OPENING SCHOOLS SAFELY DURING THE PANDEMIC

Teacher and Parent Research

EĞİTİM-BİR-SEN
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Research Report September 2020

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ABBREVIATIONS

ABD United States of America

DSÖ Dünya Sağlık örgütü
World Health Organization

EBA Eğitim Bilişim Ağı
Education Information Network

İBBS İstatistiki Bölge Birimleri Sınıflandırması
Statistical Territorial Units Classification

MEB Milli Eğitim Bakanlığı
Turkish Ministry of Education (Ministry of Education)

OECD Organization for Economic Co-operation and Development

SPSS Statistical Package for the Social Sciences

TÜİK Türkiye İstatislik kurumu
Turkish Statistical Institute

UNESCO United Nations Educational, Scientific and Cultural Organization

UNICEF United Nations International Children's Emergency Fund

WFP World Food Programme

PREFACE

After the coronavirus (Covid-19) began to spread rapidly and turned into an epidemic in the world, almost all countries took a break from face-to-face education for a while to shut down schools at all levels in order to prevent the spread of this virus. While at first it seems that closed schools would reopen in a short time, the opening dates of the schools have been postponed in many countries due to the rapid spread of the virus and insufficient control mechanisms.

In this process, with the closure of schools, studies for online / distance education were initiated so that the education process could continue, and children would not fall behind in their education. Many countries such as Turkey took advantage of technological opportunities to allow teachers and children the ability to use technology remotely depending on their level of access to the internet / online education. In this process, distance education has been continued through various e-learning platforms, television programs and social media platforms that allow teachers and students to interact and work together.

The fact that schools have been closed since mid-March and distance / online education has been continued requires that this teaching process be examined. It is especially important to determine how education was carried out after March and the level of participation of teachers and students in distance education. With this research, recommendations for the deficiencies of online / distance education during the pandemic and the determinations of the measures to be taken for the concerns of teachers and parents will be presented.

As Eğitim-Bir-Sen, we have created the report entitled "Opening Schools Safely During Pandemic Process: Teacher and Parent Research" as an indicator of our efforts to continue education in the healthiest way during the pandemic. My hope is that our report will shed light on education in the new period with regards to the views of parents and teacher on education during the period when schools are closed due to the pandemic.

I would like to thank everyone who contributed to our research, especially our teachers and parents.

Ali YALÇIN
President of Eğitim-Bir-Sen and Memur-Sen

FOREWARD

As coronavirus (Covid-19) spread rapidly throughout the world Turkey promptly closed all schools announced distance education measure with the emergence of the first case in the country. With this process, online / distance education started quickly. Although issues such as the quality, content, how it is carried out and the communication between teachers and students in the online / distance education process were the subject of discussion, this issue did not attract significant attention afterwards.

Unfortunately, when we look at how children's education was discussed in Turkey in relation to the pandemic, we see that while the education ministry implemented effective policies, there is still insufficient research on the issue. Our main purpose in this research is to point out the problems in education and the main problem areas within this ongoing process and to offer solutions to ensure that schools are opened more safely during the pandemic.

It is very important to determine how teachers and parents evaluate the process of opening schools and what kind of anxieties teachers and parents have. Therefore, in this study, how teachers and parents evaluate the opening calendar of schools and what kind of concerns they have about the opening of schools was examined. This research on teachers was applied to a total of 9,064 teachers and 20,052 parents in 80 provinces. The population of the study is basic education public institutions in Turkey, secondary education teachers working parents and children who go to these institutions. While creating the sample group, the number of teachers working in public schools in the Ministry of National Education on a provincial basis and in the Statistical Regional Units Classification (NUTS) Level 1 region of TURKSTAT were taken into consideration.

We hope that our report entitled "Opening Schools Safely During the Pandemic: Teacher and Parent Research", which we prepared in this important process, sheds light on the important problem areas of education during the pandemic. In this report we have made suggestions to develop a more effective policy for the continuation of education life in a healthy way, in line with the opinions of teachers and parents.

I would like to thank EBSAM, our research team who coordinated the field research and data analysis of our report, and especially the teachers and parents who participated in our research with their valuable opinions. I hope our report will be useful for the education community, the general public, policy makers and all concerned.

Atilla OLÇUM
Vice Chairman

EXECUTIVE SUMMARY

According to the opinions of the parents who participated in the study, the parents whose children are in secondary school (77.8%) and the parents whose children are in secondary education (73.5%) stated that their children were regularly taught live lessons by their teacher at a higher rate than the parents whose children are in primary school (63.3%).

Considering regions; 81% of parents in West Marmara, 78.3% of parents in East Black Sea, 74.3% of parents in West Black Sea, and 73.3% of parents in the Aegean region stated that their child/children were regularly taught live lessons by their teacher. 62.3% of the parents in Middle East Anatolia, 65.3% of the parents in the Mediterranean and 67.1% of the parents in Istanbul stated that their children were n live lessons at regular intervals.

