. 2). As Keegan (1996) stated that distance education is different from face-to-face education and they are separated from each other with a sharp line at one point. Unlike the traditional classroom setting, teachers and students are distant from each other, and they lack physical interaction because they do not meet physically throughout the process.

Distance education is also used interchangeably with distance learning, online learning, e-learning, and virtual education because of Internet use and even though emergency remote teaching has specific main elements. These elements are being institution-based, physical separation of teacher and student, usage of interactive telecommunication systems including media (e.g., television, telephone, or Internet), and sharing data in print, voice, or video formats (Simonson et al., 2003). Lately, with the rapid transition to distance education because of COVID-19 pandemic researchers specified distance education as emergency remote teaching (Adedoyin & Soykan, 2020). Therefore, all teachers, instructors and students were enforced to adopt distance education worldwide urgently. While this new form of distance education came with extreme challenges that influence several stakeholders of education, Bozkurt and Sharma (2020) stressed that crises such as the current pandemic show how education systems are open to external dangers.

2.4.1. History of Distance Education

The concept of distance education is not a new phenomenon that emerged from the invention of the Internet. Researchers proposed similar generation models to describe phases of the development of distance education throughout history. Distance education has three main generations which are also called phases regarding its developments in time, that is, correspondence, broadcasting, and computer-mediated distance education (Anderson & Simpson, 2012). First generation distance education is correspondence study. Today's concept of distance education takes its roots from the correspondence education, which is also called home study, based on delivering printed course materials to the learners at home in the late 1800s. Anna Eliot Ticknor established the first correspondence school in America, which is called Society to Encourage Studies at Home, offered distance education opportunities carried out by mail more than seven thousand women (Watkins, 1991). Courses were English, History, Science, French, German, and Art. She aimed to obtain opportunities for young women who could not get a formal education. Another example is correspondence education mainly for miners in 1891. Correspondence courses in mining were provided through newspapers that aim to prevent mine accidents (Simonson et al., 2003). In time, universities both in America and Europe began to offer correspondence courses especially for working people covering a wide range of topics (Moore & Kearsley, 2011). Therefore, these applications mainly provided opportunities especially for adults who were not able to receive a formal education because of social and occupational concerns. The second generation consists of broadcasting which affected the change in the delivery of instruction swiftly (Gunawardena & McIsaac, 2001). First radio and later television primarily dominated the field of distance education during this era. With the usage of radio, television, and also teleconferencing, it became easier to reach large numbers of people. Additionally, the open universities have emerged and provided licenses which offer many people to attend any education program (Simonson et al., 2003). For example, the United Kingdom Open University was the first university to offer courses in the scope of distance education with the use of television and radio programs (Anderson & Simpson, 2012). Gooch (1988) stated that, by the 1970s, there were 233 TV channels broadcasting for educational purposes in the USA. Furthermore, in 1980 educational satellite system was created, thus in particular

villages were obtained instructional television programs (Pregowska et al., 2021). Therefore, both adults and young learners had a chance to enhance their learning thanks to the developments in the distance education system (Zigerell, 1991). These were examples of noninteractive instructions. The third generation brought a new dimension to the concept of distance education because of providing two-way communication. Thanks to the computer network and Internet, in the 1990s video conferencing which make two-way communication possible was available in universities (Moore & Kearsley, 2011).

Apart from the traditional distance education which has been conducted through mail, radio, or television, new technological developments by means of the Internet affecting the whole society changed practices of distance education drastically. Today, documents and data from all over the Internet are easy to access at any place anytime. That is, usage of the Internet, computers, and mobile devices outweighs usage of mail, television, radio, video records, or CD-ROMs. In this regard, emerging technologies adapted in distance education have influenced distance education activities deeply and promoted learner and teacher interaction as well as provided flexible participation (Koçak-Usluel & Mazman, 2009). Correspondingly, distance education, online education and e-learning terms are used interchangeably because learning materials are delivered over the Internet and interactions between two parties are obtained online although these terms have significant differences (Tsai & Machado, 2002).

Distance education has an important position in terms of social development in Turkey as well. Studies in this direction started formally in 1956 with the letter delivery courses carried out by Ankara University Faculty of Law (Kaya, 2002). Therefore, bank officials were able to follow the distance education courses and develop their occupational skills. Later, with the realization of the contribution of correspondence courses conducted by mail to teaching, studies to increase distance education practices gained importance. In 1960, Correspondence Course Center was established by the Statistics and Publication Directorate with the responsibility of the MoNE (Kırık, 2014). Television, additionally, was used as an effective medium to provide distance learning, especially for foreign language courses at the beginning. As stated by İşman (2011), educational programs started to be broadcast on Turkish

Radio Television Corporation (TRT) in 1968 and also educational programs for primary, secondary, and high schools were offered by the Film, Radio and Television Education Center in 1973. After a while, in 1982, Anadolu University was assigned to carry out open education activities, thus it was the first Open University in Turkey. In the following years, the number of universities offering distance education has increased. Today, at both the university level and high school level, distance education was carried out for students who do not attend a formal education due to personal reasons or any other concerns. Thanks to the technological developments, distance education practices were enriched through the computer-based instruction and also internet-based programs. Today, numerous universities have centers for distance education offering synchronous or asynchronous courses, so that especially adult students in all ages are provided life-long learning opportunities in Turkey (Geray, 2007). Lately, due to the recent COVID-19 school closures, courses in all schools have been urgently transferred to a format for distance education, and the compulsory distance education has started. Therefore, especially in K-12 level education, television and Internet-based programs were used as medium of the distance education throughout the pandemic. TRT EBA channels, EBA web-based platforms, and Zoom online platform contributed to the continuation of the process (MoNE, 2020). In addition, the Council of Higher Education (CoHE) announced that distance education started in universities officially on 23 March 2020 (Council of Higher Education, 2020). Therefore, universities having adequate technical infrastructure systems carried out distance education for their students during the whole process.

2.4.2. Theories of Distance Education

To have a deep understanding of nature of the distance education researchers have presented important theories since the 1980s as a direct result of the acceleration of new technological developments in the field of education. Based on the theories of autonomy and independence, Wedemeyer (1977) highlighted that the core of distance education is independent of the student considering university level. According to him, system offers a great opportunity for students to take responsibility for their learning and allows students to progress at their own pace. Therefore, individualized instruction, where different learning needs of students can

be taken into account, is a key factor in distance education. In addition, Wedemeyer (1977) believed that relationship between student and teacher is essential to the success of distance education. Similarly in the scope of the theories of autonomy and independence, Moore (1973) emphasized the concept of independent study where he addresses the amount of learner autonomy and the distance between teacher and learner as determinants and classified distance education programs as "autonomous" (learner-determined) or "non-autonomous" (teacher-determined). Specifically, he stated that there are two components of distance education: providing two-way communication and responding to students' individual needs.

Within the scope of Industrialization Theory of Distance Education, Peters (1989) proposed industrial structure characteristic of distance teaching as follows: "rationalization, division of labor, mechanization, assembly line, mass production, preparatory work, planning, organization, scientific control method, formalization, standardization. change of function, objectification, concentration, centralization" (pp. 195-209). He stated that these elements are required for planning the distance education process of teaching and learning. According to him, division of labor is an important element for effective teaching of distance education; thereby tasks are divided into smaller subtasks. Another emphasis is on the change of the teacher function. Yet, numerous studies stress that teachers' role in distance education is comparatively different than in traditional education. For Beaudoin (1990) distance education is a learner-centered system and teachers must facilitate learning by using technology effectively in their instruction. MacKenzie et al. (1968) identified an instructor's tasks in the distance education process, as "diagnosing the student's readiness to learn, monitoring student progress toward objectives sought recognizing and discovering a student's learning difficulties, stimulating and challenging students to further efforts, evaluating the quality of a student's learning, assigning a grade to estimate learning outcomes" (p.137).

From the perspective of the Theory of Interaction and Communication expressed by Holmberg (1989), distance education refers to "guided didactic conversation" and he noted that learning is viewed as a personal activity in distance education while positive personal relations between the student and the teacher facilitate student participation and learning. In other words, the rapport between the teacher and the

student enhances student's willingness to participate in the lesson. As a result, a good personal relationship between teacher and learner encourages students to study while enhancing their study pleasure (Holmberg, 1989).

In the scope of Transactional Distance Theory, Moore (1993) identified three types of interactions in distance education as student-instructor, student-student, and student-content. Transactional distance can be specified as the distance existing between student and the teacher due to psychological and physical space. Moore (1993) defined three dimensions of the transactional distance as dialogue between teachers and students, structure of the courses and program, and autonomy of the student. Structure basically means the course's design and degree of enabling two-way communication while dialogue refers to the interaction during student and teacher communication. However, the autonomy of a student refers to the ability to take responsibility for his or her own learning. These three dimensions are interrelated in determining the success of the distance education program, for instance, a program including video recorded courses where there is no dialogue between teacher and learner can be considered less structured. That is, it brings out the need for students to be more autonomous in their learning.

In the consideration of success in distance education implementation, learner-student interaction is considerably important. Dialogue between instructor and learner and suitably designed learning materials are the determining factors of the success of distance education (Moore, 1993). Additionally, Moore and Kearsley (2011) stated that enhancing student learning in any type of distance education practice requires reducing the psychological distance between the teacher and the student rather than physical distance between them.

2.5. Teachers Roles in Distance Education

Distance education has changed the teacher's role, and pedagogy models (O'Neil, 2009). Because both places for teaching and instruction materials using in ordinary classrooms are different from the traditional education settings. Therefore, a fundamental change has occurred in interaction between the learner and the instructor. In addition, students in distance education programs and courses are mostly adults (Moore & Kearsley, 2011) having different characteristics from

traditional students. However, today making distance education suitable to K-12 students is another important point. Piaget's (1964) theory of cognitive development suggested that children go through different learning stages as a direct result of their brain development. Therefore, children's intelligence is different from that of an adult which brings the fact that teaching differs in different age groups. That also makes teaching in distance education challenging for teachers.

Based on the various features of distance education systems, learning environment, degree of interactions between student and teacher and also among students, learning materials, teaching methods, changes in the teachers' and students' roles make distance education different from traditional face-to-face education. According to Perraton (1988), teacher in the distance education is a facilitator of learning rather than transmitter of the existing knowledge. O'Neil (2009) stressed that because of learning environment has changed in the scope of distance education, teachers do not have the same autonomy as in the traditional classrooms. Similarly, Schoenfeld-Tacher and Persichitte (2000) noted that distance education teachers often need diverse sets of technical and pedagogical competencies in order to perform qualified teaching.

2.6. Teacher Attitudes towards Distance Education

There are various human factors having a huge impact on distance education practices. Teachers play a very crucial role in the education system whether distance education or traditional education it is. As noted before their role has changed significantly due to emergence of the new technologies in education. Also, recent global pandemic which had a severe impact on education demonstrated that teachers' technological knowledge and skills became prominent in the continuity of education (Çınar & Alcı, 2022). Besides, teacher competencies in information and communication technologies affect instructional quality positively (Ikwuka et al., 2020). Moreover, in the regard to 21st century skills, both learner and teachers are required to have particular skills such as critical thinking, communication, collaboration and creativity and use of information technology in education (Partnership for 21st century skills, 2009). However, how important it is for teachers to have these skills, especially digital skills, came to light with the urgent shift to distance education caused by the COVID-19 pandemic.

Stronge (2018) emphasized that learning is a process affected significantly by teachers' specific characteristics and behaviors. In addition to that, TALIS studies addressed that to improve students' learning experiences it is important to understand teachers' beliefs and attitudes (OECD, 2009). To obtain a comprehensive understanding of the effectiveness of the distance education and the achievement of students, it is crucial to examine teachers' attitudes toward distance education. Besides Ajzen (2001) indicated that attitudes and behaviors are linked to each other, thus teachers' attitudes towards distance education could give insight into their future behaviors in distance education.

There are several studies examining teacher attitudes towards distance education and the majority of them emerged in the course of the pandemic. However, the majority of these studies were conducted in the higher education context including pre-service teachers' or instructors' opinions and attitudes.

To illustrate, the study conducted by Nasser and Abouchedid (2000) investigated the attitudes of both school teachers and directors towards distance education implementation in Lebanon. While school directors held negative attitudes because of concerns about the cost of the distance education applications, teachers had positive attitudes towards distance education and they demand more training in order to enhance their knowledge. Considering that distance education can be carried out in any major crisis, it seems important to provide training for teachers to improve their digital knowledge and skills. That can also enhance their positive attitudes towards distance education practices and using new technologies. On the contrary, study of Russo et al. (2021) revealed math teachers' negative attitudes towards the remote learning environment. Participants were primary school teachers and they were asked to compare the productive struggle in math activities that students went through both in remote learning settings and classroom-based settings. Study results demonstrated that teachers consider struggle to be more challenging in remote learning settings compared with classroom-based settings. Therefore, they had more positive attitudes towards classroom activities that enable students' productive struggle in mathematics. According to teacher views, a remote learning environment creates low social connections because of asynchronous courses which also prevent collaborative learning. Similarly, Razkane et al. (2022) found that instructors have

negative attitudes towards distance education during the COVID-19 pandemic. Several obstacles that they faced throughout the process included technical issues such as access to Internet, inability to use online platforms, lack of training in delivering distance education and lack of student interaction. Moreover, a great number of participants stated that they prefer face-to-face education instead of distance education.

Some studies are conducted in the scope of the teachers' attitudes or perceptions about digital learning. For example, Lobova and Ponkina (2021) conducted their study intending to examine the attitudes of lecturers in Russian universities towards online courses which gave them insight into lecturers' acceptance of online courses. These online courses are usually offered as the type of Massive Open Online Courses (MOOCs). According to the results, majority of lecturers have a negative attitude towards digitalization of education as they think it will threaten their employment at the university and they reported that online courses will replace their presence.

Since distance education entered our lives quickly due to the school closures by the COVID-19 pandemic, many studies were carried out on the subject recently in Turkey as well. For instance, Demir et al. (2021) investigated the attitudes of teachers towards distance mathematics education. The sample consisted of teachers from primary, secondary and high school levels in Muğla and Kocaeli. Results showed that teachers have negative attitudes towards distance education due to technical problems they had and unsuitable course structure for distance education. Similarly, Erten's (2022) study revealed mostly teachers' negative attitudes towards distance education during the pandemic. Results showed that most of the participants had a lack of teaching experience in distance learning settings before the pandemic. They expressed negative evaluations due to low social interaction with students, poor emotional contact during distance courses, class duration problems, classroom management problems and lack of evaluation and student development tracking. Besides, they emphasized each course that is suitable for a classroom-based setting is not suitable for distance education. On the other hand, they reported some positive evaluations. For example, they stated that distance education was independent of time and place which provided continuity of education in those challenging times. On the other hand, study of Karagül and Sen (2021) showed that teachers' attitudes

towards distance education vary according to contextual and individual factors. Teachers with a certain amount of knowledge and experience about distance education hold positive attitudes towards distance education. While gender, school type, and education status of teachers did not create any variation in their attitude scores, teachers with less work experience have more positive attitudes towards distance education. This might be due to lack of digital competencies of more experienced teachers regarding their age.

In conclusion, studies showed that teachers mainly have negative attitudes towards distance education which was carried out during the COVID-19 pandemic. They mostly challenged with the lack of teaching experiences in distance education, problems related to technical infrastructure, inability to use online platforms, low teacher-student interaction and difficulty of classroom management.

2.7. Summary of the Literature Review

Crisis leaders need to be flexible and adaptable to rapid changes. The COVID-19 pandemic which forced a digital transformation in education required leaders to be adaptive and supportive. Teachers as the main providers of the education during this period also needed effective leaders who manage the crisis with adequate leadership practices. Therefore, as studies demonstrated, principals' crisis leadership behaviors became prominent for teachers to overcome the challenges.

As COVID-19 pandemic showed that all kinds of systems in society can become ineffective instantly, and education was one of them this time. Consequently, shifting to distance education at all levels appeared as a crisis management strategy. In the light of the studies, teachers' attitudes towards distance education were associated with the quality of the distance education (Harris & Krousgill, 2008); therefore investigating their attitudes towards distance education especially related to a crisis has the potential to reveal the quality of the distance education practices in times of crisis.

Additionally, trust literature presented number of positive outcomes that were associated with teachers individually. Decrease in teacher burnout, increase in teachers' well-being and supportive attitudes towards change were some of these positive outcomes. While studies were mostly conducted within the scope of three

reference groups in schools, teachers' trust in MoNE was only examined by Zayim (2015) who presented important results indicating teachers' emotions on change implementations and commitment to change. Therefore, according to trust literature, teachers' positive attitudes can be related to trust in management.

In brief, although studies offered empirical evidence related to teachers' attitudes towards distance education, this concept was aimed to examine within the framework of trust and crisis leadership for the first time.

CHAPTER 3

METHOD

This chapter includes detailed descriptions of how the study is conducted. First, the overall design of the study was described, and descriptions of the variables were provided in detail. Next, the sampling procedure and demographic characteristics of the participants were stated. After that, data collection instruments were presented with a detailed explanation of validity and reliability analyses. Also, data collection procedures were presented for the pilot study and main study. Further, data analysis was explained. At the end of this chapter, the limitations of the study were discussed.

3.1. Design of the Study

The following research question was addressed in this study:

What are the predictive roles of perceived crisis leadership, trust in principal, and trust in MoNE in teachers' attitudes towards distance education after controlling for the effects of individual-level and school-level variables?

The quantitative research method was used in the study, and correlational research design was utilized because the study aims to investigate the relationship between independent variables, which are also called predictor variables, and dependent variable, which is also called outcome variable with no manipulation (Fraenkel et al., 2015). Quantitative studies include data collection and analysis of numerical data, thus it allows researchers to describe, explain, and predict variables which consequently give an insight into the sample of a population (Creswell, 2013).

Perceived crisis leadership, trust in principal, and trust in MoNE are independent variables, and two dimensions of teachers' attitudes towards distance education are dependent variables. Additionally, as the research question addresses the purpose of

the current study was to explore the relationships between several variables, the correlational research design was an appropriate technique to utilize.

3.2. Description of the Variables

Crisis leadership: This was the independent and continuous variable indicating teachers' perceived level of crisis leadership behaviors in their school principal. It was measured by an adapted version of the C-LEAD Scale which had a one-factor structure. The scale included nine items with a 7-point Likert ranging from strongly disagree (1) to strongly agree (7). The higher scores of participants indicated higher level of perceived crisis leadership behaviors in the principal.

Trust in principal: This was an independent and continuous variable in this study. Teachers' trust in principal was measured by one-factor structure Trust in Principal Scale. The scale included 27 items with a 5-point Likert type ranging from strongly disagree (1) to strongly agree (5). The higher score of participants was associated with higher teachers' trust in principals.

Trust in MoNE: This was an independent and continuous variable. Teachers' trust in MoNE was measured by one-dimensional Trust in MoNE Scale. The scale included 27 items with a 5-point Likert type ranging from strongly disagree (1) to strongly agree (5). The higher score of participants was associated with higher teachers' trust in MoNE.

Attitude towards distance education: Teachers' attitudes towards distance education were measured by Distance Education Attitude Scale. There were 21 items in total, and the scale had a 5- point Likert type ranging from strongly disagree (1) to strongly agree (5). The scale had two dimensions, which are the dependent variables of the study, as follows:

Advantages of distance education: This dimension includes 14 items. Minimum score that can be obtained from this subscale is 14 and maximum score is 70. The higher scores on this subscale indicate more positive attitudes toward distance education.

Limitations of distance education: This dimension includes seven items. Minimum score that can be obtained from this subscale is 7 and maximum score is 35. The

higher scores on this subscale indicate more negative attitudes toward distance education.

3.3. Sampling Procedure

For this study, two separate sampling procedures were provided: one of which is the pilot study and the other one is the main study. Primarily, for the pilot study conducted for the Turkish adaptation and initial validation of the Crisis Leader Efficacy in Assessing and Deciding (C-LEAD) Scale, convenience sampling technique was used due to COVID-19 pandemic conditions which caused temporary school closures. Convenience sampling is a process of non-random sampling in which group of individuals are available for the study (Fraenkel et al., 2015). For the pilot study, 122 volunteer public school teachers involved online.

Secondly, the main study was conducted in the province of Ankara and the data were collected from teachers working in public primary, middle, and high schools. For the sample selection, stratified cluster random sampling technique was used and each school level considered as strata. Initially, six of the school districts were chosen in Ankara by based on ease of accessibility (i.e., Çankaya, Etimesgut, Sincan, Yenimahalle, Mamak & Keçiören). There were 350 primary schools, 337 middle schools, and 281 high schools in the selected school districts (MoNE, n.d). Hence, accessible population of the study was teachers who working in these schools. Next, %25 percent of each school level was selected randomly from the school districts by using SPSS. In total 271 schools were selected. Of those schools, 38 were visited and 509 teachers in Ankara volunteered to participate in the main study. Of these schools, 11 were primary schools, 17 were middle schools and 10 were high schools including vocational-technical high schools.

3.4. Demographic Characteristics of the Participants

For the main study, 509 teachers participated from 38 schools, however after missing values were handled, which was presented in the result section, the sample size became 468. Hence, the sample of the study consisted of 468 (351 females and 117 males) volunteer public school teachers. Data was collected from 11 primary schools, 17 middle schools and 10 high schools. Of the participants, 19.8% were from primary schools, 55.9% were from middle schools, and 24.1% were from high

schools. Age of the participants ranged between 23 and 63. The mean age of the participants, moreover, varies according to school levels. While the mean age of primary school teachers was 44.32, the mean age of middle school teachers was 38.44, and mean age of high school teachers was 42.06. In terms of teachers' years of experience, 7.5% (n=35) of the participants had at least 5-year experience, 21.1% (n=94) of the participants' experience within the range of 6-10 years, 17.9% (n=84)of the participants' within the range of 11-15 years, 22.9% (n=107) of the participants' within the range of 16-20 years and 31.6% (n=148) of the participants had experience 21 year and above. Of the participants, 82.7% (n=387) had bachelor's degree, which constitutes the largest proportion in the sample, 16.9% (n=79) had Master's degree, and only 2 participants had doctoral degree. Participants were also asked their prior distance education knowledge and they were divided into three groups as enough distance education knowledge, limited distance education knowledge, and no distance education knowledge. Additionally, there was a group including participants who indicated attending a distance education program before and having quite knowledge about it. Therefore, the data of the groups reported to have distance education program and enough knowledge were combined and presented together in the table. In terms of prior distance education knowledge, of the participants 1.3% (n=6) indicated that they had no DE knowledge, 6% (n=28) had limited DE knowledge, and 92.7% (n=434) had enough DE knowledge.