In the distance education process, 75.7% of the teachers stated that they taught live classes to their students at certain intervals. Increasing the rate of teachers having live lessons with their students will contribute to the increase of students' ties and motivation with the school.

23.5% of the parents who participated in the study said they always helped their child / children in the distance education process, 18.4% said they did so frequently, 30.5% said occasionally and 14.4% said they rarely helped their children in their lessons. 13.1 % of them stated that they did not help their child / children in their lessons and did not study together in this process.

In the coronavirus distance education process, 28% of parents had problems in accessing television, 50% in accessing mobile phones, 50% in accessing the internet, and 48% in accessing computers.

The anxiety level of the teachers in the Southeastern Anatolia region (83.2%) is much higher in general than the teachers who come to the school by shuttle or public transportation (86.2%) compared to those who do not come by bus or

public transportation. In addition, the anxiety level of the parents who use the school bus/ public transportation while their child / children go to school is higher than that of the parents of the students who do not use the school bus/ public transportation.

14.5% of parents participating in the study, 14.8% of teachers find it safe to send students to school for face-to-face lessons this fall. 70.9% of parents and 78.8% of teachers stated that they do not find it safe to send students to school. This data show that teachers and parents think that schools are not safe enough for children if schools are opened after September 21st.

41.3% of the parents participating in the research think that the necessary measures will not be taken to prevent the spread of coronavirus with the start of face-to-face education. 42.3% of the teachers think that when the schools are opened to face-to-face education, necessary measures will not be taken to prevent the spread of coronavirus. In addition, 73% of parents state that they are uneasy that the number of cases will increase.80.5% of teachers are worried that the number of cases will increase with the opening of schools.74.6% of parents stated that when schools are opened, students will carry coronavirus to their households, and 75.9% of teachers stated that students will infect them when schools are opened.

The most important factor that reduces the spread of the pandemic is social distance, hygiene and mask applications. There is a guide prepared by the Ministry of Health and the Ministry of National Education on the implementation of these measures. However, according to this data, it is seen that a significant number of teachers lack confidence in carrying out activities in full compliance with these guidelines and taking the necessary measures.

In this process, 70.6% of the parents stated that when the schools are not opened and the distance education is done, the students will fall behind their education. 13.8% of them disagree with the statement that students will fall behind from their education. 63.8% of the teachers stated that the students would miss out on their education when schools are not opened, and distance education is undertaken. 18.9% of them stated that they did not agree with this opinion. Teachers in the Central Anatolia Region (71%) think that when schools are not established at a much higher level than those working in other regions and if distance education is provided, children will fall behind their education.

The rate of doing live-synchronous lessons differs significantly according to gender, age, professional experience, school level and regions. The ratio of male teachers who teach live lessons (78.2%) is higher than that of female teachers (73.2%).The rate of having live lessons for teachers with 16-21 years of professional experience. 65.9% of teachers in primary schools state that they give live lessons at certain intervals. This rate is 82.3% for secondary school teachers and 81.6% for secondary school teachers. 72.5% of teachers in Northeast Anatolia and 72.6% of teachers in Southeast Anatolia give live-synchronous lessons to their students at certain intervals. 80.3% of the teachers in Istanbul and 78.8% of the teachers in West Marmara had live-synchronous lessons with their students at certain intervals.

92.3% of the teachers with 6-10 years of professional experience stated that they do additional live lessons for students who do not attend their live lessons, give homework, send documents related to the lesson or use other methods. According to the levels, 95.7% of primary school teachers, 90.4% of secondary school teachers and 88.3% of secondary school teachers stated that they do additional live lessons for students who do not attend their live lessons, give homework, send documents about the course. Regarding the regions, 94.2% of teachers in Istanbul Northeast Anatolia (92.2%), Aegean (92%), Middle East Anatolia (91.4%), West Black Sea and Southeast Anatolia (91.3%) stated that they did additional live lessons for students who did not attend live lessons, gave homework, and sent documents about the course or used other methods.

57% of teachers stated that schools should be opened sometime after January 2021 so that children can go to schools safely.21.3% of the teachers stated that schools should be opened on September 21, 14.5% in November 2020 and 7.1% in early December 2020. 50.2% of parents stated that schools should be opened in January 2021 or later in order for their children to go to schools more safely. 29.8% of parents said 21 September 2020, 13.1% said November 2020. and 6.9% stated that schools should be opened at the beginning of December 2020.