Table 3.1Demographic Characteristics of the Participants

	f	Percentage (%)	M	SD
Age			40.49	7.90
Gender				
Female	351	75		
Male	117	25		
School Level				
Primary School	93	19.9		
Middle Schhol	262	56		
High School	113	24.1		
Experience				
0-5	35	7.5		
6-10	94	20.1		
11-15	84	17.9		
16-20	107	22.9		
21 ≥	148	31.6		
Educational Attainment				
Bachelor Degree	387	82.7		
Master's Degree	79	16.9		
Doctoral Degree	2	.4		
DE knowledge				
No	6	1.3		
Limited	28	6		
Yes	434	92.7		

3.5. Data Collection Instruments

In this study, C-LEAD Scale, Trust in Principal and Trust in MoNE Scales, and Distance Education Attitude Scale were used to collect data. Additionally, in order to obtain general information of the participants, demographic information form was used. Detailed descriptions of the instruments, results for the validity and reliability analyses, and data collection procedures were provided in this section.

3.5.1. Demographic Information Form

In order to obtain demographic characteristics of the participants, demographic information form was prepared, in which questions about gender, age, educational attainment, year of experience, school level, teaching subject, distance education knowledge level, and distance education experience were present.

3.5.2. Crisis Leader Efficacy in Assessing and Deciding (C-LEAD) Scale

The Crisis Leader Efficacy in Assessing and Deciding (C-LEAD) scale was developed by Hadley et al. (2011) to measure managers' crisis leadership efficacy in times of crises. Development of this scale was based on information assessment and decision making capacity of a leader during a crisis considering effective crisis leadership behaviors. Original version of the scale tests with individuals who are in a leader position from numerous occupations. The scale has a single factor structure and consists of 9 items on a 7-point Likert scale ranging from strongly disagree (1) to strongly agree (7). C-LEAD score was calculated by taking the mean of all 9 items and high scores indicated individual's higher efficacy to assess information and make decisions in a crisis. Cronbach's alpha for the scale was found to range from 0.80 to 0.88, which suggests high reliability (Hadley et al., 2011). Exploratory Factor Analysis (EFA) results were presented by the researcher, supported single structure of the scale and Confirmatory Factor Analysis (CFA) results indicated a good fitting model (χ^2 (36) =1332.41, p < .01, CFI=.95, TLI=.94, RMSEA=.09, SRMR=.04).

Within the scope of this study, this scale was adapted into Turkish by the researcher to use in educational organizations. In the adaptation process, items were translated into Turkish by the two experts from the field of English Language and two experts from the Educational Administration and also the researcher herself. After all translated items were obtained an expert opinion from the field of Educational Administration was taken about the suitability of the alternative translations and selection the best representative ones. After the selection of the items, the original scale in which leaders evaluated themselves was adapted to teachers' assessments. For example, item 7 from the original scale "I can make decisions and recommendations even under extreme time pressure" turned into "My supervisor can make decisions and recommendations even under extreme time pressure." The

Turkish version of this new item is "Yöneticim aşırı zaman baskısı altında bile karar verebilir ve tavsiyelerde bulunabilir."

Subsequently, a pilot study was conducted. In the piloting phase, the data were collected from 122 teachers having similar demographic characteristics to the participants in the main study. Of the participants, 68% of them were female (n= 84) while 32% of them were male (n= 38). Additionally, the majority of the participants which constituted 68% of the sample had an undergraduate degree. Due to the pandemic and resulting lockdown, the data were collected online through METU Survey Service. With the data collected in the pilot study, EFA was performed. In addition to that, in the main data collection phase of the study, CFA was used to confirm the factor structure yielded with the EFA.

3.5.2.1. Exploratory Factor Analysis for C-LEAD Scale

Before the analysis, necessary assumptions including sample size, normality, outliers, KMO and Barlett's Test of Sphericity were checked (Hair et al., 2010). As the data was obtained through online application, there were no missing data in the data file. MacCallum et al. (1999) suggested that a sample size between 100 and 200 is sufficient if communalities are above .5 after extraction. Therefore, the sample size of 122 was adequate for EFA.

Firstly, to detect outliers, standardized z scores were checked. Based on the standardized z scores which were between -3.29 and +3.29 (p < .001), indicated absence of outliers. Also, normality assumptions were checked. For univariate normality, Skewness and Kurtosis values, Kolmogorov-Smirnov, and Shapiro-Wilk test were checked. Skewness and Kurtosis values were between -3 and +3 which indicate normal distribution (Field, 2009). However, Kolmogorov-Smirnov and Shapiro-Wilk tests results were significant, so violation was exist. Histogram and Q-Q plot were also showed non-normality. In addition, Mardia's test for multivariate normality was significant, p < .05. Therefore, the assumption of normality was violated. Next, Kaiser-Meyer-Olkin (KMO) and Barlett's Test of Sphericity were checked. KMO = .94 was greater than .60 (Kaiser, 1974), and Barlett's Test of Sphericity was significant, (χ^2 (36) = 1142.21, p = .00). Results indicated that data was appropriate for EFA.

Since normality assumption was violated, EFA was conducted with principal axis factoring as an extraction method with varimax rotation. As presented in the Table 3.2, all items have factor loading larger than .30, so none of them were removed (Field, 2009). EFA results also showed that there is only one factor with eigenvalue greater than 1 criterion and explained 73.4% of the variance. According to Field (2009), in the scree plot, the point where the slope of the curve changes drastically became the cut-off point to indicate the factors. As depicted in Figure 3.1, the scree plot indicated that one factor should be kept. Thus, as in the original scale, one factor structure was obtained in the pilot study. Also, Cronbach's alpha value was .96, indicating high reliability.

Table 3.2 *EFA Results for the C-LEAD Scale*

Item	Factor Loadings	
Item4	.92	
Item5	.92	
Item7	.89	
Item9	.89	
Item1	.88	
Item2	.87	
Item6	.85	
Item8	.75	
Item3	.72	

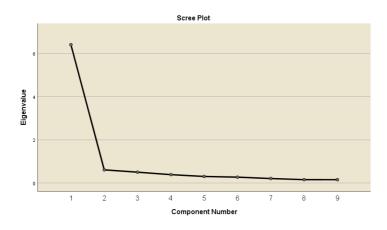


Figure 3.1 Scree plot representing eigenvalues in EFA

3.5.3. Trust Scales

Two of the independent variables examined in this study were Trust in Principal and Trust in MoNE. Trust in Principal and Trust in MoNE Scales developed by Zayim (2015) were used to measure teachers' level of trust in their school principal and the top management of Turkish Educational System, MoNE. The measures utilized a 5point Likert scale ranging from strongly disagree (1) to strongly agree (5). The scale included 27 generic items which should be rated for two reference groups separately (for principal and for MoNE). Hence, each item is responded considering school principal and MoNE independently. Based on the trust literature, conceptions of benevolence, integrity, and ability were used to develop items (Mayer & Davis, 1999). According to Zayim (2015), in the scale development process, 34 items were generated and the scale consisted of two dimensions as willingness to vulnerable and optimistic expectations. However, the scale took it final version along with the construct validity studies. For Trust in Principal Scale, the EFA suggested a onefactor structure, which explained 68.32% of the variance. Similarly, for Trust in MoNE Scale, EFA results showed one-factor structure which explained 68.29% of variance. All in all, each scale represented one-factor model with 27 items. Cronbach's alpha reliabilities of the Trust in Principal Scale and Trust in MoNE Scale were the same to be .98, indicating strong internal consistency. Within the scope of this study, Cronbach's alpha reliabilities were computed again which yielded .98 for each scale.

Example items from the original scale as follows:

- "My supervisors care about my feelings and thoughts about my job" which refers to "Yöneticilerim işimle ilgili duygu ve düşüncelerimi önemserler" in Turkish (Item 6).
- "My supervisors make an effort to solve the problems I have with my job" which refers to "Yöneticilerim işimle ilgili yaşadığım sorunları çözmek için çaba harcarlar" in Turkish (Item 11).

• "My supervisors honestly explain the reasons for their decisions" which refers to "Yöneticilerim verdikleri kararların nedenlerini dürüstçe açıklarlar." in Turkish (Item 21).

3.5.4. Distance Education Attitude Scale

Distance Education Attitude Scale developed by Ağır (2007) was used in this study to investigate attitudes of teachers towards distance education. The scale had two dimensions as advantages of distance education and limitations of distance education, which refer to positive attitudes and negative attitudes towards distance education respectively. There are 21 items in the scale: 14 items for advantages of distance education and 7 items for limitations of distance education. This measure utilized a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The total scale had a Cronbach's alpha of 0.83 which was presented by the researcher developed this scale (Ağır, 2007). Factor analysis results presented by the developer of the scale indicated six-factor structure initially, however, with the expert opinion it was decided to be two-factor structure of the scale (Ağır, 2007). These two subdimensions were named as advantages of distance education and limitations of distance education. In order to ensure scale's two-factor structure, Confirmatory Factor Analysis (CFA) was conducted and results were provided in following section.

Sample items for advantages of distance education sub-dimension as follows:

- "Distance education provides the flexibility to repeat as many times as desired" which refers to "Uzaktan eğitim, istenildiği kadar tekrar edebilme esnekliği sağlar" in Turkish (Item 3).
- "Distance education is more effective than face-to-face education" which refers to "Uzaktan eğitim, yüz yüze eğitimden daha etkilidir" in Turkish (Item 13).

Sample items for limitations of distance education sub-dimension as follows:

• "Face-to-face education is more beneficial than distance education" which refers to "Yüz yüze eğitim, uzaktan eğitimden daha yararlıdır" in Turkish (Item 4).

• "Distance education cannot be applied in a healthy way in our country" which refers to "Uzaktan eğitim, ülkemizde sağlıklı bir şekilde uygulanamaz" in Turkish (Item 20).

3.6. Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) is a statistical technique based on the testing of an existent structure or model in a measurement tool that was determined by performing EFA (Brown, 2006). Thus, in order to test factor structures of the each instrument, CFA was conducted separately. Prior to the CFA analyses, required assumptions were checked. CFA assumptions include analysis of sample size, missing data, normality, outliers, linearity, homoscedasticity, and multicollinearity (Kline, 2011). Next, CFA was conducted by using AMOS 18 software. After missing data was handled, CFA was performed for each scale with a sample of 468 data in the main study. As Kline (2011) suggested sample size should be at least 200, and the data size was appropriate. In order to interpret CFA results, fit indices as Root Mean Square of Error of Approximation (RMSEA), The Bentler Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Standardized Root Mean Square Residual (SRMR) were used with model chi-square (χ^2). To assess the model fit, the cutoffs were presented in order to provide a better understanding of the results. As Kline (2011) suggested, chi-square should be small and non-significant in the perfect fit but chi-square calculation is sensitive to sample size. Tabachnick and Fidell (2007) stated that a significant chi-square was expected with a large sample size. Regarding the RMSEA value, Browne and Cudeck (1993) suggested RMSEA < .05 indicating good fit, and RMSEA < .08 indicating reasonable fit. MacCallum et al. (1996), in addition, suggested RMSEA value provides a mediocre fit between the ranges of .08 to .10, while values above .10 indicate a poor fit. Based on the suggestions of Kline (2011), cutoff scores for confidence intervals (CI) should be lower bound of CI \leq .05 and upper bound of CI \leq .10. In terms of CFI and TLI values, the cut-off value is .95, and values that close to .95, indicative of good fit as stated by Hu and Bentler (1999). Also, Schumacker and Lomax (2010) suggested that .90 is acceptable for CFI and TLI values. Lastly, for the SRMR value Hu and Bentler (1999) recommended less than .08, but according to Kline (2011), less than .10 is also acceptable.

3.6.1. Confirmatory Factor Analysis for C-LEAD Scale

Firstly, for the univariate outliers, standardized z scores were controlled. Z scores were between -3.29 and +3.29 (p < .001) indicates no outliers (Tabachnick & Fidell, 2007). Mahalonobis distances were computed in order to detect multivariate outliers, 23 outliers were detected above critical χ^2 value of 27.88 for df = 29, p < .001. Moreover, univariate and multivariate normality assumptions were checked. For univariate normality, skewness and kurtosis values, Kolmogorov-Smirnov and Shapiro-Wilk tests, histograms, and Q-Q plots were checked (Kline, 2011). For multivariate normality check, Mardia's test was run and significant result was yielded (p = .00), suggesting violation of the assumption. Thus, bootstrapping was used to handle the impact of nonnormality (Bollen & Stine, 1992) and CFAs were run with 2000 bootstrapped samples. To assess linearity and homoscedasticity, bivariate scatterplots were examined and they did not show great deviations. Lastly, multicollinearity was tested through the inspection of bivariate correlations among scale items. No multicollinearity was concluded, as the values did not exceed .90 (Field, 2009). Furthermore, VIF and tolerance values were controlled. VIF values were between 1.82 and 3.81 as being acceptable limits (lower than 4) and tolerance values were also between the acceptable range .26 and .55 (larger than .20). Thus, assumptions of multicollinearity were validated.

3.6.1.1. CFA Results for C-LEAD Scale

Since normality assumptions were violated, the model was tested with 2000 bootstrapped samples at 95% confidence interval. Initial CFA results indicated a poor fitting model with a significant chi-square ($\chi^2(27) = 267.66$, p = .00), CFI = .92, TLI = .90, RMSEA = .12, and SRMR = .04. After the modification indices were checked, item pairs with the highest error covariance were allowed to covary (ε_1 - ε_2 , ε_4 - ε_5 , ε_5 - ε_6 , ε_4 - ε_9 , ε_7 - ε_8 , ε_8 - ε_9). Final CFA results showed significant chi-square ($\chi^2(21) = 78.92$ p = .00) again with improved fit indices: the comparative fit index CFI = .98, TLI = .96, RMSEA = .08 (90% CI = .059 - .095, p_{close} < .05) and SRMR = .02. In Table 3.3 goodness-of-fit indicators were presented. Taken together, the results suggest a mediocre fit based on the cut-offs proposed by Browne and Cudeck (1992) and Hu and Bentler (1999). The Cronbach Alpha coefficient was indicated a

good reliability as α = .94. CFA model with standardized regression weights is shown in Figure 3.2.

Table 3.3CFA Results for Models of C-LEAD Scale

Model	χ^2	df	CFI	TLI	SRMR	RMSEA
Initial Model	267.66	27	.92	.90	.04	.12
Modified Model	78.92	21	.98	.96	.02	.08

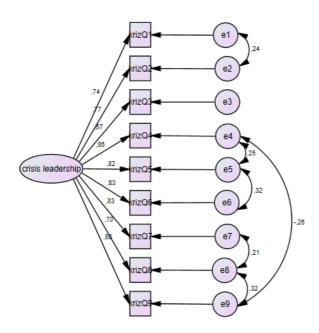


Figure 3.2 CFA Model of C-LEAD Scale with Standardized Estimates

3.6.2. Confirmatory Factor Analysis for Trust Scales

Before running the CFAs, required assumptions were checked two scales separately. The sample size was 468 as in the main study which was fairly enough for CFA. Standardized z scores were controlled for the univariate outliers and no outlier was detected for each scale. For multivariate outliers, Mahalanobis distances were computed (Tabachnick & Fidell, 2007). For trust in principal variable, 49 outliers were detected above the critical χ^2 value of 55.48 for df = 27, p < .001. Additionally, for trust in MoNE variable, 46 outliers were detected above the critical χ^2 value of 55.48 for df = 27, p < .001. Outliers were kept in the data. Moreover, normality

assumptions were checked. Skewness and kurtosis values were between -3 and +3 indicated normality (Field, 2009). On the other hand, Kolmogorov-Smirnov and Shapiro-Wilk tests results were significant and violated normality. Histograms and Q-Q plots were also showed non-normal distribution. In order to check multivariate normality, Mardia's test was utilized and results were significant (p = .00) for each scale. Thus, assumption was violated. To assess linearity and homoscedasticity assumption, bivariate scatterplots were examined and some deviations from linear relationships were observed. For multicollinearity assumptions, correlations, VIF values and tolerance values controlled. While VIF values should not exceed 4, tolerance values needed to be bigger than .20 (Tabachnick & Fidell, 2007). VIF values ranged from 3.27 to 8.81 and tolerance values were .13 to .32 for trust in MoNE variable. For trust in principal variable, VIF values were ranged from 2.77 to 7.84 and tolerance values were .13 to .32. Multicollinearity assumptions were tested for each scale by checking of bivariate correlations among items too. Since there was not any values exceeding .90 it can be inferred that multicollinearity does not exist (Field, 2009).

3.6.2.1. CFA Results for Trust in Principal Scale

As normality assumptions were not met, bootstrapping method with 2000 bootstrapped samples at 95% confidence interval was conducted. Initial CFA results indicated that chi square value was significant ($\chi^2(324) = 1622.94$, p = .00) with CFI = .92, TLI = .92, RMSEA = .09 (90% CI = .088 - .097, $p_{close} < .05$), SRMR = .03. Initial results indicated a poor model based on the RMSEA value of .09 (Browne & Cudeck, 1992). Therefore, modification indices (MI) were controlled and error terms with highest MI values were freely estimated (ε_1 - ε_2 , ε_1 - ε_8 , ε_5 - ε_{17} , ε_7 - ε_8 , ε_{15} - ε_{27} , ε_{21} - ε_{22} , ε_{26} - ε_{27}) (Arbuckle & Wothke, 1999). After error covariances were added in subsequent stages, CFAs were run again. The final CFA results indicated an acceptable fit with significant chi-square ($\chi^2(317) = 1210.77$, p = .00) (CFI = .95, TLI = .94, RMSEA = .08 (90% CI = .073 - .082, $p_{close} < .05$), and SRMR = .02). Table 3.4 indicated goodness-of-fit indicators of the model. Cronbach Alpha value was $\alpha = .98$ which revealed good reliability. The CFA model of Trust in Principal Scale was presented in Figure 3.3.

Table 3.4CFA Results for Models of Trust in Principal Scale

Model	χ^2	df	CFI	TLI	SRMR	RMSEA
Initial Model	1622.94	324	.92	.92	.03	.09
Modified Model	1210.77	317	.95	.94	.02	.08

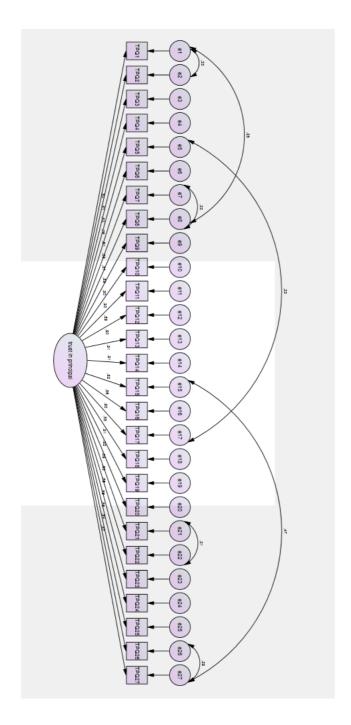


Figure 3.3 CFA Model of Trust in Principal Scale with Standardized Estimates

3.6.2.2. CFA Results for Trust in MoNE Scale

As normality assumptions were violated, bootstrapping method with 2000 bootstrapped samples at 95% confidence interval was used. Initial CFA results showed a poorly fitting model with a significant chi square value ($\chi^2(324) = 2173.41$, p = .00). Other fit indices also suggested poor fit (CFI = .89, TLI = .89, RMSEA = .11 (90% CI = .106 - .115, $p_{\text{close}} < .05$), SRMR = .03. To improve the model, modification indices were controlled and item pairs with the highest error covariance were detected: ε_1 - ε_2 , ε_2 - ε_3 , ε_4 - ε_6 , ε_7 - ε_8 , ε_{10} - ε_{12} , ε_{12} - ε_{13} , ε_{15} - ε_{27} , ε_{18} - ε_{19} , ε_{21} - ε_{22} , ε_{22} - ε_{26} , ε_{23} - ε_{27} , ε_{24} - ε_{25}) and connected to each other. The final CFA results indicated an acceptable model fit despite the fact that chi square was significant ($\chi^2(312)$ = 1444.92, p = .00) (CFI = .94, TLI = .93, RMSEA = .08 (90% CI = .081 - .092, p_{close} < .05), and SRMR = .02). Cronbach Alpha value was α = .98 which revealed good reliability and CFA model of the scale was illustrated in Figure 3.4.

Table 3.5CFA Results for Models of Trust in MoNE Scale

Model	χ^2	df	CFI	TLI	SRMR	RMSEA
Initial Model	2173.41	324	.89	.89	.03	.11
Modified Model	1444.92	312	.94	.93	.02	.08

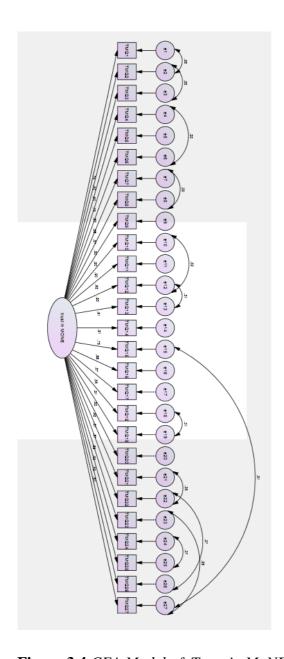


Figure 3.4 CFA Model of Trust in MoNE Scale with Standardized Estimates

3.6.3. Confirmatory Factor Analysis for Distance Education Attitude Scale

Before conducting confirmatory factor analysis, necessary assumptions were checked for the Distance Education Attitude Scale. In order to detect outliers, standardized z scores were controlled and there were no outliers. Also, Mahalanobis distances computed for items in the data set. For subscale of advantages of DE, 11 outliers were detected above the critical χ^2 value of 36.12 for df =14, p < .001. For subscale of limitations of DE, 9 outliers were detected above critical χ^2 value of 24.32 for df=7, p < .001. Next, both univariate and multivariate normality

assumptions were checked for each subscale. Skewness and kurtosis values were between -3 and +3; thus, indicated normality (Field, 2009). Kolmogorov-Smirnov and Shapiro-Wilk tests results were controlled and results showed significant values (p < .05) that is, non-normal distribution. Histogram and Q-Q plot of advantages of DE variable showed normality. However, histogram of limitation of DE was negatively skewed and Q-Q plots were also showed deviations from normality. For multivariate normality assumption, the results of Mardia's test were observed to be significant (p = .00), that is, assumption was violated. For the linearity and homoscedasticity assumptions, bivariate scatterplots were examined and deviation from normality was concluded. In addition to that, for the fulfillment of absence of multicollinearity assumption, bivariate correlations, VIF values and tolerance values controlled. First, no correlation higher than the cutoff of .90 was observed between item pairs. Furthermore, VIF values ranged from 1.40 to 1.77 and tolerance values were within the range of .55 to .71 for subscale of advantages of DE. For the subscale of limitation of DE, VIF values were ranged from 1.15 to 1.45 and tolerance values were .68 to .87 for subscale of limitations of DE. Therefore, absence of multicollinearity was validated.

3.6.3.1. CFA Results for Distance Education Attitude Scale

Following the assumption checks, CFA was performed in order to ensure that two-factor structure of the scale. Initially, CFA results indicated a poor fit (χ^2 (188) = 712.52, p = .00), CFI = .83, TLI = .81, RMSEA = .08 (90% CI = .71 - .83, $p_{\text{close}} <$.05), SRMR = .07). Then modification indices were controlled and covariances were added between the error terms with the highest modification indices (ϵ_1 - ϵ_2 , ϵ_2 - ϵ_3 , ϵ_2 - ϵ_4 , ϵ_3 - ϵ_4 , ϵ_3 - ϵ_7 , ϵ_4 - ϵ_7 , ϵ_8 - ϵ_9 , ϵ_6 - ϵ_{12} , ϵ_{17} - ϵ_{21} , ϵ_{19} - ϵ_{20}). Final CFA after these modifications showed an improved model with a mediocre fit (χ^2 (178) = 477.82, p= .00) (CFI = .90, TLI = .88, RMSEA = .06 (90% CI = .05 - .07, $p_{\text{close}} <$.05), SRMR = .06). Table 3.6 indicated goodness-of-fit indicators of the model. Cronbach Alpha coefficients of two sub-dimensions as follows: α = .88 for advantages of distance education dimension and α = .74 for limitations of distance education dimension (see Figure 3.5).

Table 3.6CFA Results for Models of Distance Education Attitude Scale

Model	χ^2	df	CFI	TLI	SRMR	RMSEA
Initial Model	712.52	188	.83	.81	.07	.08
Modified Model	477.82	178	.90	.88	.06	.06

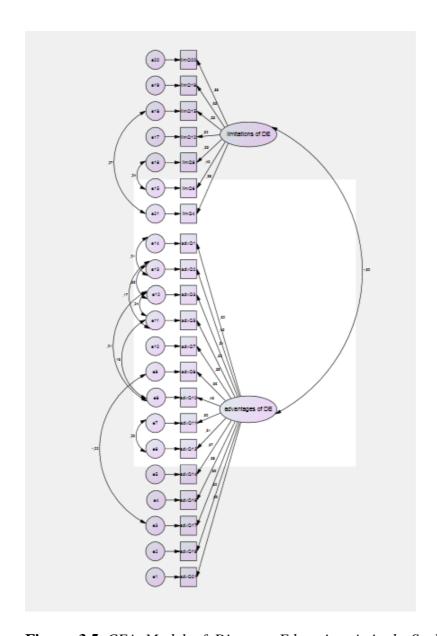


Figure 3.5 CFA Model of Distance Education Attitude Scale with Standardized Estimates

3.5. Data Collection Procedure

To collect data from the public schools in Ankara, the required permissions were taken from the Human Subjects Ethics Committee in Middle East Technical University and subsequently from the Ankara Provincial Directorate of National Education. After receiving the necessary permissions, the data collection process was started.

For the piloting phase which aimed to provide initial validity evidences for the adapted version of the (C-LEAD) Scale, METUSurvey online platform was used. Because of the COVID-19 pandemic breakdown and the resulting school closures, online data collection was opted for in this phase of the study. The online version of the measure was created on the platform, and the link that would direct the participants to the measures was shared on several social media platforms (e.g., Twitter, WhatsApp, and Facebook groups) to reach target teachers. The first page welcoming the participants on the online system was the consent form. Through this consent form, they were informed about the purpose of the study, their rights to withdraw at no cost, and assured of anonymity and confidentiality. The volunteer ones who agreed to participate in the study after reading the consent were directed to the measures. Data collection for the pilot study lasted about four months from June to September, 2021.

For the main study, data were collected from teachers working at primary, middle, and high schools affiliated to MoNE. Selected schools were visited with formal permission obtained from the Provincial Directorate of National Education in Ankara. Before administering the scales, each school principal's permission was taken. With the permission, teachers were informed about the study and asked to sign the consent form. Then, the willing ones were administered the paper and pencil format scales. Participants were not asked any questions that would reveal their identity and were informed that they could quit the study whenever they wanted. Also, they were assured about their anonymity and confidentiality before data collection. The data of the study were collected between December, 2021-March, 2022.

3.6. Data Analysis

In this study, data analysis was carried out by using SPSS 26 and AMOS 18 software. For preliminary analysis, data screening was conducted, so normality of each variable, assessment of missing data and outliers were checked. Hence, data was prepared for the analyses. Subsequently, for the descriptive statistics, means, standard deviations, and frequencies were calculated, thus demographic characteristics of the participants were obtained. Before the main analysis, the validity and reliability of the scales were tested. Hence, firstly, EFA was conducted to explore the factor structure of the adapted version of the C-LEAD Scale in the Turkish context. Next, CFA was conducted to test the existing factor structure of each scale for the sample collected during the main phase of the study. Moreover, two separate hierarchical regression analyses were performed as this study aims to investigate the predictive roles of the perceived crisis leadership and trust in principal and MoNE in teachers' positive and negative attitudes towards distance education after controlling for the effects of individual level and school level variables. As two separate hierarchical regression analyses were conducted, alpha level was set as .025 by applying the Bonferroni correction.

3.7. Limitations of the Study

This study has potential limitations. First of all, it is a quantitative research, and each measurement instrument included certain items to be scored based on participants' level of agreement. Therefore, their responses were limited to items on the scales, which prevented the researcher from taking an in-depth look at participants' ideas and motivations.

Secondly, since participants of the study were selected through cluster sampling and school districts were selected through convenience sampling in Ankara, it may reduce the generalizability of the result. Thus, the study's findings cannot necessarily represent all teachers in Turkey.

Third, participants might hesitate to express their true responses especially on Trust Scales, which aimed to measure teachers' level of trust in principals and in MoNE. In such cases, participants may provide more socially acceptable responses which

caused by social desirability bias. Similarly, they may not want to score some items or even not participate at all due to their inferior position in the school.

Finally, the assumption of independent observations may not be met for the current study. Because in each selected school, the researcher could reach more than 10 teachers at a time, and teachers mostly responded to the questionnaires during break time when social isolation among them was impossible. Therefore, it is important to prevent teachers' interaction with each other during data collection as they influence colleagues' responses and further researches may take this possible limitation into consideration as well.

CHAPTER 4

RESULTS

This chapter presents the results of the statistical analyses of the current study. Firstly, preliminary analyses were provided and descriptive statistics were elucidated. Subsequently, assumptions of the multiple regressions were presented. Finally, hierarchical multiple regression results were demonstrated.

4.1. Preliminary Analyses

4.1.1. Sample Size and Missing Value Analysis

Before the main analyses, data screening was conducted in order to prepare the data for both factor analysis and multiple regression analysis. In the beginning, the sample size of the present study was 509. However, based on the recommendations of Hair et al. (2010), cases with 50% or more missing scores were removed and 492 data remained. There were still remaining missing values. Thus, missing value analysis was performed to describe the missing value patterns. According to Little's MCAR test results, there is a non-random distribution of the missing data of the trust in principal and trust in MoNE variables. Therefore, to understand whether non-random pattern of the missing data was caused by any demographic variables (gender and school level), one-way ANOVA and chi-squares tests were run. Based on the significance test results, missing data were independent of those variables. Next, independent sample t-tests were run to understand whether missingness on the trust variables is related to dependent variables (Tabachnick & Fidell, 2007). There was no variation in the dependent variables caused by missing data of trust variables; therefore, those cases were excluded, and the sample size of the present study became 468. Additionally, Kline (2011) suggested a sample size of 200 or larger for conducting CFA. Also, for multiple regression analysis, Tabachnick and Fidell (2007) proposed N > 50 + 8m (m is the number of independent variables) formula for calculating the necessary sample size. As there were eight independent variables in the present study: gender, age, educational attainment, school-level variables, perceived crisis leadership, trust in principal, and trust in MoNE, the sample size of 468 is sufficient to conduct the determined analyses.

4.1.2. Descriptive Statistics and Inter-correlations

Descriptive statistics were used to describe the characteristics of the sample and also help in investigating the nature of the data. In Table 4.1, descriptive statistics including outcome and predictor variables were presented.

Table 4.1Descriptive Statistics of the Major Study Variables

Variables	M	SD	Possible Range	Actual Range
Outcome Variable				
Advantages of DE*	2.93	.68	1-5	1- 4.86
Limitations of DE*	3.76	.66	1-5	1-5
Predictor Variables				
Perceived Crisis Leadership	4.84	1.27	1-7	1-7
Trust in Principal	3.63	.99	1-5	1-5
Trust in MoNE	2.85	1.10	1-5	1-5

Note. *Subscales of Attitude Scale

As depicted in the Table 4.1, the overall mean score of participants for perceived crisis leadership level was high (M = 4.84, SD = 1.27). Mean scores of trust variables indicated that teachers' perception of trust varies between two different referent groups (principal and MoNE). Teachers' trust in their principal was higher (M = 3.63, SD = .99) than their level trust in MoNE (M = 2.85, SD = 1.10). When the outcome variable was analyzed, descriptive statistics for two subdimensions of attitude towards distance education were provided. As discussed in the Method section, mean scores of advantages of DE subdimension referred to positive attitudes of teachers. However, mean scores of limitations of DE subdimension referred to negative attitudes of teachers. Overall mean scores of limitations of DE variable fairly higher (M = 3.76, SD = .66) than overall mean scores of advantages of DE

variable (M = 2.93, SD = .68). It can be inferred that teachers held more negative attitudes toward distance education.

As presented in Table 4.2, correlation matrix demonstrated the bivariate correlations between independent variables (perceived crisis leadership, trust in principal, and trust in MoNE) and dependent variables (attitudes toward distance education) of the study. Results showed that there was a significant and low correlation between advantages of DE and perceived crisis leadership. However, a strong and positive correlation between perceived crisis leadership and trust in principal was concluded. Additionally, there was a positive medium correlation between trust in principal and trust in MoNE. On the other hand, there was a small and negative correlation between limitations of DE and trust in MoNE.

 Table 4.2

 Pearson Correlations Between Study Variables

Variables	1	2	3	4	5
1.Perceived crisis leadership	-				
2. Trust in principal	.62**	-			
3. Trust in MoNE	.33**	.48**	-		
4. Advantages of DE	.11**	01	.02	-	
5. Limitations of DE	07	05	14**	43**	-

^{**} *p*< .01

4.2. Hierarchical Multiple Regression Analyses

Multiple regression analysis is utilized to predict a dependent variable (outcome variable) from several independent variables (predictor variables). Hierarchical multiple regression is one of the methods that deal with the selection of predictor variables in order of their importance on the outcome variable (Field, 2009). As the purpose of this study is to investigate the predictive roles of several independent variables on the dependent variable by controlling for the effects of potential individual and school level characteristics which might have a significant influence

r= $\pm .10$ small effect, $\pm .30$ medium effect, $\pm .50$ large effect (Field, 2009)

on the dependent variable, hierarchical multiple regression analysis was used. Due to the fact that two dependent variables were explored in this study, two separate hierarchical regression analyses were conducted.

Prior to conducting hierarchical regression analysis, required assumptions of absence of outliers, normality of residuals, linearity and homoscedasticity of residuals, absence of multicollinearity, and independence of errors were checked and validated (Field, 2009). Next, a three-step hierarchical regression analysis was performed with the advantages of distance education and limitations of distance education separately. Individual-level variables (gender, age, and educational attainment) entered in step 1, school-level variables (middle school vs. primary school and middle school vs. high school) entered at step 2 and predictor variables of perceived crisis leadership, trust in principal, and trust in MoNE entered at the final step of the regression. Therefore, unique contribution of each predictor variable on the outcome variable was analyzed through hierarchical multiple regression (Tabachnick & Fidell, 2007).

In order to conduct multiple regressions, variables need to be continuous. However, categorical variables only with two categories can be used for the multiple regression analyses as well. For this purpose, initially, dummy variables were created to turn categorical variables with more than two categories into variables with two categories (Hair et al., 2010). Each dummy variable was compared with a predetermined reference group in the analyses. In the current study, the gender variable was dummy coded as female = 0 and male = 1. For the school level variable, middle school category was selected as reference group with regard to its high frequency in the sample and dummy coded variables were created in two levels as: middle school vs. primary school and middle school vs. high school. For the educational attainment variable, master degree and doctoral degree categories were combined. Therefore, this variable was entered in the analyses in two categories as undergraduate level = 0 and graduate level = 1. Since, there were two separate hierarchical regression analyses conducted, the alpha level was set as $\alpha = .025 \ (.05/2)$ by applying the Bonferroni correction.

4.2.1. Assumption Checks for the Advantages of Distance Education Variable

Assumptions of hierarchical regression analysis include absence of outliers, normality of residuals, linearity and homoscedasticity of residuals, absence of multicollinearity, and independence of errors (Field, 2009). For each analysis, these assumptions were checked separately.

After handling the missing data, assumption of absence of outliers was checked for the advantages of the distance education variable. Standardized z scores, histograms and P-P plots were used for detecting univariate outliers and Mahalanobis Distance, Leverage, Cook's Distance, DFBeta values were controlled for the multivariate outliers based on the recommendations of Field (2009). Mahalanobis distance was computed and 1 outlier was detected based on the critical χ^2 value of 26.12 for df = 8, p < .001. Also, Leverage values were computed by the formula of 3(k-1)/n where k referred to number of predictor variables (Osborne, 2015). According to the computation, value of 0.05 was set to detect the outliers and there was only 1 outlier revealed. Moreover, Cook's Distance and DFBeta values greater than 1 were examined and there was no cases having score beyond 1, which suggested absence of outliers. Next, the normality of residuals was examined through histograms and normal P-P plots of residuals. As demonstrated in Figure 4.1 and Figure 4.2, the dependent variable showed normal distribution, thus assumption was validated. For the assumption checks of linearity and homoscedasticity of residuals, partial regression plots and scatter plots were examined. As it is seen in the Figure 4.3, there was no pattern in the distribution of the points in the graph, indicating that the assumption was met (Field, 2009). For linearity of residuals, partial regression plots were examined and example with regard to continuous predictor variables presented in Figure 4.4. As proposed by Pallant (2005), "residuals should have a straight-line relationship with predicted dependent variable scores" (p. 143). Hence, there was no major deviation. Additionally, to validate the absence of multicollinearity, bivariate correlations, tolerance, and VIF values were checked. According to Tabachnick and Fidell (2007), multicollinearity problem may occur if a strong correlation between variables does exist (i.e., r values larger than .90). The results demonstrated that there was not any correlation exceeding .90. Also, VIF values were between 1.02 and 1.91 (smaller than 4) and tolerance values were between .52 and .98 (larger than .20). All these results indicated that assumption of absence of multicollinearity was not violated. Moreover, in order to check for independence of errors assumption, Durbin-Watson statistic was used in which value should be between 1 and 3 and it was 1.3 in this analysis. Thus, assumption had been met.

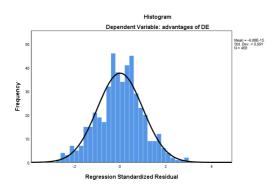


Figure 4.1 Histogram for advantages of DE sub-dimension

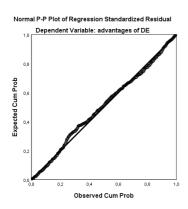


Figure 4.2 P-P Plot for advantages of DE sub-dimension

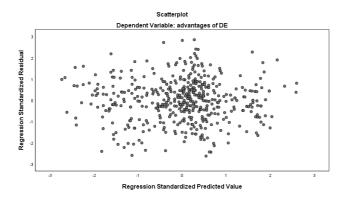


Figure 4.3 Scatter Plot for advantages of DE sub-dimension

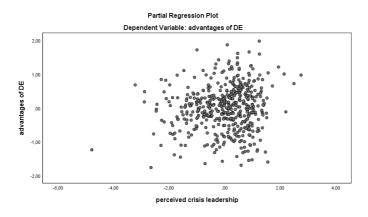


Figure 4.4 Partial Regression Plot for advantages of DE sub-dimension

4.2.2. Results of Hierarchical Multiple Regression Analysis for Advantages of Distance Education Variable

Individual level variables (gender, age, and educational attainment) were entered in step 1, school-level variables (middle school vs. primary school and middle school vs. high school) were entered in step 2, and predictor variables of perceived crisis leadership, trust in principal, and trust in MoNE were entered in the final step of the regression. After Step 1, regression model was significant (F (3, 464) = 4.89, p < 0.025) with the unique contribution of educational attainment (t (464) = 3.14, p = 0.00) and the model explained 3% of the variance. The positive b value suggests that teachers having graduate degree have more positive attitudes towards distance education than teachers having undergraduate degree. Other variables included in step 1 didn't have any significant contribution to predicting positive attitudes. After adding school-level variables (middle school vs. primary school and middle school vs. high school) in step 2, the regression model was significant (F(5, 462) = 5.72, p)< 0.025) with the contribution of middle school vs. primary school variable in this prediction (t (462) = -3.60, p = 0.00) and the model explained 3% additional variance in the dependent variable. Moreover, the b value was negative which indicated that middle school teachers had more positive attitudes towards distance education than primary school teachers did. In step 3, with the inclusion of perceived crisis leadership, trust in principal, and trust in MoNE variables after controlling for the influence of all other variables entered in step 1 and 2, the overall regression model predicted 7% of variance (F(8, 459) = 4.47, p < 0.025) with the significant contribution of only perceived crisis leadership variable (t (459) = 2.48, p= 0.01). Therefore, teachers with higher levels of perceived crisis leadership had more positive attitudes toward distance education. The results of the hierarchical regression analysis were illustrated in Table 4.3.

Table 4.3Results of the Hierarchical Regression Analysis for Advantages of DE

Step and	Variable	В	SE B	β	R^2	ΔR^2
Step 1					.03*	.03*
	Gender	02	.07	01		
	Age	01	.00	09		
	Educational Attainment	.26	.08	.15*		
Step 2					.06*	.03*
	Middle school vs. Primary school	30	.08	18*		
	Middle school vs. High school	03	.08	02		
Step 3					.07*	.01
	Perceived Crisis Leadership	.08	.03	.14*		
	Trust in principal	07	.04	10		
	Trust in MoNE	.02	.03	.04		

^{*} p<0.025

4.2.3. Assumption Checks for the Limitations of Distance Education Variable

In order to validate absence of outliers, standardized z scores, histograms, and P-P plots were used. Additionally for multivariate outliers, Mahalanobis Distance, Leverage, Cook's Distance, DFBeta values were checked. Mahalanobis distance was computed, and one outlier was detected based on the critical χ^2 value of 26.12 for df=8, p < .001. For computing Leverage values, formula of 3(k-1)/n where k referred to number of predictor variables was used and cut-off value was set as 0.05. Since there was only one value beyond 0.05, it was detected as an outlier. However, there was not a case with a Cook's Distance and DFBeta values larger than 1, thus the absence of outliers was supported by these validations. Therefore, outliers were not removed. Following assumptions of outliers, the normality of residuals was examined through histograms and normal P-P plots of residuals. As illustrated in Figure 4.5 and Figure 4.6, the residuals for the dependent variable followed a normal distribution. Thus, the assumption of normality of residuals was validated. Linearity and homoscedasticity of residuals were examined through partial regression plots and scatter plots. The spread of the points did not create a curved shape (see Figure 4.7); thus, assumption of homoscedasticity was not violated (Tabachnick & Fidell, 2007). Also, partial regression plots were checked for linearity of residuals based on

the recommendations of Pallant (2005), and there was no major deviation (as an example, see Figure 4.8). Next, assumptions of the multicollinearity were checked with bivariate correlations, tolerance, and VIF values. First, bivariate correlations among study variables were checked to see if there was a correlation exceeding .90. There was not any value larger than .90. VIF values were between 1.04 and 1.91 (smaller than 4), and tolerance values were between .52 and .92 (larger than .20). Therefore, assumption of absence of multicollinearity was validated. Last, the independence of errors assumption was checked by examining Durbin-Watson values, which should be between 1 and 3, and it was 1.88. Thus, independence of errors assumption was confirmed as well.

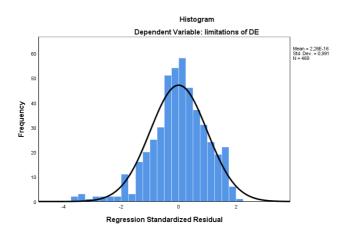


Figure 4.5 *Histogram for limitations of DE sub-dimension*

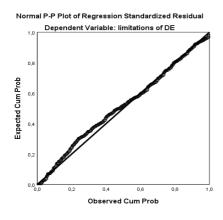


Figure 4.6 P-P Plot for limitations of DE sub-dimension

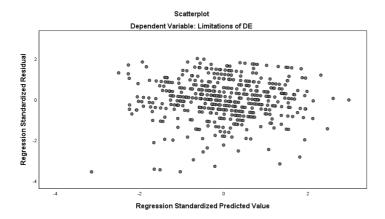


Figure 4.7 *Scatter Plot for limitations of DE sub-dimension*

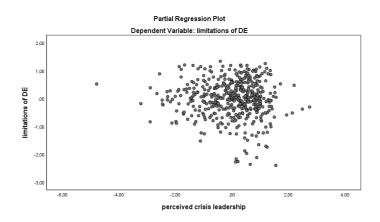


Figure 4.8 Partial Regression Plot for limitations of DE sub-dimension

4.2.4. Results of Hierarchical Multiple Regression Analysis for Limitations of Distance Education Variable

In the second analysis, the dependent variable was limitations of distance education and again, individual-level variables (gender, age, and educational attainment) were entered in step 1, school-level variables (middle school vs. primary school and middle school vs. high school) were entered in step 2, and predictor variables of perceived crisis leadership, trust in principal, and trust in MoNE were entered at the final step of the regression. After the first step, with the addition of gender, age, and educational attainment variables, the regression model was not significant (F (3, 464) = 1.67, p > 0.025). By any predictor variables, there was no significant contribution in this step. In step 2, with the inclusion of school-level variables, after controlling for the effects of individual-level variables, the regression model was still not

significant (F (5, 462) = 1.18, p > 0.025). At the final step, after the inclusion of the perceived crisis leadership, trust in principal and trust in MoNE variables, the model as a whole was significant (F(8, 459) = 2.44, p < 0.025) and explained 4% of the variance. After controlling for the effects of individual and school level variables, only trust in MoNE variable significantly contributed to the prediction of the outcome variable (t(459)= -3.19, p = 0.00). Therefore, a decrease in the degree of teachers' trust in MoNE is associated with an increase in their negative attitudes towards distance education. Results of the analysis were presented in the Table 4.4.