SUGGESTIONS

- Learning losses should be determined and a make-up education program should be implemented in accordance with the knowledge and skills of students. Considering that a significant portion of the students do not attend the live lessons, learning losses differ both according to the schools and within the same school. Considering that some students attend the distance classes at all and some students very little, the knowledge and skill level of the students should be determined first. A make-up training program should be prepared in accordance with the knowledge and skill level of the students. School-based compensatory education programs that take into account the student level should be prepared instead of a common remedial education program that will be followed by everyone across the country.

- Teachers should be motivated and supported to conduct live lessons with their students. Considering that distance education will continue for a while, supportive studies should be carried out for teachers to provide effective distance education. In addition, live lessons with teachers' students should be encouraged and supported.

- Students should be motivated and supported to attend live classes. Considering that most of the students do not attend the live lessons in distance education and the distance education will continue for a while, families should motivate and encourage their children to participate in live lessons. For this, an effective communication should be established between teachers and families, and they should be supported in guiding their children to lessons.

- In order to enable students to participate in distance education more effectively, necessary digital tools such as tablets and computers should be provided with internet connection. Considering that a significant proportion of students do not have a computer at home and the low participation rate of children who do not have a computer and internet connection, tablets, computers and internet connection should be provided to families in need.

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- The distance education process should be ended as soon as possible and face-to-face education should be started. Parents and teachers stated that children will experience a significant learning loss in the distance education process and will be negatively affected emotionally. Therefore, the face-to-face training process should be initiated as soon as possible, by taking the necessary health and safety measures.

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Teacher and Parent Research

INTRODUCTION

INTRODUCTION

The World Health Organization (WHO) declared a pandemic after the new type of coronavirus (Covid-19) was seen in many countries of the world since early March. Following the WHO's pandemic decision, with the acceleration of the spread of the virus, countries have started to take urgent measures to reduce the spread of the virus. Within the scope of these urgent measures, many countries in the world decided to close their schools in the middle of March and started to use distance education opportunities instead of face-to-face education. In Turkey, on the12th of March it was announced that schools would be closed on the for an initial duration of one week starting March 16. On March 23rd distance education was declared (Altas & Yıldızalp Ozmen, 2020). In early April, when the pandemic was most effective all over the world, 1.6 billion students in more than 190 countries were deprived of face-to-face education in schools. In other words, 91.3% of the students in the world were affected by the school closure (UNESCO, 2020a).

In many countries such as Italy, Spain and France, where the pandemic hit hard, very strict quarantine and restriction measures were taken. As a result of the positive implications of these measures, schools have been reopened in countries such as Denmark, Germany, China, Japan and South Korea and Australia and New Zealand as of the end of April. On the other hand, many countries like Turkey and Italy have completed the school year with distance learning. According to data from September 8, 2020, which shows the status of countries in the world to open schools, presented by UNESCO, schools of nearly 900 million students in 50 countries are still closed due to the pandemic. Referring to the countries where the schools were closed mainly with Latin American countries and ranging to Turkey, Bangladesh and even in the south of the country are in Asia. In countries such as China, USA and Australia, schools are partially closed, while schools are open in most European countries, especially in South Korea and Japan (UNESCO, 2020a).

After the closure of schools due to the pandemic, countries have used different distance education methods to ensure that children do not experience loss of learning and that education continues. Simultaneous-synchronization with the use of various digital platforms, depending on the physical and technological capacity of countries, the level of digital skills of schools and teachers, the level of families and children having appropriate physical conditions and digital tools, and the level of digital literacy and teaching using asynchronous methods have been used (UNESCO, 2020b). Television and radio broadcasts have been used in countries with insufficient digital infrastructures in some Africa and Latin America, and even printed teaching materials have been sent to students without digital tools (Cobo, Hawkins & Rovner, 2020). Many countries have provided support for students to access digital platforms more effectively, such as offering free internet, increasing the width of the internet, offering a certain quota internet free for educational services (Hawkins, 2020).

With the closure of schools and the commencement of the distance education process, international organizations such as UNESCO, UNICEF and the World Bank have expressed the adversities caused by the closure of schools in their reports and studies. These organizations emphasized that especially disadvantaged students were affected during the school closure and distance education process, and existing educational inequalities were further increased. It was emphasized that with the closure of schools, learning losses will be experienced and disadvantaged students will have greater learning losses. Disadvantaged children will have difficulties in accessing lessons due to the lack of appropriate physical and technological facilities, and therefore their learning motivation will be lost, so their connection with the lessons is much more likely to be lost. One of the most important difficulties faced with the closure of schools is the lack of preparation and inadequacy of parents with regards to homeschooling. In the distance education process, motivating children to learn, preparing them for lessons, following lessons and doing their homework, etc. is quite difficult. The responsibilities of families in many of these issues, have become much more important. In addition, the physical and technological facilities of the house have become quite determinant. While schools offer a more equal education at a certain level, this equality has disappeared in the distance education process, and digital literacy has been the main determinant of the physical and technological opportunities of households. To put it more clearly, in an environment where more than one child attends school, without computers and tablets at home, these children cannot follow synchronous lessons, while children with their own study room and computer can easily follow synchronous lessons. Therefore, the education level, income etc. of families in the distance education process is quite important. The other most important problem is the psycho-social and emotional problems caused by the deprivation of friends, inability to socially interact with their peers, and isolation. Children cannot interact with their peers due to quarantine and isolation. In addition, outbreaks, illnesses and deaths have had a severe emotional impact on children (Saavedra, 2020a, 2020b; UNESCO, 2020b, 2020c, 2020d; World Bank, 2020a).