Table 4.4Results of the Hierarchical Regression Analysis for Limitations of DE

Step and	Variable	В	SE B	β	R^2	ΔR^2
Step 1					.01	.01
-	Gender	10	.07	07		
	Age	-00	.00	05		
	Educational Attainment	10	.08	06		
Step 2					.01	.00
-	Middle school vs. Primary school	08	.08	05		
	Middle school vs. High school	04	.08	03		
Step 3	_				.04*	.03*
•	Perceived Crisis Leadership	04	.03	07		
	Trust in principal	.05	.04	.07		
	Trust in MoNE	10	.03	17*		

^{*} *p*<0.025

CHAPTER 5

DISCUSSION

This chapter presents the results of the study and based on the relevant literature results were discussed. Next, implications for practice and recommendations for further studies were provided.

5.1. Discussion of the Results

This study aimed to investigate the relationship between perceived crisis leadership, trust in principal, trust in MoNE, and teachers' attitudes towards distance education. It was a correlational study with 468 public school teachers in Ankara included. For this purpose, the newly adapted C-LEAD Scale, Trust in Principal and Trust in MoNE Scales, and Distance Education Attitudes Scale were utilized. Additionally, validation of all instruments utilized in this study was maintained with the help of EFA and CFAs.

According to descriptive statistics results, based on the mean scores of the variables, teachers' negative attitudes towards distance education were higher than teachers' positive attitudes towards distance education. This finding of the study was consistent with many other studies in which were carried out during the pandemic in Turkey (e.g., Erten, 2022; Kara, 2021; Metin et al., 2021; Moçoşğlu & Kaya, 2020; Yahşi & Kırkıç, 2020). First of all, teachers have limited experience in teaching through distance education until the pandemic and they had to participate without any preparation (TEDMEM, 2020), thus they may reflect their bad experiences on the study which leads to reveal their negative attitudes towards distance education. Moreover, it is possible that teachers' attitudes towards distance education were mostly based on the experiences related with the COVID-19 pandemic conditions. That is, COVID-19 pandemic conditions may support this finding because the consequences of COVID-19 affected physical activity and mental well-being of

numbers of people. In addition to the disruptions to physical activity and social interaction, many psychological effects on the people including depression, anxiety and stress also emerged (Giuntella et al., 2021). Therefore, increase in anxiety, stress and social isolation among teachers may affect their attitudes towards distance education negatively. Furthermore, based on the organizational change literature, when the uncertainty and unknown emerged due to lack of change related information, employees negative reactions increases (Armenakis et al., 2007). Thus, rapid change in the teaching practices driven by COVID-19 pandemic and missing information at the beginning on how the process will proceed may cause teachers to exhibit negative attitudes.

Also, teachers' level of trust in principal was higher than their trust in MoNE. Based on Dirks and Ferrin's (2002) arguments, there is a difference between an employee's degree of trust in a direct supervisor and trust in a top manager, which is consistent with the results. This could be explained by the highly centralized structure of TES. Since TES has a highly centralized "top-down" organizational structure, decision-making is predominantly centralized in MoNE (Davutyan et al., 2010). Teachers are not included in the process of making decisions that may affect them, and this may cause failure to address teachers' needs and problems. Therefore, especially in times of uncertainty such as the recent pandemic, they may tend to build a more trusting relationship with their principal who will be able to meet their needs and address their concerns quickly. Moreover, Zayim and Kondakci (2015) demonstrated that in times of change when uncertainty is present, teachers rely more on the information they receive from the school principal, which was parallel with the findings.

On the other hand, descriptive statistics results of the study revealed that teachers' perceived crisis leadership was at moderate level. This finding reaffirmed previous studies that examined the perspectives of teachers with regard to principals' crisis management skills and revealing moderate level conclusions (e.g., Ersan-Albayrak, 2022; Gezer, 2020; 2022; Karakuş & İnandı, 2018; Maya, 2014). In addition, hierarchical multiple regression analyses were performed in the present study since two dependent variables exist: advantages of distance education and limitations of distance education.

Firstly, the findings implied that teachers' educational attainment is a stronger predictor of positive attitudes of teachers towards distance education than the other individual variables (gender and age). That is, teachers having graduate degree have more positive attitudes towards distance education than teachers having undergraduate degree. However, previous studies did not find any significant relationship between teachers' educational attainment and their attitudes towards distance education (Ağır, 2007; Karaca et al., 2021; Karagül & Şen, 2021; Kocayiğit & Uşun, 2020). This finding can be supported with teachers' capacity to adapt to change. Since all teachers went through dramatic and quick changes in their teaching practices due to the COVID-19 pandemic, it is possible that their capacity for adjusting to this new situation is associated with their attitudes towards distance education. This argument is consistent with the previous findings of Genç (2006) which revealed that teachers with a graduate degree are better at adapting to change than teachers with an undergraduate degree.

Secondly, hierarchical multiple regression results indicated that middle school teachers had more positive attitudes towards distance education than primary school teachers. Other studies also reported consistent results with the current study (e.g., Düzgün, 2021; Karaca et al., 2021). It can be concluded that as primary school teachers deal with the younger age group of students for the purpose of teaching them basic reading, writing, and math skills, they may have more difficulties during the distance education since younger age students have more difficulty using technology. Thus, it may affect teachers' attitudes towards distance education.

Third, the results of the regression analysis demonstrated that teachers with higher level of perceived crisis leadership had more positive attitudes towards distance education. According to Gallup (2020), remote work can lead to an increase in employee stress and burnout while they seek more emotional support. However, higher perceived crisis leadership during the COVID-19 pandemic may promote positive attitudes of teachers while they are dealing with their new workloads and the change in their teaching practices. The reason for this could be that crises leadership entails understanding the feelings and needs of the members (Wooten & James, 2008), connecting with people (Fernandez & Shaw, 2020), and clear and timely communication to foster a sense of comfort among stakeholders (Marshall et al.,

2020). Therefore, higher crisis leadership may minimize teachers' fear and anxiety and enable them to embrace the change easier, which, in turn, may lead to positive attitudes towards distance education.

Lastly, this study hypothesized that trust in different reference groups is a significant predictor of teachers' attitudes towards distance education. Findings revealed that a decrease in the degree of the teachers' trust in MoNE is associated with an increase in their negative attitudes towards distance education. However, an increment in trust in MoNE did not mean an increment in teachers' positive attitudes towards distance education, but increment in perceived crisis leadership was associated with an increment in positive attitudes. This finding is parallel with the study of Zayim (2015). In her study, trust in MoNE was the strongest predictor of positive and negative change-related affect and attitudinal variables in Turkish school context. Similarly, there was a negative correlational relationship between trust in MoNE and negative change-related affect. That is, an increment in trust in MoNE was associated with a decrement in teachers' negative change-related affect and attitudes. Herein, teachers' negative attitudes towards distance education were associated with trust in MoNE, not with the positive ones. One of the reasons for this finding might be the highly centralized structure of the TES where decisions are made in a top-down manner and imposed on school practitioners. Since the current study conducted in post-crisis period in the pandemic, it is possible that teachers evaluate MoNE as the key decision maker throughout the whole distance education process and relate their negative experiences (party stemming from lack of preparedness and information) with those decisions made by the MoNE. However, school principals did not have strong decision-making power in this process. Therefore teachers' negative attitudes towards distance education could be associated with only their trust in MoNE. Besides, according to the findings, teachers' positive attitudes toward distance education were associated with perceived crisis leadership. One of the reasons for this finding can be effective leadership communication, guidance, and support displayed at school level. As proposed by Beilstein et al. (2020), crisis leaders are expected to communicate clearly and often in order to share potential solutions with members, thus members can feel comfortable. In fact, the presence of two-way communication comes to the forefront, herein, where the teachers' perceived crisis leadership is a stronger predictor of positive attitudes towards distance education

than their trust in MoNE. Since, teachers can establish closer relationship with their principal than the higher administrators in MoNE. Thus, through two-way communication, two parties can have the opportunities to understand each other and resolve possible conflicts (Dhiman & Marques, 2018). Similarly, teachers' perceptions of leadership depend on the presence of the close relationship with their principals which may lead to teachers' positive attitudes towards distance education. However, their negative attitudes towards distance education were associated with trust in MoNE and teachers have no opportunities to build closer relationship with the higher administrators in MoNE. Therefore, as proposed by Dirks and Ferrin (2002), distinction in the roles of the different leadership referents, which is school principals and MoNE in this case, emerged different employee outcomes.

5.2. Implications for Practice

The COVID-19 pandemic showed that large-scale crises could force educational organizations into radical changes. Consequently, educational leaders and authorities needed to take action to minimize the destructive impacts of this crisis. In fact, closing the schools and shifting to distance education was one of the crisis management strategies which aims to ensure the safety of school community and continuity of the education. Therefore, distance education became a vital part of the society in times of crisis due to school closures. While majority of studies have focused on teachers' attitudes towards distance education in K-12 level so far (e.g., Ağır, 2007; Çelen et al., 2013; Horzum et al., 2012; Ülkü, 2018), and provided useful information about the related factors, teachers' attitudes towards distance education became prominent again in the course of the crisis. Because several factors as teachers' opinions about digital transformation, their perceptions about crises and crisis leadership behaviors of principals, and trust in management might be related to teachers' desirable attitudes towards distance education and eventually to the quality of education and students' outcomes considerably, they are worthwhile to examine. In that vein, the current study provides empirical evidence on the relationship between teachers' attitudes towards distance education and contextual factors including school level variables, principals' crisis leadership behaviors, teachers' trust in principals and in MoNE along with other individual variables including teachers' educational attainments. With regard to practice, the findings of the study provide useful information and suggestions for both school principals and higher authorities in MoNE. Since findings demonstrated that teachers' positive attitudes are associated with their principals' crisis leadership behaviors, it gains importance to involve school principals in crisis management process and to give them autonomy in this regard. Besides, MoNE can provide in-service crisis leadership trainings for school principals in order to enhance their leadership behaviors in times of crisis such as communicating effectively, working collaboratively, taking strategic risks and making decisive actions. Moreover, crisis leadership and management training courses can be implemented into graduate-level programs such as Educational Administration; thereby more qualified educational leaders would be trained in effective crisis leadership behaviors. As teachers' positive work-related attitude in challenging times, which was towards distance education in the current study, was positively associated with principals' crisis leadership behaviors, enhancing principals' related leadership behaviors is remarkably important. On the other hand, results revealed that teachers' trust in MoNE is associated with teachers' negative attitudes towards distance education. However, there was no significant relationship between trust in principal and attitudes towards distance education. Therefore, to improve teachers' attitudes towards distance education, higher authorities may consider teachers' opinions, needs, and attitudes in decision-making process. However, in times of crisis, as leaders need to make quick decisions due to time constraints, not allowing other parties in decision making could be a wise choice. Peters (2011) stated that centralization facilitates quick decisions during crises. In this regard, the centralized structure of the MoNE can be seen as positive as it will enable quick decisions to be taken and implemented in times of crisis. Because as Jankelová et al. (2021) emphasized, leaders need to create a sense of control over the crisis situation. Together with this, studies demonstrated that employees demand transparent explanations from leaders and need to stay informed. Thus, keeping teachers informed and up-to-date about the process, justifying the reasons for the decisions made, and meeting their needs and concerns by providing leader support is likely to breed trust in principals and in MoNE, which, in turn, may lead to an increase in their positive attitudes towards distance education.

5.3. Recommendations for Future Research

Although this study revealed useful results and conclusions about teachers' attitudes towards distance educations, there were some limitations. Thus, recommendations for future studies can be suggested concerning those limitations as follows:

Firstly, the current study included only public school teachers living in Ankara. However, in future studies, private school teachers can be included. Moreover, by adding a school type variable into the current study, its predictive role on the outcome variable can be investigated. Thus, a new significant correlation between variables can be revealed. Also, in future studies, data can be obtained from all provinces in Turkey; hence, it can be examined whether the attitudes of teachers towards distance education change according to where they live and the different school contexts they are in. Besides, these suggestions can increase the generalizability of the results.

Secondly, given the low variances explained in the dependent variables, in addition to perceived crisis leadership, trust in principal, and trust in MoNE variables, new predictor variables can be considered in future studies such as teachers' access to web-based infrastructures and teachers' self-efficacy regarding technology usage. Such variables may offer new insight into teachers' attitudes towards distance education in the course of a crisis. Moreover, class size may be a strong predictor of teachers' attitudes towards distance education because studies showed that teachers believe classes with large numbers of students lead to numerous problems such as discipline issues including classroom management and student control (Blatchford et al., 2009), interaction problems such as decrease in teachers and students interpersonal communication (Hayes, 1997), and frustration in the teacher's effort (Ayeni & Olowe, 2016). Similarly, class size can be essential during distance education and be associated with teachers' attitudes.

Additionally, attitude concept may require subjective assessments, thus in order to gain a deeper understanding about teachers' attitudes, qualitative research design can be utilized. Moreover, future studies can be designed as a mixed-methods study which combines quantitative and qualitative data collection. Therefore, studies can provide more in-depth findings with stronger evidences.

Finally, main study variables can be investigated in higher education context as well. Therefore, relationship between instructors' attitudes towards distance education, trust in university administration, and crisis leadership behaviors of deans or department chairs can be examined. Furthermore, findings may allow making a comparison between teachers' attitudes towards distance education in K-12 and higher education levels if any significant difference exists.

REFERENCES

- Adamson, A. D., & Peacock, G. G. (2007). Crisis response in the public schools: A survey of school psychologists' experiences and perceptions. *Psychology in the Schools*, 44(8), 749-764.
- Adedoyin, O. B., & Soykan, E. (2020). Covid-19 pandemic and online learning: The challenges and opportunities. *Interactive Learning Environments*, 1–13. https://doi.org/10.1080/10494820.2020.1813180
- Ağır, F. (2007). Özel okullarda ve devlet okullarında çalışan ilköğretim öğretmenlerinin uzaktan eğitime karşı tutumlarının belirlenmesi [Unpublished master's thesis]. Balıkesir University.
- Ahlström, B., Leo, U., Norqvist, L., & Isling, P. P. (2020). School leadership as (un)usual: Insights from principals in Sweden during a pandemic. *International Studies in Educational Administration*, 48(2), 35–41.
- Ajzen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology*, 52, 27–58. https://doi.org/10.1146/annurev.psych.52.1.27
- Aksoy, H. H. & Aksoy, N. (2003). Okullarda krize müdahale planlaması. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, *36*(1), 36-49.
- Aksu, A. (2009). Kriz yönetimi ve vizyoner liderlik. *Yaşar Üniversitesi. E-Dergisi*, 4(15), 2435-2450.
- Aksu, A. & Deveci, S. (2009). İlköğretim okulu müdürlerinin kriz yönetimi becerileri. *Education Sciences*, 4(2), 448-464.
- Anderson, B., & Simpson, M. (2012). History and heritage in open, flexible and distance education. *Journal of Open, Flexible, and Distance Learning,* 16(2), 1-10.
- Arbuckle, J. L., & Wothke, W. (1999). Amos 4.0 user's guide. Small Corporation.

- Arı, G. S. (2003). Yöneticiye duyulan güven örgütsel bağlılığı artırır mı? Gazi Ticaret ve Turizm Eğitim Fakültesi Dergisi, 2, 17-34.
- Armenakis, A. A., Bernerth, J. B., Pitts, J. P., & Walker, H. J. (2007). Organizational change recipients' beliefs scale: Development of an assessment instrument. *The Journal of Applied Behavioral Sciences*, 43(4), 481-505.
- Allen, M., Jerome, A., White, A., Marston, S., Lamb, S., Pope, D., & Rawlins, C. (2002). The preparation of school psychologists for crisis intervention. *Psychology in the Schools*, 39(4), 427–439. https://doi.org/10.1002/pits.10044
- Ateş, A., & Altun, E. (2008). Bilgisayar öğretmeni adaylarının uzaktan eğitime yönelik tutumlarının çeşitli değişkenler açısından incelenmesi. *Gazi Eğitim Fakültesi Dergisi*, 28(3), 125-145.
- Avolio, B. J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviors. *The Leadership Quarterly*, *15*(6), 801–823. https://doi.org/10.1016/j.leaqua.2004.09.003
- Avvisati, F., Gurgand, M., Guyon, N., & Maurin, E. (2014). Getting parents involved: A field experiment in deprived schools. *The Review of Economic Studies*, 81(1), 57–83. https://doi.org/10.1093/restud/rdt027
- Ayeni, O. G., & Olowe, M. O. (2016). The implication of large class size in the teaching and learning of business education in tertiary institution in Ekiti State. *Journal of Education and Practice*, 7, 65-69.
- Ayyürek, O. (2014). Eğitim örgütlerinde kriz yönetimi: Van depremi örneği [Unpublished master's thesis]. Yüzüncü Yıl University.
- Baier, A. C. (1994). Moral prejudices. Harvard University Press.
- Bak, H. (2020). Supervisor Feedback and innovative work behavior: The mediating roles of trust in supervisor and affective commitment. *Frontiers in Psychology*, 11, 1-12.

- Balyer, A. (2017). Trust in school principals: Teachers' opinions. *Journal of Education and Learning*, 6(2), 317–325. https://doi.org/10.5539/jel.v6n2p317
- Bates, A. W. (2015). Teaching in a digital age: Guidelines for designing teaching and learning. Tony Bates Associates Ltd.
- Baykal, D., & Koc-Tutuncu, S. (2022). Online education experiences of the students studying in health care departments during the COVID-19 pandemic. *Turkish Online Journal of Distance Education*, 23(1), 131–143. https://doi.org/10.17718/tojde.1050379
- Baylor, A. L., & Ritchie, D. (2002). What factors facilitate teacher skill, teacher morale, and perceived student learning in technology-using classrooms? *Computers and Education*, *39*, 395- 414. https://doi.org/10.1016/S0360-1315(02)00075-1
- Beaudoin, M. (1990). The instructor's changing role in distance education. *American Journal of Distance Education*, 4(2), 21–29. https://doi.org/10.1080/08923649009526701
- Beilstein, C. M., Lehmann, L. E., Braun, M., Urman, R. D., Luedi, M. M., & Stüber, F. (2021). Leadership in a time of crisis: Lessons learned from a pandemic. *Best practice & research. Clinical anaesthesiology*, *35*(3), 405–414. https://doi.org/10.1016/j.bpa.2020.11.011
- Berkovich, I. (2018). Typology of trust relationships: Profiles of teachers' trust in principal and their implications. *Teachers and Teaching: Theory and Practice*, 24(7), 749–767. https://doi.org/10.1080/13540602.2018.1483914
- Beyer, J. M., & Browning, L. D. (1999). Transforming an industry in crisis: charisma, routinization, and supportive cultural leadership. Leadership Quarterly, 10(3), 483-520.
- Blatchford, P., Russell, A., & Brown, P. (2009). Teaching in large and small classes. *International Handbook of Education*, 12(9), 779-790. http://dx.doi.org/10.1007/978-0-387-73317-3_49

- Boin, A., Kuipers, S., & Overdijk, W. (2013). Leadership in times of crisis: A framework for assessment. *International Review of Public Administration*, 18(1), 79–91. https://doi.org/10.1080/12294659.2013.10805241
- Boin, A., Hart, P. 't, Stern, E., & Sundelius, B. (2017). *The politics of crisis management public leadership under pressure*. Cambridge University Press.
- Bollen, K. A., & Stine, R. A. (1992). Bootstrapping goodness-of-fit measures in structural equation models. *Sociological Methods & Research*, 21(2), 205–229. https://doi.org/10.1177/0049124192021002004
- Boon, S. D., & Holmes, J. G. (1991). The dynamics of interpersonal trust: resolving uncertainty in the face of risk. In R. A. Hinde & J. Groebel (Eds.). *Cooperation and prosocial behavior* (pp. 190- 211). Cambridge University Press.
- Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to Coronavirus pandemic. *Asian Journal of Distance Education*, 15(1), 1-6.
- Brezicha, K. F., & Fuller, E. J. (2019). Building teachers' trust in principals: Exploring the effects of the match between teacher and principal race/ethnicity and gender and feelings of trust. *Journal of School Leadership*, 29(1), 25–53. https://doi.org/10.1177/1052684618825087
- Brock, S.E., Sandoval, J. & Lewis, S. (1996). *Preparing for crises in the schools: A manual for building school crisis response teams*. Clinical Psychology.
- Brockner, J., Siegel, P. A., Daly, J. P., Tyler, T., & Martin, C. (1997). When trust matters: The moderating effect of outcome favorability. *Administrative Science Quarterly*, 42(3), 558–583. https://doi.org/10.2307/2393738
- Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. Guilford Press.
- Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods* & *Research*, 21(2), 230–258. https://doi.org/10.1177/0049124192021002005

- Bryk, A. S., & Schneider, B. (1996). Social trust a moral resource for school improvement final deliverable to Oeri (ED412630). ERIC. https://files.eric.ed.gov/fulltext/ED412630.pdf
- Bryk, A., & Schneider, B. (2002). *Trust in schools: A core resource for improvement*. Russell Sage Foundation.
- Bullock, D. (2004). Moving from theory to practice: An examination of the factors that preservice teachers encounter as the attempt to gain experience teaching with technology during field placement experiences. *Journal of Technology and Teacher Education*, 12(2), 211-237.
- Caringal-Go, J. F., Teng-Calleja, M., Franco, E. P., Manaois, J. O., & Zantua, R. M. (2021). Crisis leadership from the perspective of employees during the COVID-19 pandemic. *Leadership & Organization Development Journal*, 42(4), 630–643. https://doi.org/10.1108/lodj-07-2020-0284
- Carone, A., & Iorio, L. D. (2013). Crisis management: an extended reference framework for decision makers. *Journal of business continuity & emergency planning*, 6(4), 347–359.
- Chan, K. Y., & Drasgow, F. (2001). Toward a theory of individual differences and leadership: Understanding the motivation to lead. *Journal of Applied Psychology*, 86(3), 481–498. https://doi.org/10.1037/0021-9010.86.3.481
- Chiles, T. H., & McMackin, J. F. (1996). Integrating variable risk preferences, trust, and transaction cost economics. *Academy of Management Review*, 21(1), 73–99. https://doi.org/10.5465/amr.1996.96021615667
- Coleman, J.S. (1990). Foundations of social theory. Harvard University Press.
- Costigan, R. D., Ilter, S. S., & Berman, J.J. (1998). A multi-dimensional study of trust in organizations. *Journal of Managerial Issues*, 10(3), 303-317.
- Coombs, W. (2007). Ongoing crisis communication: Planning, managing, and responding. SAGE Publications.

- Council of Higher Education (2020, March 18). YÖK Üniversitelerde Uygulanacak Uzaktan Eğitime İlişkin Açıklama [Press release]. https://www.yok.gov.tr/Sayfalar/Haberler/2020/universitelerde-uygulanacak-uzaktan-egitime-iliskin-aciklama.aspx
- Creswell, J.W. (2013). Research design: qualitative, quantitative, and mixed methods approaches (4th ed.). SAGE Publications.
- Crisis. (n.d). In *The Online Etymology Dictionary*. Retrieved from https://www.etymonline.com/search?q=crisis&ref=searchbar_searchhint
- Cummings, L. L., & Bromiley, P. (1996). The organizational trust inventory (OTI): Development and validation. In R. M. Kramer & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp.302-330). SAGE Publications.
- Currall, S. C., & Epstein, M. J. (2003). The fragility of organizational trust: Lessons from the rise and fall of Enron. *Organizational Dynamics*, 32(2), 193–206.
- Çınar, A., & Alcı, B. (2022). Teachers' attitudes toward information and communication technologies scale: adaptation study to Turkish. *E-Uluslararası Eğitim Araştırmaları Dergisi*, 13(1), 1-18. https://doi.org/10.19160/e- ijer.854720
- Çelen, F. K., Çelik, A., & Seferoglu, S. S. (2013). Analysis of teachers 'approaches to distance education. *Procedia Social and Behavioral Sciences*, 83, 388–392. https://doi.org/10.1016/j.sbspro.2013.06.076
- Çelik, S., Karakuş, T., Kurşun, E., Göktaş, Y., & Özben, M. (2017). Teknoloji destekli öğrenme ortamlarında öğretmenler ve öğrencilerin karşılaştığı pedagojik problemler: FATİH Projesi örneği. *Journal of Education and Future*, 12, 67-83.
- Davis, J. H., Schoorman, F. D., Mayer, R. C., & Tan, H. H. (2000). The trusted general manager and business unit performance: Empirical evidence of a competitive advantage. *Strategic Management Journal*, 21(5), 563–576.
- Davutyan, N., Demir, M., & Polat, S. (2010). Assessing the efficiency of Turkish secondary education: Heterogeneity, centralization, and scale diseconomies. *Socio-Economic Planning Sciences*, 44(1), 35-44.

- Demir, B., Kaleli Yılmaz, G., & Sert çelik, H. (2021). Teachers' attitudes and opinions on mathematics lessons conducted with distance education due to covid-19 pandemic. *Turkish Online Journal of Distance Education*, 22(4), 147–163. https://doi.org/10.17718/tojde.1002812
- Demirer, V., & Dikmen, C. H. (2018). Öğretmenlerin FATİH projesine yönelik görüşlerinin teknolojik pedagojik alan bilgisi bağlamında incelenmesi. *İlköğretim Online*, *17*(1), 26-46. https://doi.org/10.17051/ilkonline.2018.413735
- Demiroz, F., & Kapucu, N. (2012). The role of leadership in managing emergencies and disasters. *European Journal of Economic and Political Studies*, 5, 91-101.
- Deutsch, M. (1958). Trust and suspicion. Journal of Conflict Resolution, 2, 265–279.
- Demirtaş, H. (2000). Kriz yönetimi. *Kuram ve Uygulamada Eğitim Yönetimi Dergisi*, 2, 353-373.
- Dirks, K. T. (1999). The effects of Interpersonal Trust on work group performance. *Journal of Applied Psychology*, 84(3), 445–455. https://doi.org/10.1037/0021-9010.84.3.445
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, 87(4), 611–628. https://doi.org/10.1037/0021-9010.87.4.611
- Dooley, K. E., & Murphrey, T. P. (2000). How the perspectives of administrators, faculty, and support units impact the rate of distance education adoption. *Online Journal of Distance Learning Administration*, 3(4), 1-8.
- Düzgün, S. (2021). Teachers' Attitudes toward Turkey Education Informatics Network during the Distance Education Period in the COVID-19 Pandemic. *International Journal of Progressive Education*, 17(5), 102-118.
- Erol, İ., & Karsantik, İ. (2017). Investigation of Teacher Opinions on Crisis Management in Primary and Secondary Schools. In H. Arslan, C. S. Duse, & M. A. Icbay (Eds.), *Research on Education* (pp.268-274). E-BWN.

- Ersan-Albayrak, E. (2022). Okul yöneticilerinin kriz yönetim becerileri ile okul sağlığı ilişkisine yönelik öğretmen görüşleri [Unpublished master's thesis]. Hacettepe University.
- Erten, P. (2022). Attitudes and evaluations of the teachers towards distance education during the COVID-19 pandemic. *Discourse and Communication for Sustainable Education*, 13(1), 112–144. https://doi.org/10.2478/dcse-2022-0010
- Ferrari, A. (2012). *Digital competence in practice: An analysis of frameworks*. Seville: Joint Research Centre, Institute for Prospective Technological Studies. http://dx.doi.org/10.2791/82116.
- Fernandez, A. A., & Shaw, G. P. (2020). Academic leadership in a time of crisis: The coronavirus and COVID-19. *Journal of Leadership Studies*, *14*(1), 39–45. https://doi.org/10.1002/jls.21684
- Fink, S. L., Beak, J., & Taddeo, K. (1971). Organizational crisis and change. *The Journal of Applied Behavioral Science*, 7(1), 15–37.
- Field, A. (2009). Discovering statistics using IBM SPSS statistics. Sage.
- Fraenkel, J. R., & Wallen, N. E. (2015). *How to design and evaluate research in Education*. McGraw-Hill.
- Fuller, E. J., Richards, M., & Cohen, R. (2008). Conflict or congruence? The intersection of faculty, parent, and student trust in the principal. *Journal of School Public Relations*, 29(2), 112–142. https://doi.org/10.3138/jspr.29.2.112
- Gabarro, J. J. (1978). The development of trust influence and expectations. In A. G. Athos & J. J. Gabarro (Eds.). *Interpersonal behavior: communication and understanding in relationship* (pp. 290-303). Prentice Hall.
- Genç, M. (2006). Eğitim örgütlerinde öğretmenlerin değişime karşı gösterdiği direnç [Unpublished master's thesis]. Yeditepe University.
- Geray, C. (2007). Distance education in Turkey. *International Journal of Educational Policies*, *I*(1), 33-62.

- Gezer, Y. (2020). Kriz yönetim becerilerine (kriz öncesi, dönemi ve sonrası) ilişkin olarak okul müdürlerinin sergilemiş oldukları davranışlar. *Disiplinlerarası Eğitim Araştırmaları Dergisi*, 4(8), 282-298.
- Giuntella, O., Hyde, K., Saccardo, S., & Sadoff, S. (2021). Lifestyle and mental health disruptions during COVID-19. *Proceedings of the National Academy of Sciences of the United States of America*, 118(9), 1-9. https://doi.org/10.1073/pnas.2016632118
- Goddard, R. D., Tschannen-Moran, M., & Hoy, W. K. (2001). A multilevel examination of the distribution and effects of teacher trust in students and parents in urban elementary schools. *The Elementary School Journal*, 102(1), 3–17.
- Gooch, J. (1998). *They Blazed the Trail for Distance Education*. Distance Education Clearinghouse.
- Grissom, J. A., & Condon, L. (2021). Leading schools and districts in times of crisis. *Educational Researcher*, 50(5), 315–324. https://doi.org/10.3102/0013189x211023112
- Gunawardena, C. N., & McIsaac, M. S. (2001). Distance Education. In D.H. Jonasses (Ed.) *Handbook of Research for Educational Communications and Technology* (pp. 355-395). Lawrence Earlbaum.
- Hadley, C. N., Pittinsky, T. L., Sommer, S. A., & Zhu, W. (2011). Measuring the efficacy of leaders to assess information and make decisions in a crisis: The C-LEAD Scale. *The Leadership Quarterly*, 22, 633-648.
- Hair, J. F., Black, W. C., Babin, B.J. & Anderson, R.E. (2010). *Multivariate data analysis*. Pearson.
- Harris, D. A., & Krousgrill, C. (2008). Distance Education: New Technologies and New Directions. *Proceedings of the IEEE*, 96(6), 917-930. https://doi.org/10.1109/JPROC.2008.921612
- Hayes, D. (1997). Helping teachers to cope with large classes. *ELT Journal*, 51(2), 106-116.

- Hebebci, M. T., Bertiz, Y., & Alan, S. (2020). Investigation of views of students and teachers on distance education practices during the Coronavirus (COVID-19) Pandemic. *International Journal of Technology in Education and Science (IJTES)*, 4(4), 267-282.
- Hermann, C. F. (1963). Some consequences of crisis which limit the viability of organizations. *Administrative Science Quarterly*, 8(1), 61. https://doi.org/10.2307/2390887
- Herman, J. J. (1994). Crisis management a guide to school crises and action taken. the practicing administrator's leadership series (ED378661). ERIC. https://eric.ed.gov/?id=ED378661
- Holmberg, B. (1989). Theory and practice of distance education. Routledge.
- Holmes, J. G., & Rempel, J. K. (1989). Trust in close relationships. In C. Hendrick (Ed.), *Close relationships* (pp. 187–220). Sage Publications.
- Hoover-Dempsey, K. V., & Sandler, H. M. (1997). Why do parents become involved in their children's education? *Review of Educational Research*, 67(1), 3–42. https://doi.org/10.2307/1170618
- Horzum, M. B., Albayrak, E. & Ayvaz, A. (2012). Sınıf öğretmenlerinin hizmet içi eğitimde uzaktan eğitime yönelik inançları. *Ege Eğitim Dergisi 13*(1), 56–72.
- Hoy, W. K., & Kupersmith, W. (1984). Principal authenticity and faculty trust: Key elements in organizational behavior. *Planning and changing*, 15(2), 80-88.
- Hoy, W. K., Tarter, C. J., & Kottkamp, R. B. (1991). *Open schools, healthy schools: Measuring organizational climate.* Sage.
- Hoy, W. K., Tarter, C.J., & Witkoskie, L. (1992). Faculty trust in colleagues: linking the principal with school effectivenes. *Journal of Research and Development in Education*, 26(1), 38-45.
- Hoy, W. K., Barnes, K., & Sabo, D. (1996). Organizational health and faculty trust: a view from the middle level. *Research in Middle Level Education Quarterly*, 19(3), 21-39.

- Hoy, W. K., & Tschannen-Moran, M. (1999). Five faces of trust: An empirical confirmation in urban elementary schools. *Journal of School Leadership*, 9, 184-208.
- Hoy, W. K., & Tschannen-Moran, M. (2003). The conceptualization and measurement of faculty trust in schools: The omnibus T-Scale. In W. K. Hoy, & C. G. Miskel (Eds.), Studies in Leading and Organizing Schools (pp. 181-208). Information Age Publishing.
- Hoy, W. K., Smith, P. A., & Sweetland, S. R. (2002). The Development of the organizational climate index for high schools: Its measure and relationship to faculty trust. *The High School Journal*, 86(2), 38–49.
- Hrebiniak, L. G., & Alutto, J. A. (1972). Personal and role-related factors in the development of Organizational Commitment. *Administrative Science Quarterly*, 17(4), 555-573. https://doi.org/10.2307/2393833
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55.
- Hunt, J. G., Boal, K. B., & Dodge, G. E. (1999). The effects of visionary and crisisresponsive charisma on followers: An experimental examination of two kinds of charismatic leadership. *The Leadership Quarterly*, 10, 423-448.
- Ikwuka, O. I., Onyali, L. C., Olugbemi, O. P., Etodike, C. E., Igbokwe, I. C., & Adigwe, E. J. (2020). Teachers' attitude towards the use of ICT for quality instructional delivery in Onitsha North Secondary Schools, Anambra State, Nigeria. *International Journal of Academic Research in Progressive Education and Development*, 9(3), 1-11. https://doi.org/10.6007/ijarped/v9-i3/7980
- İşman, A. (2011). *Uzaktan eğitim*. Pegem Academy Publishing.
- Ingenito, A. G. (2004). A qualitative study exploring the perceptions of superintendents concerning the impact of tragedy and disaster upon the role of their school organization [Unpublished doctoral dissertation]. Seton Hall University.

- Jackson, S. E., & Dutton, J. E. (1988). Discerning threats and opportunities. *Administrative Science Quarterly*, 33(3), 370. https://doi.org/10.2307/2392714
- Jahagirdar, S., Mohapatra, A., Chatterjee, A., & Behera, S. (2020). Response to the COVID-19 pandemic in India: Case studies on leadership in crisis situations. *International Journal of Health & Allied Sciences*, *9*(5), 81. https://doi.org/10.4103/ijhas.ijhas_112_20
- James, E. H., & Wooten, L. P. (2004). Leadership in turbulent times: Competencies for thriving amidst crisis. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.555966
- James, E. H., & Wooten, L.P. (2005). Leadership as (Un)usual: How to display Competence in times of crisis. *Organizational Dynamics*, 34(2), 141–152.
- James, E.H. & Wooten, L.P. (2010). Leading under pressure. Routledge.
- Jankelová, N., Joniaková, Z., Blštáková, J., Skorková, Z., & Procházková, K. (2021). Leading employees through the crises: Key competences of crises management in healthcare facilities in Coronavirus Pandemic. *Risk management and healthcare policy*, 14, 561–573. https://doi.org/10.2147/RMHP.S288171
- Johnson, T. (2018). Crisis leadership: How to lead in times of crisis, threat and uncertainty. Bloomsbury Business.
- Jones, M., & Paterson, L. (1992). Preventing chaos in times of crisis: A guide for school administrators (ED350700). ERIC. https://files.eric.ed.gov/fulltext/ED350700.pdf
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31–36.
- Kang B. (2021). How the COVID-19 Pandemic is reshaping the education service. *The Future of Service Post-COVID-19 Pandemic*, 1, 15–36. https://doi.org/10.1007/978-981-33-4126-5_2

- Kara, S. (2021). An investigation of visual arts teachers' attitudes towards distance education in the time of COVID-19. *International Journal on Social and Education Sciences* (*IJonSES*), 3(3), 576-588. https://doi.org/10.46328/ijonses.246
- Karaca, İ., Karaca, N., Karamustafaoğlu, N. & Özcan, M. (2021). Öğretmenlerin uzaktan eğitimin yararına ilişkin algılarının incelenmesi. *Uluslararası Psikolojik Danışma ve Rehberlik Araştırmaları Dergisi*, 3(1), 209-224.
- Karagül, S., & Şen, E. (2021). Turkish teachers' attitudes towards distance learning during the COVID-19 pandemic. *International Education Studies*, *14*(10), 53. https://doi.org/10.5539/ies.v14n10p53
- Karakuş, A., & İnandı, Y. (2018). Ortaokul yöneticilerinin okullarında yaşanan kriz durumlarını yönetme becerilerinin incelenmesi. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 14(2), 500-518.
- Karalar, H., & Doğan, U. (2017). Teacher perception on educational informatics network: a qualitative study of a turkish anatolian high school, *International Education Studies*, 10(4), 101-112.
- Kath, L. M., Magley, V. J., & Marmet, M. (2010). The role of organizational trust in safety climate's influence on organizational outcomes. *Accident Analysis & Prevention*, 42(5), 1488-1497.
- Kaya, P. Z. (2002). *Uzaktan Eğitim*. Pegam Akademi Yayıncılık.
- Keegan, D. (1996). *Foundations of distance education* (3rd ed.). Routledge. https://doi.org/10.4324/9781315004822
- Kırık, M. A. (2014). Uzaktan eğitimin tarihsel gelişimi ve Türkiye'deki durumu. *Marmara University Journal of Communication*, 21, 73-94.
- Klann, G. (2003). Crisis leadership using military lessons, organizational experiences, and the power of influence to lessen the impact of Chaos on the people you lead. Center for Creative Leadership.
- Kline, R. B. (2011). *Principles and practice of structural equation modelling*. Guilford Press.

- Kocayiğit, A., & Uşun, S. (2020). Milli Eğitim Bakanlığına bağlı okullarda görev yapan öğretmenlerin uzaktan eğitime yönelik tutumları (Burdur ili örneği). *Avrasya Uluslararası Araştırmalar Dergisi*, 8(23), 285-299.
- Kochanek, J. R. (2005). Building trust for better schools. Corwin Press.
- Koçak-Usluel, Y., & Mazman, S. G. (2009). Adoption of web 2.0 tools in distance education. *Procedia Social and Behavioral Sciences*, *I*(1), 818–823. https://doi.org/10.1016/j.sbspro.2009.01.146
- Koçoğlu, E., & Tekdal, D. (2020) Analysis of distance education activities conducted during COVID-19 pandemic. *Educational Research and Reviews*, 9(15), 536-543. https://doi.org/10.5897/ERR2020.4033
- Kramer, R., & Tyler, T. (1996). *Trust in organizations: Frontiers of theory and research.* SAGE Publications.
- Kurt, A.A., Kuzu, A., Dursun, Ö.Ö., Güllüpınar, F. & Gültekin, M. (2013). Fatih projesinin pilot uygulama sürecinin değerlendirilmesi: Öğretmen görüşleri. Journal of Instructional Technologies & Teacher Education, 1(2), 1-23.
- Lee, C. K., Song, H. J., Lee, H. M., Lee, S., & Bernhard, B. J. (2013). The impact of CSR on casino employees' organizational trust, job satisfaction, and customer orientation: An empirical examination of responsible gambling strategies. *International Journal of Hospitality Management*, 33(1), 406-415.
- Lewicki, R. J., McAllister, D. J., & Bies, R. J. (1998). Trust and distrust: New relationships and realities, *Academy of Management Review*, 23(3), 438-458.
- Lewicki, R. J., & Bunker, B. B. (1995). Trust in relationships: A model of development and decline. In B. B. Bunker & J. Z. Rubin (Eds.), *Conflict, cooperation, and justice: Essays inspired by the work of Morton Deutsch* (pp. 133–173). Jossey-Bass/Wiley.
- Lewis, J. D., & Weigert, A. (1985). Trust as a social reality. *Social Forces*, 63, 967-985.

- Liou, K. T. (1995). Understanding employee commitment in the public organization: A Study of the Juvenile Detention Center. *International Journal of Public Administration*, 18(8), 1269–1295. https://doi.org/10.1080/01900699508525052
- Lippi, G., Sanchis-Gomar, F., & Henry, B. M. (2020). Coronavirus disease 2019 (COVID-19): The portrait of a perfect storm. *Annals of Translational Medicine*, 8(7), 497. https://doi.org/10.21037/atm.2020.03.157
- Lobova, S. V., & Ponkina, E. V. (2021). Digital learning in Russian Higher Education: What are lecturers attitude and fears toward online courses adoption? *Journal of Higher Education Theory and Practice*, 21(13), 114–128. https://doi.org/10.33423/jhetp.v21i13.4794
- Louis, K. S., & Murphy, J. (2017). Trust, caring and organizational learning: The leader's role. *Journal of Educational Administration*, 55(1), 103–126. https://doi.org/10.1108/jea-07-2016-0077
- Louis, K. S. (2007). Trust and improvement in schools. *Journal of Educational Change*, 8, 1–24.
- Lussier, R. N., & Achua, C. F. (2004). *Leadership: Theory, application, skill development* (2nd ed.). Thomson-West.
- MacCallum, R. C., Browne, M.W., & Sugawara, H.M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, *1*(2), 130–149.
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods*, *4*, 84-99.
- MacKenzie, O., Christensen, E., & Rigby, P. (1968). Correspondence instruction in the United States; a study of what it is, how it functions, and what its potential may be. McGraw-Hill.
- Margolis, H., & Brannigan, G. G. (1986). Building trust with parents. *Academic Therapy*, 22(1), 71-74.