As of September, the pandemic still continues to be widespread and we are still discussing whether and how schools will open. According to the statement made by the Ministry of National Education, the schools started education with distance education on August 31, and it was announced that the schools would be opened gradually as of September 21 (MEB, 2020). It is very important in the process of opening schools to determine how teachers and parents evaluate the process of opening schools and what kind of concerns teachers and parents have. Therefore, in this study, how teachers and parents evaluate the opening calendar of schools and what kind of concerns they have about the opening of schools was examined. In addition, the difficulties faced in the distance education process after March, live lessons, students' participation in classes and EBA were analyzed. The efficiency of the distance education process was examined. On the axis of the teachers 'and parents' opinions, suggestions were presented to develop a more effective policy in the upcoming period.

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2 RESEARCH METHOD

RESEARCH METHOD

In this section, the model, population, sample, data collection tools, the method to be followed in collecting data and the limitations of the research are explained.

2.1 Research Model

Quantitative research is research that tries to reveal the facts in the relationship between description and causality through objective observation, measurement and experimentation of facts and events (Arıkan, 2011). For the purpose of this research, descriptive research methods were used to collect the data needed. In this context, the research was carried out in a survey model, using the online survey technique.

2.2 Population and Sample

The population of this study consists of basic education public institutions in Turkey and secondary school teachers and employees who are parents of children in these institutions. Across Turkey teachers and parents were asked to fill out surveys within the specified sample design.

While creating the sample design, the number of teachers working in state schools in the Level 1 region of the Ministry of National Education (MEB) on a provincial basis and the Statistical Regional Units Classification (NUTS) of TURKSTAT (Turkish Statistical Institute) were taken into consideration. Ten thousand samples for teachers and 20 thousand samples for parents were targeted and a sampling distribution was created by using the proportional sampling method. The obtained questionnaire numbers were compared with the distribution of the population and the sampling error (sensitivity) was minimal; teacher questionnaires were reduced to 9,064, and the parent survey was weighted over 20,052 questionnaires.

2.3 Data Collection Tools

Within the scope of the survey study, the first 8 questions for the teachers and the first 7 questions for the parents in the data collection tool consisting of 23 questions were created to determine the profiles of the participants. The remaining 15 (16 questions for parents) questions are about the efficiency of the distance education given in the coronavirus pandemic and whether face-to-face education can be delivered safely in the next period. The data collected within the scope of the quantitative research was analyzed by the SPSS package program.

2.4 Limitations

Research was conducted across Turkey through an online survey sampling technique. The research only covers teachers (excluding school administrators) working in public schools and parents with children attending these schools. Data was collected from the 19th to the 25th of August 2020 all across Turkey.

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DATA ANALYISIS AND FINDINGS

DATA ANALYSIS AND FINDINGS

The data obtained as a result of the application of the questionnaires prepared within the framework of the quantitative research was entered into the SPSS package program and analyzed in line with the aims of the research. The teacher and parent questionnaire for both groups was analyzed separately. The Profile of Teachers / Parents, Education in the Coronavirus Process, Concerns and Expectations of Teachers / Parents in the Coronavirus Period are discussed under three main headings. Frequency and percentage calculations were used to analyze the opinions of teachers and parents participating in the survey on education during the coronavirus pandemic. The existence of a meaningful relationship between the answers given by teachers and parents to the relevant questions in terms of gender, marital status, branches, ages, duration of study, number of children and school types was analyzed and interpreted using the Chi-Square Independence Test.

There are 6 questions in the questionnaire to measure the anxiety levels of teachers and parents. A five-point Likert type scale was used to determine the levels of these anxiety. The anxiety score was calculated for each teacher by reverse coding the answers related to these 6 questions and by adding the question scores and dividing them into six. For five-point Likert-type scales, the normality assumption was examined under the assumption of continuity and sums. In this context, the kurtosis and skewness coefficients were examined and found as a result of the analysis to be between -1.0 and +1.0 (Hair et al. 2013).

In this context, the anxiety score calculated in terms of the opinions of teachers and parents about their anxiety was analyzed by Independent Samples t-Test and One-Way Analysis of Variance (ANOVA). In cases where there is a statistically significant difference as a result of the One-Way Analysis of Variance, the Scheffe Test was conducted to determine which level or levels caused this difference. In the statistical analyzes used in the study, the level of significance was taken as 0.05.

3.1. Teacher Profile

In this section a general profile of teachers including the region where they work, age, gender, marital status, having children under the age of 18, professional experience, school type, branch, and the use of buses or public transportation to school are presented.

This research for teachers was applied to a total of 9,064 teachers in 80 provinces. In Table 1, the distribution of teachers participating in the research sorted by regions is presented. According to the sample formed by taking into consideration the distribution of teachers according region, teachers participated in the research mostly in South-East Anatolia (14.5%), Mediterranean (13.8%), Aegean (12.6%) regions, and the least in Eastern Black Sea (% 3.0), West Marmara (3.6%), Northeast Anatolia (4.5%) regions. In general, it is seen that the sample is similar to the distribution of teachers in the Ministry of National Education, when the research participants by region are compared with the number of teachers in MEB.

Table 1. *Distribution of teachers by region*

	n	*%*	*MEB verisi %*
Istanbul	999	11,0	12,3
West Marmara	326	3,6	3,8
Aegean	1.141	12,6	12,2
East Marmara	866	9,6	9,1
West Anatolia	797	8,8	9,4
Mediterranean	1.254	13,8	13,9
Central Anatolia	555	6,1	5,6
West Black Sea	593	6,5	6,0
East Black Sea	272	3,0	3,5
Northeast Anatolia	407	4,5	3,6
Central East Anatolia	541	6,0	6,5
South East Anatolia	1.313	14,5	14,0
Total	9.064	100,0	100,0

Table 2. *Demographic characteristics of teachers I (gender, marital status and having children 0-18 years old, age and total working time)*

Gender	*n*	*%*
Female	4.523	49,9
Male	4.541	50,1
Total	9.064	100,0
Marital Status	*n*	*%*
Single	2.115	23,3
Married	6.949	76,7
Total	9.064	100,0
Has child(ren) between the ages of 0-18	*n*	*%*
None	3.376	37,3
1 child	2.371	26,2
2 or more children	3.316	36,6
Total	9.063	100,0
Age	*n*	*%*
30 Age and under	2.110	23,3
31-40 Age	4.014	44,3
41-50 Age	2.290	25,3
51 Age and over	650	7,2
Total	9.064	100,0
Total working time	*n*	*%*
5 year and under	2.082	23,0
6-10 years	2.223	24,5
11-15 years	1.692	18,7
16-20 years	1.276	14,1
21 years and over	1.791	19,8
Total	9.064	100,0

Table 2 contains demographic data including gender, marital status, having children between the ages of 0-18, age and the professional experience of the teachers participating in the study. According to this table, 50.1% of the teachers participating in the study are men and 49.9% are women. In this study, we looked at the marital status of teacher and the effect of having children on the process of conducting distance education, teachers' approach to opening schools and their anxiety levels. 76.7% of the participants in the research are married and 23.3% are single. While 37.3% of the participants have no children under the age of 18, 26.2% have a child under the age of 18 and 36.6% have two or more children under the age of 18. Considering the age distribution of the participants, 23.3% were between the ages of 30 and below, 44.3% were between 31-40 years old, 25.3% were between 41-50 years old and 7.2% were 51 and over. Considering the professional experiences of the participants, 23% have 7 years or less experience, 24.5% have 6-10 years, 18.7% 11-15 years, 14.1% 16-20 years, 19.8% have 21 years of professional experience.

In Table 3, data on the demographic characteristics of the teachers participating in the study regarding the school type, branch and the use of buses / vehicles while going to school are presented. 31% of those participating in the research are primary school teachers, 36.3% are secondary school teachers and 32.7% high school teachers. Considering the branch distribution of the teachers participating in the study, the highest rate of teachers with regards to subject are as follows: (26.7%), mathematics (9.6%), Turkish (7.9%) and English (7.7%.) With regards to using a shuttle or public transportation while going to school, 33.4% of the teachers participating in the research use shuttles or public transportation while 66.6% do not use shuttles or public transportation.