- Marshall, J., Roache, D., & Moody-Marshall, R. (2020). Crisis Leadership: A Critical Examination of Educational Leadership in Higher Education in the Midst of the COVID-19 Pandemic. *International Studies in Educational Administration*, 48(3), 30-37.
- Marques, J., & Dhiman, S. (2018). *Leadership today practices for personal and professional performance*. Springer International Publishing.
- Maya, İ. (2014). Kamu ilkokullarında yöneticilerin sergiledikleri kriz yönetimi beceri düzeylerine ilişkin öğretmen görüşleri. *Yönetim Bilimleri Dergisi*, 12(23), 209-235.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *The Academy of Management Review*, 20(3), 709–734. https://doi.org/10.2307/258792
- Mayer, R. C., & Davis, J. H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of Applied Psychology*, 84(1), 123–136. https://doi.org/10.1037/0021-9010.84.1.123
- Metin, M., Emlik, H., Gürlek, E. H., & Demirbaş, S. (2021). Uzaktan eğitime yönelik öğretmen görüşlerinin farklı değişkenler açısından incelenmesi. *Studies in Educational Research and Development*, 5(1), 19-47.
- Mcallister, D. J. (1995). Affect and Cognition Based Trust as Foundations of interpersonal Cooperation in Organizations. *Academy of Management Journal*, 38, 24-59.
- Ministry of Health. (2020, April). *COVID-19 (SARS-CoV-2 Infection) Guide*. https://hsgm.saglik.gov.tr/depo/birimler/goc_sagligi/covid19/rehber/COVID-19_Rehberi20200414_eng_v4_002_14.05.2020.pdf
- Mishra, A. K. (1996). Organizational responses to crisis: The centrality of trust. In R. M. Kramer & T. Thomas (Eds.), *Trust in organizations* (pp. 261–287). SAGE.
- Mishra, A. K., & Spreitzer, G. M. (1998). Explaining how survivors respond to downsizing: The roles of trust, empowerment, justice, and work redesign. *Academy of Management Review*, 23(3), 567–588. https://doi.org/10.5465/amr.1998.926627

- Mitroff, I. I. (1988). Crisis management: Cutting through the confusion. *Sloan Management Review*, 29(2), 15-20.
- Moçoşoğlu, B. & Kaya, A. (2020). Koronavirüs Hastalığı (COVID-19) sebebiyle uygulanan uzaktan eğitime yönelik öğretmen tutumlarının incelenmesi. *Kahramanmaraş Sütçü İmam Üniversitesi Eğitim Dergisi, 2*(1), 15-43.
- MoNE. (n.d). *Eğitim İstatistikleri*. https://ankara.meb.gov.tr/www/egitim-istatistikleri/icerik/24
- Moore, M. G. (1973). Toward a theory of independent learning and teaching. Journal of Higher Education, 44, 66-69.
- Moore, M. G. (1993). Theory of transactional distance. In D. Keegan (Ed.), *Theoretical Principle of distance education* (pp. 22-29). Routledge.
- Moore, M. G., & Kearsley, G. (2011). *Distance education: A systems view of online learning* (3rd ed.). Wadsworth Cengage Learning.
- Moos, L., & Kofod, K. K. (2009). Sustained Successful School Leadership in Denmark. *Journal of Educational Administration*, 47(6), 709–718.
- Morrison, K. (2008). Educational philosophy and the challenge of complexity theory. *Educational Philosophy and Theory*, 40(1), 19–34. https://doi.org/10.1111/j.1469-5812.2007.00394.x
- Mulenga, E. M., & Marbán, J. M. (2020). Is COVID-19 the gateway for digital learning in mathematics education? *Contemporary Educational Technology*, 12(2), ep269. https://doi.org/10.30935/cedtech/7949
- Nambiar, D. (2020). The impact of online learning during COVID-19: students' and teachers' perspective. *The International Journal of Indian Psychology*, 8(2), 783-793.
- Nasser, R., & Abouchedid, K. (2000). Attitudes and concerns towards distance education: The case of Lebanon. *Online Journal of Distance Learning Administration*, 3(4), 1-10.

- Newgass, S., & Schonfeld, D. J. (2000). School crisis intervention, crisis prevention, and crisis response. In A. R. Roberts (Ed.), *Crisis intervention handbook: Assessment, treatment, and research* (pp. 209–228). Oxford University Press.
- OECD. (2009). Teaching Practices, Teachers' Beliefs and Attitudes. In Creating Effective Teaching and Learning Environments: First Results from Teaching and Learning International Survey (TALIS) (pp. 87-135). OECD Publishing.
- OECD. (2020, April). *The impact of the COVID-19 pandemic on jobs and incomes in G20 economies*. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms_756331.pdf
- O'Neil, T. (2009). How distance education has changed teaching and the role of the instructor. *Information Systems Education Journal*, 7(48), 1-11.
- Osborne, J. W. (2015). Best practices in logistic regression. Sage.
- Ouchi, W. G. (1981). Organizational paradigms: A commentary on Japanese management and theory Z organizations. *Organizational Dynamics*, 9(4), 36-43.
- Pallant, J. (2005). SPSS survival manual: A step by step guide to data analysis using SPSS. McGraw-Hill.
- Partnership for 21st Century Skills. (2009). Framework for 21st Century Skills. http://www.p21.org/index.php?option=com_content&task=view&id=42&It emid= 69
- Pearson, C. M., & Clair, J. (1998). Reframing crisis management. *The Academy of Management Review*, 23(1), 59-76.
- Perraton, H. (1988). A theory for distance education. In D. Sewart, D. Keegan, & B. Holmberg (Ed.), *Distance education: International perspectives* (pp. 34-45). Routledge.
- Peters, B. G. (2011). Governance responses to the fiscal crisis: Comparative perspectives. *Public Money & Management*, 31(1), 75–80.

- Peters, O. (1989). Further reflections on the concept of industrialization and distance teaching. In: Keegan, D. (Ed.). *Otto Peters on distance education: The industrialization of teaching and learning*. (pp. 195-209). Routledge,
- Pregowska, A., Masztalerz, K., Garlińska, M., & Osial, M. (2021). A worldwide journey through distance education-from the post office to Virtual, augmented and mixed realities and education during the COVID-19 pandemic. *Education Sciences*, 11(3), 118. https://doi.org/10.3390/educsci11030118
- Qi, X. (2021). Challenges faced by schools, teachers and students in distance education implementation during the COVID-19 outbreak: Recommendations on the application of adaptive responses. 2021 The 6th International Conference on Distance Education and Learning (pp. 227-232). Association for Computing Machinery. https://doi.org/10.1145/3474995.3475033
- Quarantelli, E. L. (1988). Disaster crisis management: A summary of research findings. *Journal of Management Studies*, 25(4), 373–385. https://doi.org/10.1111/j.1467-6486.1988.tb00043.x
- Raphael, B. (1986). When disaster strikes: How individuals and communities cope with catastrophe. Basic Books.
- Razkane, H., Sayeh, A. Y., & Yeou, M. (2021). University teachers' attitudes towards distance learning during COVID-19 pandemic: Hurdles, challenges, and take-away lessons. *European Journal of Interactive Multimedia and Education*, *3*(1). e02201. https://doi.org/10.30935/ejimed/11436
- Redding, S. (1991). What is a school community, anyway? *The School Community Journal*, 1(2), 7–9.
- Reinke, S. J. (2003). Does the form really matter? Leadership, trust, and the acceptance of the performance appraisal process, *Review of Public Personnel Administration*, 23(1), 23–37.
- Rempel, J. K., Holmes, J. G. & Zanna, M. P. (1985). Trust in close relationships. *Journal of Personality and Social Psychology*, 49, 95-112.

- Roberson, J. (2020). *Executing crisis: A C-Suite crisis leadership survival guide*. Rothstein Publishing.
- Roberts, K. H., & O'Reilly, C. A. (1974). Measuring organizational communication. *Journal of Applied Psychology*, 59(3), 321–326. https://doi.org/10.1037/h0036660
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: a crossdiscipline view of trust. *Academy of Management Review*, 23(3), 393-404.
- Russo, J., Bobis, J., Downton, A., Livy, S., & Sullivan P. (2021). Primary teacher attitudes towards productive struggle in mathematics in remote learning versus classroom-based settings. *Education Sciences*, 11(2), 35.
- Sari, T., & Nayir, F. (2020). Challenges in Distance Education During the (Covid-19) Pandemic Period. *Qualitative Research in Education*, 9(3), 328-360. https://doi.org/10.17583/qre.2020.5872
- Schoenfeld-Tacher, R., & Persichitte, K. A. (2000). Differential skills and competencies required of faculty teaching distance education courses. *International Journal of Educational Technology*, 2(1), 1–16.
- Schumacker, R.E., & Lomax, R.G. (2010). A beginners guide to structural equation modeling (3rd ed.). Routledge.
- Seeger, M. W. (2002). Chaos and crisis: Propositions for a general theory of crisis communication. *Public Relations Review*, 28(4), 329–337. https://doi.org/10.1016/s0363-8111(02)00168-6
- Sellnow, T. L., & Seeger, M. W. (2021). *Theorizing crisis communication* (2nd ed.). Wiley Blackwell.
- Shapiro, D. L., Sheppard, B. H., & Cheraskin, L. (1992). Business on a handshake. *Negotiation Journal*, 8(4), 365–377.
- Shea, G. F. (1984). *Building Trust in the Workplace*. AMA Membership Publications.

- Shockley-Zalabak P., Ellis, K., & Cesaria, R. (2000). *Measuring organizational trust: A diagnostic survey and international indicator*. IABC Research Foundation.
- Simonson, M., Smaldino, S., Albright, M., & Zvacek, S. (2003). *Teaching and learning at a distance: Foundations of distance education* (2nd ed.). Prentice Hall.
- Smith, L., & Riley, D. (2012). School leadership in times of crisis. *School Leadership* & *Management*, 32(1), 57–71. https://doi.org/10.1080/13632434.2011.614941
- Smits, S. J., & Ezzat Ally, N. (2003). "thinking the unthinkable" leadership's role in creating behavioral readiness for crisis management. *Competitiveness Review: An International Business Journal*, 13(1), 1–23. https://doi.org/10.1108/eb046448
- Sonnenberg, F. K. (1996). *Managing with a conscience: How to improve*. McGraw-Hill.
- Stanley, D. J., Meyer, J. P., & Topolnytsky, L. (2005). Employee cynicism and resistance to organizational change. *Journal of Business and Psychology*, 19(4), 429–459. https://doi.org/10.1007/s10869-005-4518-2
- Strauss, K., Griffin, M. A., Parker, S. K., & Mason, C. M. (2013). Building and sustaining proactive behaviors: The role of adaptivity and job satisfaction. *Journal of Business and Psychology*, 30(1), 63–72. https://doi.org/10.1007/s10869-013-9334-5
- Stronge, J. H. (2018). Qualities of effective teachers (3rd ed.). ASCD.
- Tabachnik, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Pearson.
- Tan, H. H., & Tan, C. S. F. (2000). Toward the differentiation of trust in supervisor and trust in organization. *Genetic, Social, and General Psychology Monographs*, 126(2), 241–260.

- Tarman, B. (2011). Development of social studies curriculum in Turkey and John Dewey's effect on the modernization of Turkish Education. *International Journal of Progressive Education*, 7(1), 45-61.
- TEDMEM. (2020). COVID-19 sürecinde eğitim: uzaktan öğrenme, sorunlar ve çözüm önerileri (TEDMEM Analiz Dizisi 7). Türk Eğitim Derneği Yayınları.
- Telli-Yamamoto, S. G., & Altun, D. (2020). Coronavirüs ve çevrimiçi (online) eğitimin önlenemeyen yükselişi. *Üniversite Araştırmaları Dergisi*, 3(1), 25–34. https://doi.org/10.32329/uad.711110
- Tsai, S. & Machado, P. (2002). E-learning, online learning, language learning, or distance learning: Unveiling the ambiguity in current terminology. *Association for Computer Machinery eLearn Magazine*, 2002(7), 3-5.
- Tschannen-Moran, M., & Hoy, W. K. (1998). Trust in schools: A conceptual and empirical analysis. *Journal of Educational Administration*, *36*, 334-352.
- Tschannen-Moran, M., & Hoy, W. K. (2000). A multidisciplinary analysis of the nature, meaning, and measurement of trust. *Review of Educational Research*, 70(4), 547–593. https://doi.org/10.3102/00346543070004547
- Tschannen-Moran, M. (2001). Collaboration and the need for trust. *Journal of Educational Administration*, 39(4), 308-331.
- Tschannen-Moran, M. (2003). Fostering organizational citizenship in school: Transformational leadership and trust. In W. K. Hoy & C. Miskel (Eds.), *Studies in leading and organizing schools* (pp. 157–179). Information Age.
- Tschannen-Moran, M. (2004). Trust matters: Leadership for successful schools. Jossey-Bass.
- Tschannen-Moran, M., Parish, J., & DiPaola, M. F. (2006). School climate and state standards: How interpersonal relationships influence student achievement. *Journal of School Leadership*, 16, 386-415.

- Tschannen-Moran, M. (2009). Fostering teacher professionalism in schools: The role of leadership orientation and trust. *Educational Administration Quarterly*, 45(2), 217–247.
- Tschannen-Moran, M. (2014). The interconnectivity of trust in schools. In D. Van Maele, P. B. Forsyth, & M. Van Houtte (Eds.), *Trust and school life: The role of trust for learning, teaching, leading, and bridging* (pp. 57–81). Springer.
- UNESCO (2020). *COVID-19 Educational disruption and response*. https://en.unesco.org/covid19/educationresponse
- Ülkü, S. (2018). İlkokullarda görev yapan öğretmenlerin uzaktan eğitime yönelik tutumları [Unpublished master's thesis]. Abant İzzet Baysal University.
- Van Maele, D., Van Houtte, M., & Forsyth, P. B (Eds). (2014). Trust as a matter of equity and excellence in education. In D. Van Maele, M. Van Houtte, & P. B. Forsyth (Eds.), *Trust and school life: The role of trust for learning, teaching, leading, and bridging* (pp. 1-33). Springer.
- Van Maele, D., & Van Houtte, M. (2015). Trust in school: A pathway to inhibit teacher burnout? *Journal of Educational Administration*, 53(1), 93–115.
- Vanhala, M. (2019). Trust as an organizational knowledge sharing enabler validation of the impersonal trust scale. *VINE Journal of Information and Knowledge Management Systems*, 50(2), 349-368.
- Vroom, V. H. (1964). Work and motivation. Wiley.
- Waldman, D. A., Ramirez, G. G., House, R. J., & Puranam, P. (2001). Does leadership matter? CEO leadership attributes and profitability under conditions of perceived environmental uncertainty. *Academy of Management Journal*, 44(1), 134–143. https://doi.org/10.2307/3069341
- Watkins, B. L. (1991). A quite radical idea: The invention and elaboration of collegiate correspondence study. In B. L. Watkins & S. J. Wright (Eds.), *The Foundations of American Distance Education: A Century of Collegiate Correspondence Study* (pp. 1–35). Kendall/Hunt.

- Waller, M. J., Lei, Z., & Pratten, R. (2014). Focusing on teams in Crisis Management Education: An integration and simulation-based approach. *Academy of Management Learning & Education*, 13(2), 208–221. https://doi.org/10.5465/amle.2012.0337
- Wedemeyer, C. A. (1977). Independent Study. In A. S. Knowles (Ed.), *The International Encyclopedia of Higher Education*. Northeastern University Press.
- Weiner, J., Francois, C., Stone-Johnson, C., & Childs, J. (2021). Keep safe, keep learning: Principals' role in creating psychological safety and organizational learning during the COVID-19 pandemic. *Frontiers in Education*, 5. https://doi.org/10.3389/feduc.2020.618483
- Wittmer, J. L., & Hopkins, M. M. (2021). Leading remotely in a time of crisis: Relationships with emotional intelligence. *Journal of Leadership & Organizational Studies*, 29(2), 176–189. https://doi.org/10.1177/15480518211053531
- Wooten, L.P., & James, E, H. (2008). Linking crisis management and leadership competencies: The role of human resource development. *Advances in Developing Human Resources*, 10(3), 352-379. https://doi.org/10.1177/1523422308316450
- Yahşi, Ö., & Kırkıç, K. A. (2020). Uzaktan eğitim sürecinde öğretmenlerin uzaktan eğitime yönelik tutumlarının incelenmesi. *Turkish Studies Education*, 15(5), 3827-3847.
- Yağcı, Ö. (2020). Kriz yönetimi: Teşhis, engelleme ve müdahale. In F. S. Güngör, & K. R. Bilgin, *Kriz Yönetimi* (Eds.), *Kaçınılmazı Anlamak* (p. 5). Gazi Kitapevi.
- Yıldız, H., Sarıtepeci, M. & Seferoğlu, S. S. (2013). Fatih projesi kapsamında düzenlenen hizmet-içi eğitim etkinliklerinin öğretmenlerin mesleki gelişimine katkılarının ISTE öğretmen standartları açısından incelenmesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, Özel sayı (1), 375-392.
- Zand, D. E. (1972). Trust and managerial problem solving. *Administrative Science Quarterly*, 17(2), 229-239. https://doi.org/10.2307/2393957

- Zayim, M. (2010). Investigating the relationship between primary and secondary level public school teachers' readiness for change and perceived organizational trust [Unpublished master's thesis]. Middle East Technical University.
- Zayim, M., & Kondakci, Y. (2015). An exploration of the relationship between readiness for change and organizational trust in Turkish public schools. *Educational Management Administration & Leadership*, 43(4), 610-625.
- Zayim, M. (2015). Modeling public school teachers' change implementation behaviors: Interrelations among change antecedents, change-related affect, commitment to change, and job satisfaction [Unpublished doctoral dissertation]. Middle East Technical University.
- Zayim-Kurtay, M. (2021). Trust in Principals. In R. Papa (Ed.), *Oxford Research Encyclopedia of Education* (pp. 1-21). Oxford University Press.
- Zhang, F., Welch, E. W., & Miao, Q. (2018). Public organization adaptation to extreme events: Mediating role of risk perception. *Journal of Public Administration Research and Theory*, 28(3), 371–387. https://doi.org/10.1093/jopart/muy004
- Zigerell, J. (1991). The uses of television in American higher education. Praeger.

APPENDICES

A. APPROVAL OF THE METU HUMAN SUBJECTS ETHICS COMMITTEE

UYDULAMALI ETİK ARAŞTIRMA MERKEZİ APPLIED ETHICS RESEAREH GEHTER ORTA DOĞU TEKNİK ÜNİVERSİTESİ MIDDLE EAST TECHNICAL UNIVERSITY

DUMLUPINAR BULVARI 06800 ÇANKAYA ANKARA/TURKEY T: +90 312 210 22 91 F: +90 322 210 79 59 usani@metu.edu.tr

Says: 28620816 /

Konu : Değerlendirme Sonucu

24 Mayıs 2021

Gönderen: ODTÜ İnsan Araştırmalan Etik Kurulu (İAEK) İlgi : İnsan Araştırmalan Etik Kurulu Başvurusu

Sayın Prof.Dr. Yaşar KONDAKÇI

Danışmanlığını yürüttüğünüz İlayda ERDOĞAN'ın "Öğretmenlerin Uzaktan Eğitime Karşı Tutumları, Yöneticilere Yönelik Güvenleri ve Yöneticilerin Kriz Liderliği Davranışları Arasındaki İlişki" başlıklı araşırmanız İnsan Araşırmaları Etik Kurulu tarafından uygun görülmüş ve 243-ODTU-2021 protokol numarası ile onaylanmıştır.

Saygılarımızla bilgilerinize sunarız.

Dr.Öğretim Üyesi Şerife SEVİNÇ İAEK Başkan Vekili

B. APPROVAL ANKARA PROVINCIAL DIRECTORATE OF NATIONAL **EDUCATION**



T.C. ANKARA VALILIĞI Milli Egitim Mildurlugii

Sayı : E-14588481-605.99-35617243

Konu : Araştırma İzni

26.10.2021

ORTA DOĞU TEKNIK ÜNİVERSİTESİNE (Öğrenci İşleri Daire Başkanlığı)

ligi: a)MEB Yenilik ve Eğitim Teknolojileri Genel Müdürlüğümin 2020/2 nolu Genelgesi. b)13.10.2021 tarihli ve 237 sayılı yazınız.

Üniversiteniz Eğitim Bilimleri Ana Bilim Dalı Eğitim Yönetimi ve Phadaması Yüksek Lisans Programı öğrencisi İlayda ERDOĞAN'ın "Öğretmenlerin Uzaktan Eğitime Kara Tutumlara, Yöneticilere Yönelik Güvenleri ve Yöneticilerin Kriz Liderliği Davranışlara Arasındaki İlişki" konulu çalışması kapsamında İlimiz 9 Merkez ilçesindeki okul ve kurumlarda, uygulama tülebi ilgi (a) Genelge çerçevesinde incelenmiştir.

Yapılan inceleme sonucunda, söz konusu araştırmanın Müdürlüğümüzde muhafaza edilen ölşme Yapılan inceleme sonucunda, sör konusu araştırmanın sonucungamizacı mutratusa edilen olgra-araştarının; Türkiye Cumhuriyeti Arayasası, Milli Eğitim Temel Kanusu ile Türk Milli Eğitiminin genel amaştarına uygun olarak, ilgili yasal düzenlemelerde belirilin ilke, esas ve amaştara aykınlık teşkil etmeyecek, eğitim-öğretim faaliyetlerini aksatmayacak gekilde okul ve kırının yöneticilerinin sorumluluğunda gönüllülük esasına göre uygulanması Mildürlüğünüzce uygun görülmüşür.

Bilgilerinizi ve gereğini rica ederim.

Harun FATSA Vali a. Milli Egitim Müdürü

Degrum

Orta Doğu Toknik Üniversitesi

Bilgi: 9 Hot MEM

op Adres indontriel legel

(146-153f-38a)-ab55-2d8f ush a

C. INFORMED CONSENT FORM

Bu araştırma, ODTÜ Eğitim Yönetimi ve Planlaması yüksek lisans öğrencisi İlayda Erdoğan tarafından Dr.Öğr.Üyesi Merve Zayim Kurtay danışmanlığındaki yüksek lisans tezi kapsamında yürütülmektedir. Bu form sizi araştırma koşulları hakkında bilgilendirmek için hazırlanmıştır.

Çalışmanın Amacı Nedir?

Araştırmanın amacı, COVID-19 pandemi dönemindeki uzaktan eğitim sürecinde öğretmenlerin uzaktan eğitime karşı tutumları ile yöneticilerin kriz liderliği davranışı arasındaki ilişkiyi incelemektir.

Bize Nasıl Yardımcı Olmanızı İsteyeceğiz?

Araştırmaya katılmayı kabul ederseniz, sizden üç ayrı ankette yer alan bir dizi soruyu derecelendirme ölçeği üzerinde cevaplamanız beklenmektedir. Anket sorularını cevaplamak yaklaşık 20 dakika sürmektedir.

Sizden Topladığımız Bilgileri Nasıl Kullanacağız?

Araştırmaya katılımınız tamamen gönüllülük temelinde olmalıdır. Anketlerde, sizden kimlik belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız tamamıyla gizli tutulacak, sadece araştırmacılar tarafından değerlendirilecektir. Katılımcılardan elde edilecek bilgiler toplu halde değerlendirilecek ve bilimsel amaçlarla kullanılacaktır.

Katılımınızla ilgili bilmeniz gerekenler:

Anketler, genel olarak kişisel rahatsızlık verecek sorular içermemektedir. Ancak, katılım sırasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz cevaplama işini yarıda bırakmakta serbestsiniz. Böyle bir durumda çalışmayı uygulayan kişiye, çalışmadan çıkmak istediğinizi söylemek yeterli olacaktır.

Araştırmayla ilgili daha fazla bilgi almak isterseniz:

Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz. Çalışma hakkında daha fazla bilgi almak için ODTÜ Eğitim Bilimleri öğretim üyelerinden Dr.Öğr.Üyesi Merve Zayim Kurtay (E-posta: @metu.edu.tr) ya da ODTÜ Eğitim Yönetimi ve Planlaması yüksek lisans öğrencisi İlayda Erdoğan (E-posta: @metu.edu.tr) ile iletişim kurabilirsiniz.