Table 3. *Demographic characteristics of teachers II (school type, branch and use of shuttle / public transportation to school)*

School type	*n*	*%*
Primary school	2.807	31,0
Secondary school	2.618	28,9
İmam hatip secondary school	673	7,4
Anadolu imam hatip high school	606	6,7
Anadolu high school	1.027	11,3
Anadolu voccational and technical high school	724	8,0
Social sciences high school	29	0,3
Science high school	111	1,2
Other	469	5,2
Total	9.064	100,0
Branch	*n*	*%*
Classroom teacher	2.424	26,7
Math	874	9,6
Turkish	719	7,9
English	695	7,7
Culture of religion and knowledge of ethics	603	6,7
Science	455	5,0
Social sciences	355	3,9
History	198	2,2
Geography	156	1,7
Biology	117	1,3
Chemistry	116	1,3
Physics	111	1,2
Other	2.241	24,7
Total	9.064	100,0
Using shutless / public transportation when going to school	*n*	*%*
Yes	3.031	33,4
No	6.033	66,6
Total	9.064	100,0

3.2. Distance Education During the Pandemic

In this section various factors in relation to the closure of the schools during the pandemic and distance education will be examined. These factors are as follows: whether teachers hold live-synchronous lessons during the distance education process, the participation of the students in these lessons, whether there is a study program for the students who cannot attend the lessons, whether they have difficulties in accessing EBA, Ministry of National Education guidelines about live-synchronous lessons. The opinions of the teachers on whether they received support from the Turkish government were analyzed. Each question in this section was also examined regarding whether or not there was a differentiation in the opinions of the participants according to different variables.

Figure 1. *Have you done live-synchronous (simultaneous) teaching with your students during the coronavirus process?*

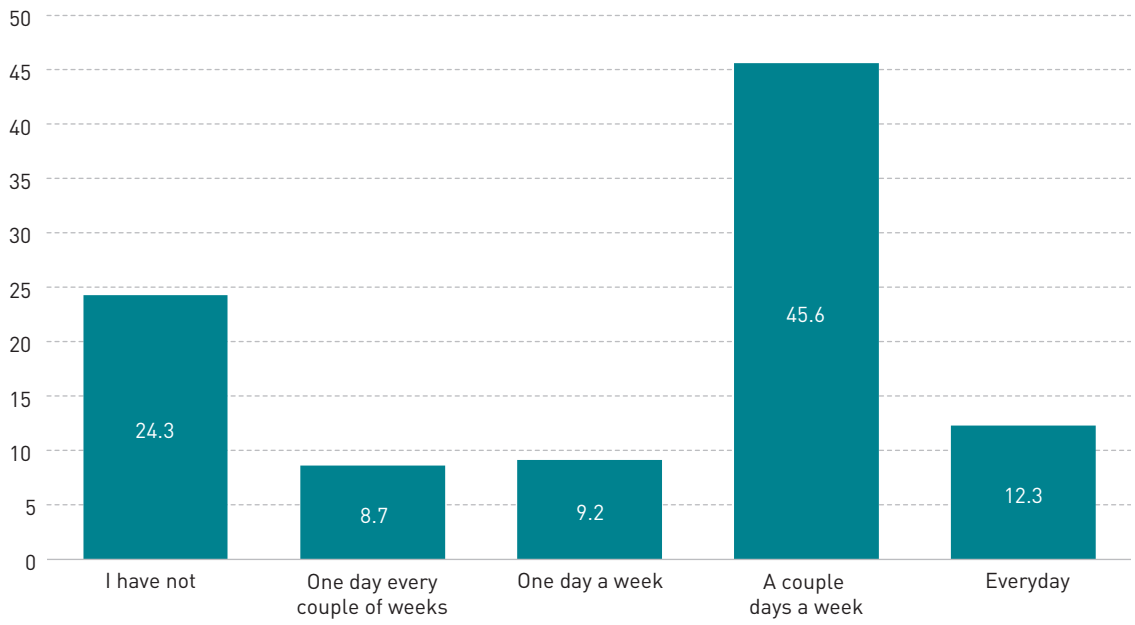


Figure 1 shows the teachers' live-synchronous education with their students during the period when schools were closed, and distance education was implemented. 75.7% of the teachers stated that they gave live lessons to their students at certain intervals during the distance education process. Increasing the rate of teachers having live lessons with their students will contribute to the increase of students' ties and motivation with the school.

Table 4 shows an analysis of how teachers approached live-synchronous education with students according to different variables. The rate of holding live-synchronous lessons varies significantly according to gender. Accordingly, the ratio of male teachers (78.2%) who taught live lessons at regular intervals is higher than the ratio of female teachers (73.2%). The rate of holding live-synchronous lessons differs significantly according to age. According to professional experience, the situation of teachers conducting live-synchronous lessons differs significantly. While the rate of conducting live lessons at certain intervals is 73% for teachers with 21 years and more experience, it is 78.5% for teachers with 16-21 years of professional experience. The rate of conducting live-synchronous lessons differs significantly according to school level. While 65.9% of teachers in primary schools stated that they give live lessons at certain intervals, this rate is 82.3% for middle school teachers and 81.6% for secondary school teachers. The rate of conducting live-synchronous lessons differs significantly according to the regions. While 72.5% of teachers in Northeast Anatolia and 72.6% of teachers in Southeast Anatolia regularly conduct live-synchronous lessons with their students, 80.3% of teachers in Istanbul and 78.8% of teachers in West Marmara conduct live-synchronous lessons with their students at certain intervals.

Table 4. *"Have you done live-synchronous (simultaneous) education with your students during the coronavirus pandemic?" The distribution of teachers' opinions on the question and independent variables (%) and chi-square analysis results*

	Have you done live-synchronous (simultaneous) education with your students during the coronavirus pandemic					χ^2	*sd*	*p*
	I have not	*Everyday*	*A couple days a week*	*One day a week*	*One day a week*			
Female	26,8	13,6	42,8	8,8	8,0	59,00	4	,000*
Male	21,8	10,9	48,4	9,6	9,4			
30 Age and under	24,7	10,8	44,9	9,1	10,6	65,81	12	,000*
31-40 Age	23,2	11,7	48,5	8,6	8,0			
41-50 Age	24,2	13,8	43,6	10,5	7,9			
51 Age and older	29,8	15,7	36,9	8,5	9,1			
5 year and under	24,8	9,8	46,3	9,0	10,0	66,91	16	,000*
6-10 years	22,1	11,5	48,7	9,1	8,5			
11-15 years	25,8	13,3	45,0	8,1	7,8			
16-20 years	21,5	12,6	47,0	10,6	8,3			
21 years and above	27,0	15,0	40,4	9,4	8,3			
Primary school	34,1	21,4	30,9	5,8	7,9	736,89	8	,000*
Secondary school	17,7	9,4	54,0	10,3	8,7			
Middle School	18,4	7,2	53,5	11,5	9,4			
Istanbul	19,7	16,0	47,9	8,1	8,2	125,14	44	,000*
West Marmara	21,2	15,0	48,8	8,0	7,1			
Aegean	21,8	13,5	49,1	8,3	7,3			
East Marmara	24,9	14,2	43,8	8,8	8,3			
West Anatolia	26,2	12,3	43,2	8,3	10,0			
Mediterranean	26,4	11,0	43,3	9,3	10,0			
Central Anatolia	25,2	11,9	45,9	7,9	9,0			
West Black Sea	22,4	16,7	44,4	8,4	8,1			
East Black Sea	22,1	12,1	48,5	8,8	8,5			
Northeast Anatolia	27,5	11,5	43,5	8,8	8,6			
Central East Anatolia	23,1	10,2	48,1	11,1	7,6			
South East Anatolia	27,4	6,9	44,4	12,0	9,3			

**P<,05.*

Map 1. *The distribution of teachers who say they are doing live-synchronous (simultaneous) education with their students every day during the coronavirus pandemic by region (%)*

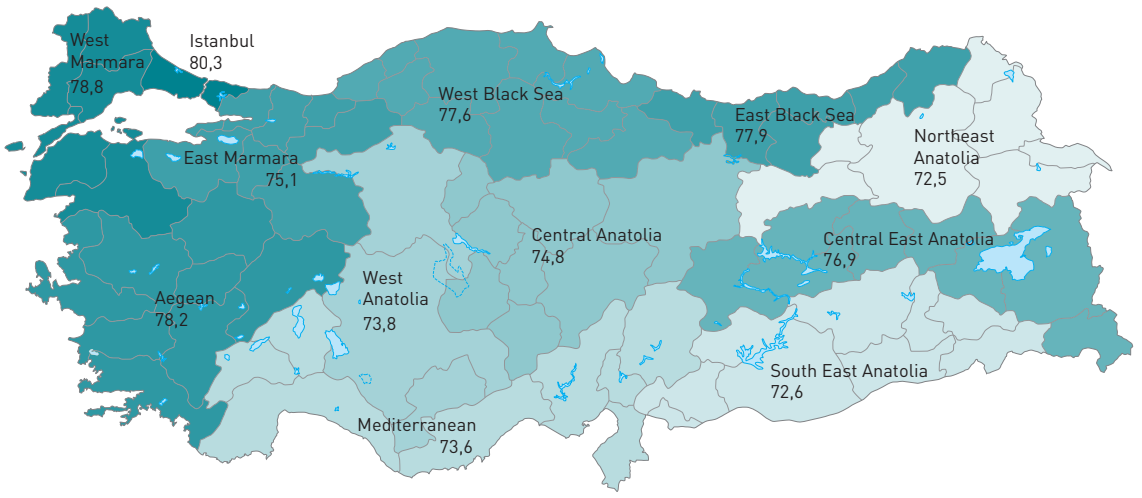


Figure 2. *How many of the students participated in the live lessons you taught?*