Yukarıdaki bilgileri okudum	ve bu çalışmaya	tamamen	gönüllü	olarak
katılıyorum.				

(Formu doldurup ir	nzaladıktan sonra uygulayıcıy	a geri veriniz).
Ad Soyad	Tarih	İmza
	/	

D. PERMISSION TO USE C-LEAD SCALE

Gönderen:	
	Tüm Başlıkları Göster Yazdırılabilir Şekilde Göster Bunu dosya olarak indir
Hi,	
You have my permission. Attached is the info	ormation on administering the scale.
Please do let me know if you publish with th	ne C-LEAD scale.
Good luck in your research!	
Connie	
Connie Noonan Hadley, PhD, MBA	
Original Message From: Sent: Thursday, December 17, 2020 8:14 AM To: Hadley, Constance N. Subject: [SUSPECTED SPAM] Permission for The	C-LEAD Scale
Dear Constance Noonan Hadley,	
My name is Îlayda Erdoğan and I'm from Turke Middle East Technical University with a majo Educational Administration. I am interested "Measuring the efficacy of leaders to assess crisis: The C-LEAD scale" which was publishe Thus, I am kindly requesting your permission will appreciate it if you may provide the sc Thank you.	r in in your scale development s information and make decisions in a id in "The Leadership Quarterly" in 2011. to use your scale in my research. I
Best regards, Îlayda Erdoğan	

E. PERMISSION TO USE TRUST SCALES

22020	Re: Trust Scales	
Gönderen:		
Tarih:	8 Mayıs 2021, Cumartesi, 10:25 am	
Alıcı:		
Öncelik:	Normal	
Seçenekler:	Tüm Başlıkları Göster Yazdırılabilir Şekilde Göster Bunu dosya olarak indir	
îlayda merhaba,		
trust ölçeğini ekte bulabilirsin. Çalışmanda	başarılar dilerim.	
Sevgiler,		
Merve		
Alinti galancila della d		
> Merhaba Merve hocam,		
>		
> Ben Eğitim Yönetimi ve Planlanması master		
> Erdoğan.Geçtiğimiz dönem EDS505 dersinde, Yaşar hocanın > danışmanlığındaki tezimin proposalını sunmuştum.Kullanmayı		
> düşündüğüm ölçekler arasında doktora tezinizde yer alan ve sizin		
> geliştirdiğiniz Trust ölçekleri vardı. Ölçeğin tamamına ulaşmam		
> gerekiyor.Îzninizle ölçeğin tamamını gönde > tesekkür ederim.	rmenizi rica ediyorum.Çok	
> teşekkür ederim.		
> Saygılarımla,		
> Îlavda Erdoğan		

F. PERMISSION TO USE DISTANCE EDUCATION ATTITUDE SCALE

Konu: Re: Ölçek kullanım izni hk. Gönderen: "Fatma Tayfur" Tarih: 11 Mart 2021, Perşembe, 9:40 pm Öncelik: Normal Seçenekler: Tüm Başlıkları Göster | Yazdırılabilir Şekilde Göster | Bunu dosya olarak indir | HTML olarak göster Merhaba İlayda hocam Ölçeği kullanabilirsiniz, ölçek yök tez merkezi veritabanında bulunan tezimde mevcuttur, çalışmalarınızda kolaylıklar dilerim Android için Outlook<https://aka.ms/ghei36>'u edinin From: Sent: Thursday, March 11, 2021 2:30:43 PM To: Subject: Ölçek kullanım izni hk. Sayın Fatma Ağır, Merhaba, ben İlayda Erdoğan. ODTÜ'de Eğitim Yönetimi ve Planlaması bölümünde master öğrencisiyim.2007'de yayımlanan "ÖZEL OKULLARDA VE DEVLET OKULLARINDA ÇALIŞAN İLKÖĞRETİM ÖĞRETMENLERİNİN UZAKTAN EĞİTİME KARŞI TUTUMLARINDA ÇALIŞAN ILKUGARI'IM ÜÜRELMENLEKININ ÜZAKTAN EĞİTİN KARŞI TUTUMLARININ BELİRLENMESİ" isimli yüksek lisans tezinizde yer alan "Uzaktan Eğitim Tutum Ölçeği" çalışması ile ilgileniyorum ve çalışmamda kullanmak istiyorum.Bu sebeple, ölçeği ve ölçek kullanma iznini göndermenizi rica ederim.

Saygılarımla, İlayda Erdoğan

G. DEMOGRAPHIC INFORMATION FORM

<u>BÖLÜM I:</u> Bu bölümdeki maddeler sizinle ilgili genel bilgileri ortaya çıkarmayı amaçlamaktadır. Lütfen her bir maddeyi okuyarak sizin için en uygun seçeneği işaretleyiniz.

1.Cinsiyetiniz:		
Kadın () Erkek ()		
2.Yaşınız: (Lütfen yazınız.)		
3. Çalıştığınız Kurum:		
Devlet Okulu () Özel Okul ()		
4.Çalıştığınız Okul Düzeyi:		
İlkokul () Ortaokul() Lise ()		
5.Öğretmenlik deneyiminiz: (Lütfen yazınız.)yıl		
6. Öğrenim durumunuz:		
Üniversite () Yüksek Lisans () Doktora ()		
7. Branşınız: (Lütfen yazınız.)		
ÖLÜM II: Bu bölümde uzaktan eğitime yönelik ifadeler yer almaktadır. Lütfer maddeyi okuyarak sizin için en uygun seçeneği işaretleyiniz.	n her	
1. Uzaktan eğitim ile ilgili aşağıdaki seçeneklerden birini seçiniz.		
a) Uzaktan eğitim hakkında bilgim yok. ()		
b) Uzaktan eğitim hakkında çok az bilgim var. ()		
c) Uzaktan eğitim hakkında yeterince bilgim var. ()		
d) Daha önce uzaktan eğitim aldım. ()		
Eğitim aldığınız kurumun adı:		

H. SAMPLE ITEMS FROM C-LEAD SCALE

- 1. Yöneticim kendi kararlarının ve eylemlerinin kişilerarası sonuçlarını önceden tahmin edebilir.
- 2. Yöneticim, elinde istediği düzeyde bilgi olmasa bile bir konu hakkında karar alabilir ve o konu hakkında öneriler sunabilir.
- 3. Yöneticim aşırı zaman baskısı altında bile karar verebilir ve tavsiyelerde bulunabilir.

I. SAMPLE ITEMS FROM TRUST SCALES

- 1. Yöneticilerim benim adıma karar verirken iyi niyetlidirler.
- 2. Yöneticilerim işimle ilgili duygu ve düşüncelerimi önemserler.
- 3. Yöneticilerim işimle ilgili yaşadığım sorunları çözmek için çaba harcarlar.
- 4. Yöneticilerim işimle ilgili konularda bana mesleki rehberlik yaparlar.

J. SAMPLE ITEMS FROM DISTANCE EDUCATION ATTITUDE SCALE

- 1. Uzaktan eğitimle bireylerin başarı süreçleri daha kolay takip edilir.
- 2. Uzaktan eğitim işitsel, görsel tasarımlar ve teknoloji yoluyla etkili öğrenmeyi sağlar.
- 3. Eğitimin en iyi şekilde gerçekleşmesi için yüz yüze etkileşim gereklidir.
- 4. Uzaktan eğitimle herkes kendi düzeyinde eğitim alabilir.

K. TURKISH SUMMARY / TÜRKÇE ÖZET

1.Giriş

İnsanlık tarihi boyunca krizler kaçınılmaz olmuştur. Ekonomik krizler, sağlık krizleri, salgın hastalıklar, savaşlar, afetler, açlıklar ve iklim değişiklikleri tarihi şekillendiren krizler olarak kabul edilmektedir. Son zamanlarda meydana gelen COVID-19 salgını ise II. Dünya Savaşı'ndan bu yana aynı anda bütün ülkeleri etkilemiş olan ve tüm dünyayı etkisine alan büyük bir kriz olarak ele alınmaktadır (Lippi vd., 2020). Bu süreçte virüsün yayılmasını engellemek amacıyla hükümetler çeşitli kararlar almışlardır. Bu kararlar sosyal izolasyonu sağlamaya imkan tanıyan ev karantinalarını, sosyal mesafe kurallarını uygulamayı ve maske kullanımını zorunlu hale getirmiştir. Çok sayıda işyeri kapatılmış ve çalışanlar geçici veya kalıcı olarak işlerini kaybetmişlerdir (OECD, 2020). İnsanlar sosyal hayatlarındaki bu ani değişimle beraber pandeminin getirdiği yeni kurallara uyum sağlamaya çalışmışlardır. Eğitim sistemi de dünya genelinde büyük ölçüde bir değişime uğramak zorunda kalmıştır. Telli-Yamamoto ve Altun'a (2020) göre sağlık sektörünün ardından COVID-19'dan en çok etkilenen sektör eğitimdir. 188 ülkede COVID-19'un yayılması okulların kapatılmasıyla kontrol altına alınmaya çalışılırken 1.6 milyar çocuk ve yaklaşık 60.2 milyon öğretmen bu durumdan etkilendi (UNESCO, 2020). Benzer şekilde Türkiye'de de 11 Mart 2020'de ilk vakanın ortaya çıkmasıyla eğitime tüm kademelerde ara verilmiş ve okullar kapatılmıştır (Sağlık Bakanlığı, 2020). Süreç içerisinde hükümet yetkilileri, krizi yönetebilmek ve eğitimi sürdürmek için alternatif yollar aramıştır. Alınan kararların ışığında okul programlarında hızlı bir şekilde geleneksel öğretimden uzaktan eğitime geçilmiştir. K-12 eğitim düzeyindeki uzaktan eğitim süreci MEB'in kurduğu TRT EBA TV kanalları üzerinden yapılan ders yayınları ile başlamıştır. Aynı zamanda EBA dijital platformunun içeriği zenginleştirilerek öğrencilere ders materyalleri de sağlanmıştır. Daha sonrasında Zoom ve EBA platformları üzerinden canlı dersler verilmeye başlanmıştır. Böylelikle öğretmenler hızlı bir şekilde öğretim yöntemlerini dijital platformlarda sürdürmek üzere adapte etmenin acil ihtiyacı ile karşı karşıya kalmıştır

(Qi, 2021). Kang'a (2021) göre öğretmenlerin hızlı adaptasyonu gerektiren bu yeni süreç dijital dönüşümü hızlandırmıştır. Öğretmenlerin öğretim faaliyetlerini yürüten önemli aktörler olması sebebiyle, uzaktan eğitime karşı tutumlarının açığa çıkarılması önem taşımaktadır. Çünkü olası kriz durumlarında uzaktan eğitimin alternatif bir eğitim olmaktan ziyade eğitimin sürdürülebilmesini sağlayan tek seçenek olduğu gerçeği bu küresel çaplı krizde gözler önüne serilmiştir. Öğretmenlerin, uzaktan eğitim sürecinde dijital yeterliliklere sahip olmasının önemi artmıştır. Yapılan çalışmalar öğretmenlerin teknolojik altyapıdan kaynaklı sorunlar yaşadığını, uzaktan eğitim yürütmeye yönelik kısıtlı eğitime sahip olduklarını, uzaktan eğitim sürecinde sınıf yönetimine ilişkin problemlerle sıklıkla karşılaştıklarını ve canlı derslerin doğasından kaynaklı (kısıtlı öğrenci-öğretmen etkileşimi, ders süresi yetersizliği vb.) birçok problemi ortaya koymuştur (Hebebci vd., 2020; Koçoğlu ve Tekdal, 2020; Sari ve Nayir, 2020). Tüm bu çalışmalar, pandemi sırasında öğretmenlerin uzaktan eğitime yönelik tutumlarıyla ilişkili olabilecek dramatik faktörleri ortaya çıkarmaktadır. Bunların yanı sıra öğretmenler, COVID-19 pandemisinin getirdiği benzersiz zorluklar karşısında mesleklerini icra etmek için mücadele ederken, yüksek hızlı internet erişimi, uygun teknolojik altyapı ve dijital yetkinliklere sahip olmanın dışında sosyal ve duygusal desteğe ihtiyaç duymaktaydılar. Bu noktada öğretmenlerin okul müdürlerinin göstermiş olduğu kriz liderliği davranışlarına ilişkin algıları önemli bir element olarak ortaya çıkmaktadır. Boin ve arkadaşları (2017), kriz koşullarında liderlerden beklenen davranışları liderlerin anlam oluşturması, rehberlik etmesi, umut vermesi ve çalışanlarına empati göstermesi olarak önermiştir. Benzer şekilde okul müdürlerinin kriz liderliği davranışları, öğretmenlerin yön ve rehberlik gösteren bir lider aradıkları kriz dönemlerinde onların öğretmenlik deneyimlerini etkileyebilmektedir. Yöneticilerin etkili kriz liderliği davranışlarının yanı sıra yöneticilere duyulan güven, öğretmenlerin kriz zamanlarındaki davranış ve tutumlarını etkileyebilecek önemli bir faktördür. Güven, sosyal ilişkilerin inşasında önemli olan karmaşık bir olgudur. Güvenin hem bireysel düzeyde hem de örgütsel düzeyde birçok olumlu katkısı vardır. Etkili örgütsel bağlılığı, çalışan tutumlarını ve iş memnuniyetini öngören birçok çalışmada liderliğe güvenin önemi vurgulanmıştır (Avoli vd., 2004; Dirks ve Ferrin, 2002; Yang ve Mossholder, 2010). Okul bağlamında ise, güven çalışmaları eğitim kurumlarında güveni anlamak amacıyla üç referans grubuna odaklanmıştır ve

bunlar öğrenci ve ebeveyne güven, meslektaşlara güven ve müdüre güvendir (Hoy ve Tschannen-Moran, 1999). Hoy ve Tschannen-Moran (2003), öğretmenlerin müdüre olan güveninin okullardaki güvenin temeli olduğunu ve güvenin öğretmenlerin güvenilirlik, nezaket, yetkinlik ve dürüstlük algılarına bağlı olduğunu belirtmişlerdir. Benzer şekilde, müdürün destekleyiciliği, açık ve anlayışlı yaklaşımı öğretmenler tarafından güven oluşturucu faktörler olarak ortaya çıkmıştır (Hoy ve Kupersmith, 1984; Hoy vd., 1991; Tarter vd., 1995). Van Maele ve Van Houtte (2015), öğretmen düzeyinde güven sonuçlarını incelendiğinde öğretmenlerin müdüre yönelik güveninin duygusal tükenmeyi azalttığını ortaya koymuştur. Zayim ve Kondakçı (2015), Türk devlet okulları bağlamında yapılan güven çalışmalarında, öğretmenlerin değişimin uygulanmasına yönelik tutumlarını ifade eden değişime hazır olma durumlarının, müdüre duyulan güven ile güçlü bir şekilde ilişkili olduğunu göstermiştir. Bununla beraber, Türkiye'de eğitim örgütlerinde güven olgusu incelenirken Türk Eğitim Sistemi'nin üst yönetimi olan MEB'e yönelik güven kavramı yeni bir referans grubu olarak literatürdekini yerini almıştır (Zayim, 2015). Zayim'in (2015) çalışmasında, öğretmenlerin müdüre olan güveni, işle ilgili tutumlarla ilişkilendirilmiştir. Ancak öğretmenlerin MEB'e olan güveni daha çok öğretmenlerin okul bağlamındaki değişim uygulamalarına ilişkin duyguları ve değişime olan bağlılığı ile ilgilidir. Dolayısıyla, öğretmenlerin Türkiye'deki eğitim öğretim faaliyetleri kapsamında tutumlarını ortaya çıkarmak için hem okul müdürlerine hem de MEB'e yönelik güvenin dikkate alınmasının, öğretmenlerin uzaktan eğitime karşı tutumlarının daha derinden anlaşılmasını sağlayabilecek önemli sonuçları beraberinde getireceği çıkarımında bulunulabilir. Ayrıca, algılanan kriz liderliği davranışları ile birlikte, müdüre ve MEB'e yönelik güven, öğretmenlerin krizlerle beraber hayatına zorunlu olarak giren yeni uygulamalardan biri olan uzaktan eğitime karşı tutumları ile ilişkilendirilebilir.

1.1 Çalışmanın Amacı

Bu araştırmanın amacı, MEB'e bağlı devlet okullarında ilkokul, ortaokul ve lise düzeylerinde çalışan öğretmenlerin algıladıkları kriz liderliği, okul müdürüne ve MEB'e yönelik güvenleri ile uzaktan eğitime karşı tutumları arasındaki ilişkiyi incelemektir. Bu nedenle, bu çalışma aşağıdaki soruya cevap vermeyi amaçlamaktadır:

Bireysel düzeydeki ve okul düzeyindeki değişkenlerin etkileri kontrol edildikten sonra algılanan kriz liderliği ile müdüre ve MEB'e duyulan güvenin öğretmenlerin uzaktan eğitime karşı tutumlarında yordayıcı rolleri nelerdir?

1.2 Çalışmanın Önemi

Kriz zamanlarında eğitim örgütleri köklü değişime uğrayabilmektedir. Araştırmalara göre, kriz ortamlarında etkili bir lider olmak belirsizlikle baş ederek kritik kararlar almayı ve gerektiğinde var olan yöntemleri hızlıca değiştirebilmeyi gerektirir (Boin vd., 2005). Geçtiğimiz COVID-19 salgınında olduğu gibi kriz zamanlarında uzaktan eğitim bir alternatif yöntem değil, bir zorunluluk olarak ortaya çıkmaktadır. Bu durum aynı zamanda okul topluluğunu oluşturan bireylerin sağlık ve güvenliğinin korunarak eğitimin sürekliliğinin sağlanması hususunda önemli bir kriz yönetimi stratejisi olarak görülebilir. Dolayısıyla bu ani gelişen kriz, yöneticilerin hızlı kararlar alıp uygulamasını zorunlu kılarak öğretmenlerin ve öğrencilerin de hızlı bir şekilde uzaktan eğitime adapte olmasını gerektirmiştir. Böylelikle, eğitimin ana aktörü olan öğretmenlerin uzaktan eğitime karşı tutumlarının incelenmesi önem kazanmıştır. Literatürdeki çalışmalar göstermektedir ki, öğretmenlerin uzaktan eğitime karşı tutumlarını ortaya çıkarmayı amaçlayan çok sayıda araştırma mevcuttur. Bu çalışmaların sayısı pandemi döneminde artmıştır. Türkiye'de de öğretmenlerin uzaktan eğitime yönelik tutumlarıyla ilgili hem bireysel faktörleri hem de bağlamsal faktörleri inceleyen çalışmalar bulunmaktadır fakat bir kriz durumunun sonucu olarak ortaya çıkan uzaktan eğitim bağlamında, öğretmenlerin algıladıkları kriz liderliği davranışlarının ve onların yönetime yönelik güvenlerinin incelenmiş olduğu bir çalışma bulunmamaktadır. Okul düzeyinde kriz yönetimi ile ilgili yapılan çalışmalarda öğretmenlerin okul müdürlerinin kriz durumuyla baş etme yöntemlerini önemsediğini ve yöneticilerinden kriz durumlarını en az zararla atlatılmasını sağlamaları yönünde beklentileri olduğu görülmektedir (Erol ve Karsantik, 2017). Okul örgütlerinde güven olgusu ise literatürdeki çok sayıda çalışmada olumlu birçok sonuçla ilişkilendirilmektedir. Bu çalışmanın, daha önce uzaktan eğitim bağlamında incelenmeyen algılanan kriz liderliği, müdüre ve MEB'e yönelik güven ile öğretmenlerin tutumları arasındaki ilişkiyi incelemesi eğitim örgütlerini etkileyen olası kriz dönemlerinde alınan ve uygulanan kararların ne derecede başarılı olacağı konusunda bir öngörü sağlaması beklenmektedir. İlaveten, çalışmanın pandemi

sürecinde zorunlu uzaktan eğitimin sona erdikten sonra okulların yüz yüze eğitime tekrar başladığı dönemde yürütülmüş olması öğretmenlerin bu süreçteki yeni tecrübelerine yönelik tutumlarının ortaya çıkarılması açısından önem arz etmektedir. Ayrıca, bu dönemde Türkiye'deki uzaktan eğitim sürecinin öğretmenlerin bakış açısından değerlendirilmesine olanak sağlamaktadır.

2. Yöntem

2.1 Araştırma Deseni

Bu çalışmada ikiden fazla değişkenin ilişkisi ve bu ilişkinin derecesini belirlemek amaçlanmıştır. Bu nedenle, nicel araştırma yöntemlerinden ilişkisel araştırma deseni kullanılmıştır. Çalışma kapsamında öğretmenlerin algıladıkları kriz liderliği, müdüre ve MEB'e yönelik güvenleri ve uzaktan eğitime karşı tutumları arasındaki ilişki incelenmiştir.

2.2 Örneklem

Araştırma evrenini, 2021–2022 eğitim ve öğretim yılında Ankara ilinde MEB'e bağlı devlet okullarında ilkokul, ortaokul ve lise kademelerinde görev yapmakta olan öğretmenler oluşturmaktadır. Öncelikle, Ankara iline bağlı 6 ilçede (Çankaya, Etimesgut, Sincan, Yenimahalle, Mamak ve Keçiören) bulunan okullardan tabakalı seçkisiz küme örneklemesi yöntemi kullanılarak 271 okul seçilmiştir. Çalışma kapsamında ziyaret edilen 38 okulda görev yapan 468 öğretmen, çalışmanın örneklemini oluşturmaktadır. Katılımcıların %19.8'i ilkokul, %55.9'u ortaokul ve %24.1'i lise kademelerinde görev yapmaktadır. Örneklemde bulunan katılımcıların 351'i kadın ve 117'si erkektir. Katılımcıların yaşları 23 ile 63 arasında değişmekle birlikte, grubun yaş ortalaması 40.49'dur.

2.3 Veri Toplama Araçları

Bu çalışmada veri toplama aracı olarak demografik bilgi formu, Hadley ve diğerleri (2011) tarafından geliştirilen ve araştırmacı tarafından uyarlama çalışması yapılan Kriz Ortamında Liderlik Yeterliliği Ölçeği, Zayim (2015) tarafından geliştirilen MEB'e ve Müdüre Yönelik Güven Ölçekleri ve Ağır (2007) tarafından geliştirilen Uzaktan Eğitime Karşı Tutum Ölçeği kullanılmıştır.

Kriz Ortamında Liderlik Yeterliliği Ölçeği

Hadley ve diğerleri (2011) tarafından yöneticilerin kriz liderliği davranışlarını ölçmek amacıyla geliştirilen tek boyutlu ve 7'li Likert tipindeki ölçek 9 maddeden oluşmaktadır. Bu çalışma kapsamında, ölçeğin eğitim örgütlerinde kullanılması amaçlanarak Türkçeye uyarlama çalışması yapılmıştır. Uyarlama sürecinde maddeler, İngiliz Dili ve Eğitim Yönetimi alanından toplamda 4 uzman ve araştırmacının kendisi tarafından Türkçeye çevrilmiştir. Maddelerin çevirilerinin ardından, alternatif çevirilerin uygunluğu ve en iyi temsil edenlerin seçilmesi konusunda Eğitim Yönetimi alanından uzman görüşü alınmıştır. Ölçeğin nihai halini almasıyla beraber pilot calısması yapılmıştır. Böylece öğretmenlerin perspektifinden okul yöneticilerinin kriz liderliği davranışlarını değerlendirme olanağı sağlayan bir ölçme aracı ortaya çıkmıştır. Yapılan açımlayıcı ve doğrulayıcı faktör analizleri ile birlikte özgün ölçeğin tek faktörlü yapısı doğrulanmıştır ($\chi^2(21) = 78.92 p = .00$, CFI = .98, TLI = .96, RMSEA = .08 (90% CI = .059, .095, $p_{close} < .05$), & SRMR = .02). Açımlayıcı faktör analizi sonuçlarına bakıldığında ölçek maddelerinin özdeğeri 1'in üzerinde olan tek bir faktörde toplandığı ve bu yapının %73.4 düzeyinde bir varyans açıkladığı belirlenmiştir. Ölçeğin iç tutarlık güvenirlik katsayısı .96 olarak hesaplanmıştır.

MEB'e ve Müdüre Yönelik Güven Ölçekleri

Zayim (2015) tarafından geliştirilen ve öğretmenlerin müdüre ve MEB'e güvenlerini ölçmeyi amaçlayan MEB'e ve Müdüre Yönelik Güven Ölçeklerinin her biri tek boyutlu, 5'li Likert tipinde 27 maddeden oluşmaktadır. Ölçeklerin iç tutarlık güvenirlik katsayısı .98 olarak hesaplanmıştır. Yapılan doğrulayıcı faktör analizleri ile her iki ölçeğin yapı geçerliği test edilmiştir. Müdüre Yönelik Güven Ölçeğinin tek faktörlü yapısı doğrulanmıştır ($\chi^2(317)$ =1210.77, p = .00, CFI = .95 , TLI = .94, RMSEA = .08 (90% CI = .073, .082, p_{close} < .05), & SRMR = .02). Benzer şekilde MEB'e Yönelik Güven Ölçeğinin tek faktörlü yapısı da yapılan doğrulayıcı faktör analiz ile doğrulanmıştır ($\chi^2(312)$ =1444.92, p= .00, CFI = .94, TLI = .93, RMSEA = .08 (90% CI = .081, .092, p_{close} < .05), & SRMR = .02). Bu çalışma kapsamında hesaplanan iç tutarlık güvenirlik katsayısı her iki ölçek için .98 olarak bulunmuştur.

Uzaktan Eğitime Karşı Tutum Ölçeği

Ağır (2007) tarafından öğretmenlerin uzaktan eğitime karşı tutumlarını ölçmek için geliştirilen Uzaktan Eğitime Karşı Tutum Ölçeği, iki faktörlü bir yapıda olup 5'li Likert tipinde 21 maddeden oluşmaktadır. Ölçek, uzaktan eğitimin avantajları ve uzaktan eğitimin sınırlılıkları olmak üzere iki alt boyuta sahiptir. Uzaktan eğitimin avantajları alt boyutu öğretmenlerin uzaktan eğitime karşı pozitif tutumları ile ilişkilendirilirken, uzaktan eğitimin sınırlılıkları alt boyutu öğretmenlerin uzaktan eğitime karşı negatif tutumları ile ilişkilendirilmiştir. Yapı geçerliğini test etmek amacıyla yapılan doğrulayıcı faktör analizi ile ölçeğin iki faktörlü yapısı doğrulanmıştır (χ^2 (178) = 477.82, p= .00), CFI = .90, TLI = .88, RMSEA = .06 (90% CI = .05, .07, p_{close} < .05), & SRMR = .06). Bu çalışma kapsamında uzaktan eğitimin avantajları alt boyutu için hesaplanan iç tutarlık güvenirlik katsayısı .88 iken uzaktan eğitimin sınırlılıkları alt boyutu için .74'tür.

2.4 Veri Toplama Süreci

Veri toplama süreci 2021-2022 eğitim öğretim yılının tamamını kapsamaktadır. ODTÜ İnsan Araştırmaları Etik Kurulu'ndan ve Ankara İl Milli Eğitim Müdürlüğü'nden gerekli izinlerin alınmasının ardından süreç başlamıştır. Pilot çalışma kapsamında veriler, ODTÜ Anket Servisi platformu aracılıyla hazırlanan çevrimiçi anket formları ile toplanmıştır. Online anket formları katılımcılara, çeşitli sosyal medya platformlarından (Twitter, WhatsApp ve Facebook) ulaştırılmıştır. Asıl veri toplama aşamasında ise ziyaret edilen okullarda, öncelikle okul müdürlerinin izni alınmış ve sonrasında araştırmanın amacı anlatılarak gönüllü katılmayı kabul eden öğretmenlerden veriler yüz yüze toplanmıştır. Bu aşamada katılımcılara Gönüllü Katılım Formu ve ölçekler dağıtılmıştır. Uygulamanın tamamlanması ortalama 20 dakika sürmüştür.

2.5 Veri Analizi

Bu çalışmada veri analizi kapsamında öncelikle betimsel istatistikler kullanılarak ön analizler yapılmıştır. Böylece kayıp verilerin analizi yapılmıştır ve aykırı değerler kontrol edilmiştir. Gerekli varsayımlar test edilmiş ve kabul edilebilir sonuçların elde edilmesiyle beraber asıl analizlere başlanmıştır. Değişkenler arasındaki ilişki ve ilişkinin derecesinin ölçülmesi amaçlandığı için ilişkisel analiz yöntemlerinden

hiyerarşik regresyon analizleri yapılmıştır. Bu analizlerin yapılması için SPSS 26 kullanılmıştır. Doğrulayıcı faktör analizleri için ise AMOS 18 programından yararlanılmıştır.

3. Bulgular

Bu çalışmada 468 öğretmen katılımcı olarak yer almıştır. Demografik bilgi formlarından elde edilen bilgiler ışığında katılımcıların %75'nin kadın (n=351), %25'nin (n=117) erkek olduğu belirlenmiştir. Katılımcıların yaş ortalaması 40.49 (SS= 7.90) olarak hesaplanmıştır. Katılımcıların eğitim durumlarına bakıldığında %82.7'si (n=387) lisans mezunu, %16.9'u (n=79) yüksek lisans mezunu ve %0.4'ü (n=2) doktora mezunudur. Betimsel istatistiklere bakıldığında, öğretmenlerin algıladıkları kriz liderliği değişkeninin puan ortalaması 4.84 (SS=1.27) olarak hesaplanmıştır. Öğretmenlerin müdüre yönelik güvenlerinin puan ortalaması 3.63 (SS=0.90), öğretmenlerin MEB'e yönelik güvenlerinin puan ortalaması 2.85 (SS=1.10) olarak hesaplanmıştır. Uzaktan eğitime karşı tutum boyutları arasında, uzaktan eğitimin avantajları alt boyutu için ortalama puan 2.93 (SS=0.68), uzaktan eğitimin sınırlılıkları alt boyutu için ortalama puan 3.76 (SS= 0.66) olarak hesaplanmıştır. Pearson korelasyon analizi sonuçlarına bakıldığında, algılanan kriz liderliği ve uzaktan eğitimin avantajları değişkenleri arasında (r = .11, p < .01) ve benzer sekilde algılanan kriz liderliği ve müdüre yönelik güven değiskenleri arasında (r = .62, p < .01) pozitif yönlü ve anlamlı bir ilişki olduğu görülmüştür. Bunun yanı sıra, MEB'e yönelik güven ile uzaktan eğitimin sınırlılıkları değişkenleri arasında negatif yönlü ve anlamlı (r = -.14, p < .01) bir ilişki vardır. Asıl analizlere geçildiğinde, iki ayrı hiyerarşik regresyon analizi üç aşamada tamamlanmıştır. Hiyerarşik regresyon analizleri için algılanan kriz liderliği değişkeni puanları, müdüre ve MEB'e yönelik güven değişkenleri puanları, uzaktan eğitime karşı tutum değişkeni puanları, cinsiyet, yaş, eğitim düzeyi ve görev yapılan okul kademesi değişkenleri kullanılmıştır. Uzaktan eğitimin avantajları alt boyutu öğretmenlerin olumlu tutumlarını, uzaktan eğitimin sınırlılıkları alt boyutu öğretmenlerin olumsuz tutumlarını ifade etmektedir. Öğretmenlerin uzaktan eğitime karşı olumlu tutumlarının yordanmasında, birinci aşamada eğitim düzeyi değişkeni modele anlamlı bir katkı sağlamıştır (F (3, 464) = 4.89, p < 0.025). Sonuçlar, lisansüstü eğitim seviyesine sahip öğretmenlerin lisans mezunu öğretmenlere göre uzaktan

eğitime karşı daha olumlu tutumları olduğunu göstermektedir. İkinci aşamada okul kademesi değişkeni modele anlamlı katkı sağlamıştır (F (5, 462) = 5.72, p < 0.025). Ortaokulda görev yapan öğretmenlerin ilkokulda görev yapan öğretmenlere göre daha olumlu tutumlara sahip olduğu ortaya çıkmıştır. Son aşamada, algılanan kriz liderliğinin öğretmenlerin uzaktan eğitime karşı olumlu tutumlarının anlamlı bir yordayıcısı olduğu bulunmuştur (F (8, 459) = 4.47, p < 0.025). İkinci hiyerarşik regresyon analizinde uzaktan eğitime karşı olumsuz tutumların yordayıcısı olan değişkenler ortaya konmuştur. Yalnızca üçüncü aşamada MEB'e yönelik güven değişkeni modele anlamlı bir katkı sağlamıştır (F(8, 459) = 2.44, p <0.025). Dolayısıyla öğretmenlerin MEB'e olan güvenlerinin azalması, uzaktan eğitime yönelik olumsuz tutumlarının artmasıyla ilişkilendirilmiştir.

4. Tartışma

Bu araştırmanın amacı öğretmenlerin algıladıkları kriz liderliği, müdürlerine ve Türk Eğitim Sistemi'nin üst yönetim merci olan MEB'e yönelik güvenleri ile uzaktan eğitime karşı tutumları arasındaki ilişkiyi incelemektir. Yapılan betimsel analizler incelendiğinde, öğretmenlerin uzaktan eğitime karışı olumsuz tutumlarının, olumlu tutumlarından daha fazla olduğu söylenebilir. Bu durum çalışmanın pandemi döneminde uzaktan eğitim süreci henüz bitmişken yapılması ve öğretmenlerin pandemiyle ilgili olumsuz deneyimlerini yansıtmış olmasıyla ilişkilendirilebilir. Yaşanılan bu büyük çaplı krizin hem fiziksel hem de ruhsal olarak çeşitli etkilere sahip olabileceği belirtilmiştir. Depresyon, anksiyete ve stres bu etkilerden bazılarıdır (Giuntella vd., 2020). Dolayısıyla öğretmenlerin pandemi koşullarından kaynaklanan ruhsal durumları onların süreçteki uzaktan eğitime yönelik tutumlarını etkilemiş olabilir. Dahası örgütsel değişim literatüründe geçtiği üzere değişimle ilgili bilgi eksikliği nedeniyle belirsizlik ve bilinmezlik ortaya çıktığında, çalışanların olumsuz tepkileri artmaktadır (Armenakis vd., 2007). Bu durum da öğretmenlerde pandeminin başında süreç hakkında eksik ya da yetersiz bilgi almasından kaynaklı bir olumsuz tutum ortaya çıkarmış olabilir. Betimsel istatistiklerin ortaya koyduğu diğer bir bulgu ise öğretmenlerin müdüre yönelik güvenlerinin MEB'e yönelik güvenlerinden daha fazla olmasıdır. Dirks ve Ferrin'ine (2002) göre çalışanların hiyerarşik olarak daha yakın çalıştıkları yönetici ile üst düzey yöneticilerine yönelik güvenleri farklılık göstermektedir. Buna ek olarak Zayim ve Kondakçı (2015), belirsizliğin olduğu değişim zamanlarında öğretmenlerin okul müdüründen aldıkları bilgilere daha fazla güvendiklerini ortaya koymuştur. Krizden kaynaklanan bir belirsizlik durumu göz önüne alındığında bu bulgularla doğrudan paralellik gösterdiği söylenebilir.

Hiyerarşik regresyon analizleri sonucunda elde edilen bulgulara bakıldığında, öğretmenlerin eğitim düzeyi, çalıştığı okul kademesi ve algıladıkları kriz liderliği davranışları uzaktan eğitime karşı olumlu tutumlarını anlamlı şekilde yordamaktadır. Bunun yanı sıra, öğretmenlerin MEB'e yönelik güvenleri uzaktan eğitime karşı olumsuz tutumlarını anlamlı şekilde yordamaktadır.

Lisansüstü eğitim derecesine sahip öğretmenlerin, uzaktan eğitime karşı olumlu tutumları, lisans derecesine sahip öğretmenlere göre daha fazladır. Bu durum, öğretmenlerin değişime uyum sağlama kapasiteleri ile ilişkilendirilebilir. Genç (2006) öğretmenlerin değişime karşı dirençlerini incelediği çalışmasında, lisansüstü eğitim derecesine sahip öğretmenlerin lisans derecesine sahip öğretmenlere göre değişime karşı daha iyi uyum sağladıklarını ortaya koymuştur ve bu araştırmadaki bulguları destekler nitelik taşımaktadır. Bir diğer bulgu, ortaokulda çalışan öğretmenlerin ilkokulda çalışan öğretmenlere göre uzaktan eğitime karşı daha olumlu tutuma sahip olduğunu ortaya koymuştur. Bu bulgu Düzgün ve diğerleri (2021) ile Karaca ve diğerlerinin (2021) çalışmalarıyla paralellik göstermektedir. Pandemi dönemindeki uzaktan eğitim süreci göz önüne alındığında, ilkokullarda küçük yaş grubu öğrencilerle bu süreci yürüten öğretmenlerin daha fazla zorlandığı düşünüldüğünde bu durumun öğretmenlerin tutumlarına yansıdığı sonucuna ulaşılabilir. Bunun yanı sıra, öğretmenlerin algıladıkları kriz liderliği davranışları, uzaktan eğitime karşı olumlu tutumlarında yordayıcı bir rol oynamaktadır. Bu noktada okul müdürlerinin sahip olduğu kriz liderliği davranışları etkili olmaktadır. Özellikle krizden kaynaklanan yüksek belirsizlik ve değişim süreçlerinde, okul müdürlerinin kriz liderliği öğretmenlerin korku ve kaygılarını en aza indirebilir ve değişimi daha kolay benimsemelerini sağlayabilir ve bu da uzaktan eğitime yönelik olumlu tutumları arttırabilir. Son olarak bulgular, öğretmenlerin MEB'e olan güvenlerinin azalmasının uzaktan eğitime yönelik olumsuz tutumlarının artmasıyla ilişkili olduğunu ortaya koymuştur. Öğretmenlerin uzaktan eğitime karşı olumlu tutumlarında müdüre yönelik güvenin herhangi bir yordayıcı rolü ortaya çıkmazken MEB'e yönelik güven olumsuz tutumlarla ilişkilendirilmiştir. Bu durum Zayim'in (2015) MEB'e yönelik güveni dördüncü referans grup olarak tanıttığı çalışmasıyla paralellik göstermektedir. Zayim (2015) çalışmasında öğretmenlerin değişime bağlı duygularının ve tutumların oluşmasında MEB'e yönelik güvenin müdüre yönelik güvenden daha etkili olduğu sonucuna ulaşmıştır. Pandemideki uzaktan eğitim sürecinin her aşaması, MEB tarafından alınan kararlarla yürütülmüştür. Türk Eğitim Sistemi'nde karar verici üst yönetim olan MEB'e yönelik güven, kriz dönemlerinde eğitimde meydana gelen değişim süreci göz önüne alındığında öğretmenlerin uzaktan eğitime karşı tutumlarının anlamlı bir yordayıcısı olarak ortaya çıkmaktadır. Dolayısıyla, öğretmenlerin özellikle uzaktan eğitime karşı olumsuz tutumlara sahip olması bu eğitim süreci boyunca MEB'i temel karar verici olarak değerlendirmeleri ve sürece dair olumsuz deneyimlerini bu alınan kararlarla ilişkilendirmeleri ile açıklanabilir.

4.1 Öneriler

COVID-19 pandemisiyle beraber krizlerin hayatımızın bir parçası olabileceği ve eğitim sistemlerinin de bu krizlerden etkilenen mekanizmaların başında geldiği düşünüldüğünde uzaktan eğitime yönelik araştırmaların yapılması ve öğretmenlerin uzaktan eğitime karşı tutumlarının incelenmesi eğitimin sürdürülebilirliği açısından önem taşımaktadır. Çalışmanın bulgularının ortaya koyduğu algılanan kriz liderliği ve uzaktan eğitime karşı olumlu tutum arasındaki ilişki, okul müdürlerinin kriz liderliği davranışlarını arttırmaya yönelik çalışmalar veya uygulamalar yapılmasına dayanak sağlayabilir. Bu konuda okul müdürlerine kriz yönetimine ilişkin hizmet içi eğitimler verilebilir. Hatta lisansüstü eğitim kademsinde özellikle Eğitim Yönetimi alanındaki programlara kriz yönetimine ilişkin dersler sunulabilir. Böylece nitelikli eğitim liderleri etkili kriz liderliği davranışları konusunda eğitim almış olacaktır. Buna ek olarak, öğretmenlerin uzaktan eğitime karşı tutumlarını iyileştirmek için, MEB bünyesindeki üst yöneticiler karar verme sürecinde öğretmenlerin görüş, ihtiyaç ve tutumlarını dikkate alabilir. Özellikle kriz döneminde sürece ilişkin alınan kararlar başlangıçtan itibaren açık ve yeterli bilgi paylaşımıyla öğretmenlere iletilebilir. Böylece öğretmenlerin krizden kaynaklanan belirsizlik, korku ve endişe hali azaltılabilir. Bu durum aynı zamanda onların uzaktan eğitim vermeye yönelik olumlu tutumlarında artışa sebep olabilir ve sürecin en az hasarla atlatılmasına yardımcı olabilir.

İleride yapılacak çalışmalara ilişkin öneriler göz önüne alındığında çalışmanın örneklem grubuna özel okul öğretmenleri dahil edilebilir. Ayrıca sonuçların genellenebilirliğinin arttırılması açısından çalışma Türkiye genelinde yapılabilir. Benzer çalışmalarda algılanan kriz lider liderliği ve yönetime yönelik güvenin yanı sıra öğretmenlerin teknoloji kullanımına ilişkin yeterlikleri de yeni bir yordayıcı değişken olarak incelenebilir. Bu tür bir değişken, diğer bağlamsal faktörlerle beraber incelendiğinde kriz durumlarında öğretmenlerin uzaktan eğitime karşı tutumlarına yeni bir bakış açısı sunabilir. Bunun yanı sıra sınıf mevcudu, uzaktan yürütülmesinde önemli olabilir eğitimin ve öğretmenlerin tutumlarıyla ilişkilendirilebilir. Dolayısıyla önemli bir bağımsız değişken olarak ele alınabilir.

Son olarak, çalışmadaki bağımsız değişkenler yükseköğretim bağlamında da araştırılabilir. Böylece öğretim elemanlarının uzaktan eğitime karşı tutumları, üniversite yönetimine güvenleri ile dekan veya bölüm başkanlarının kriz liderliği davranışları arasındaki ilişki incelenebilir. Ayrıca bulgular, K-12 düzeyindeki öğretmenlerin ve yükseköğretim kademesindeki öğretim elemanlarının kriz bağlamındaki uzaktan eğitime karşı tutumları arasında bir karşılaştırma yapılmasına olanak sağlayabilir.

L. THESIS PERMISSION FORM / TEZ İZİN FORMU

ENSTİTÜ / INSTITUTE			
Fen Bilimleri Enstitüsü / Graduate School of Natural and Applied Sciences			
Sosyal Bilimler Enstitüsü / Graduate School of Social Sciences			
Uygulamalı Matematik Enstitüsü / Graduate School	ol of Applied Mathematics		
Enformatik Enstitüsü / Graduate School of Informa	itics		
Deniz Bilimleri Enstitüsü / Graduate School of Mar	ine Sciences		
YAZARIN / AUTHOR			
Soyadı / Surname : Erdoğan Adı / Name : İlayda Bölümü / Department : Eğitim Bilimleri, Eğitim ' Educational Administration and Planning	Yönetimi ve Planlaması / Education	al Sciences,	
TEZİN ADI / TITLE OF THE THESIS (İngilizce / English TEACHERS' PERCEIVED CRISIS LEADERSHIP, TRUST I DISTANCE EDUCATION			
TEZİN TÜRÜ / DEGREE: Yüksek Lisans / Master	Doktora / PhD		
 Tezin tamamı dünya çapında erişime açıla work immediately for access worldwide. 	acaktır. / Release the entire	\boxtimes	
 Tez <u>iki yıl</u> süreyle erişime kapalı olacaktır. patent and/or proprietary purposes for a p 			
 Tez <u>altı ay</u> süreyle erişime kapalı olacaktır period of <u>six months</u>. * 	r. / Secure the entire work for		
* Enstitü Yönetim Kurulu kararının basılı kopya A copy of the decision of the Institute Administ together with the printed thesis.			
Yazarın imzası / Signature Tezin son sayfasıdır. / This is the last page of the th	Tarih / Date		
102111 Son Suyjusiun. / This is the tust puge of the th	CBIB/ GIBBCI IGIIOII.		