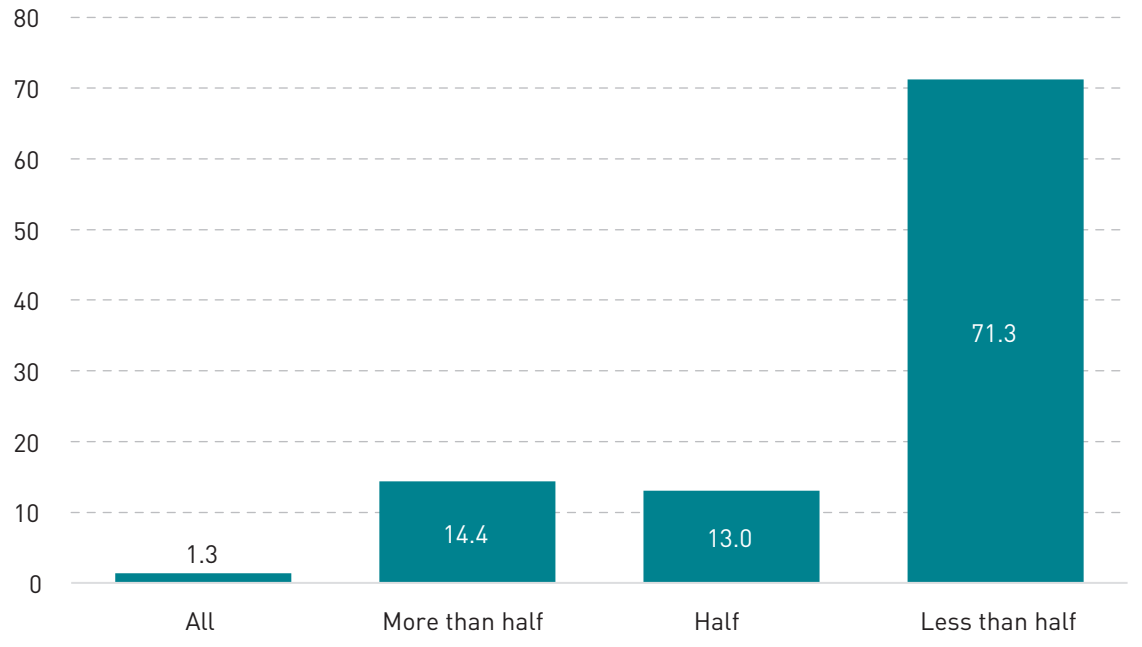


Figure 2 shows the number of students who attended the lessons of teachers who conducted live lessons. 1.3% of the teachers who gave live lessons stated that all of their students attended the live lessons. The ratio of teachers who said that more than half of the students attended the lessons was 14.4%, the ratio of the teachers who said that half of the students attended the lessons was 13%, and the ratio of the teachers who said that less than half of the students attended the lessons was 71.3%. The fact that such a high percentage of students did not attend classes shows that students' learning losses will be quite high during distance education. This data shows that a serious supplementary education program should be held for these students. While planning the make-up education program, factors should be taken into consideration on a school basis, taking into account the high percentage of students not attending classes (Çelik, 2020).

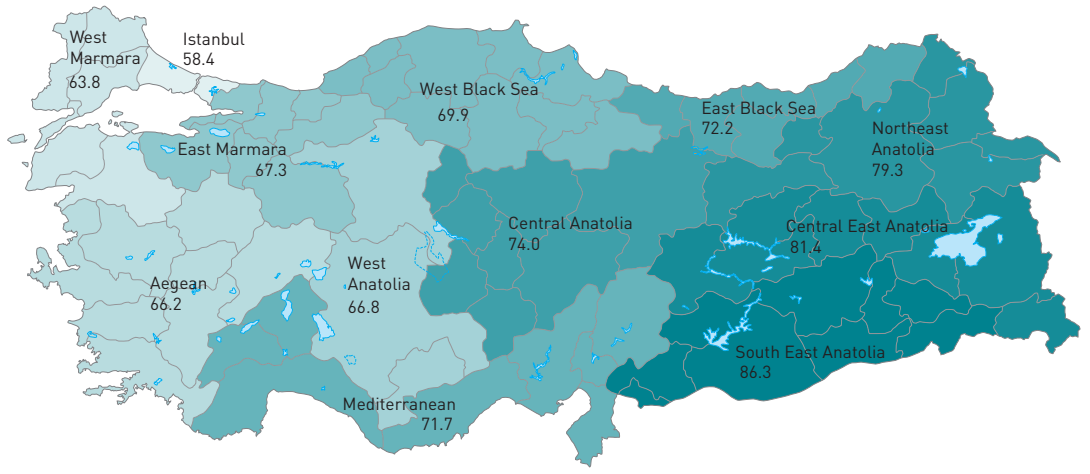
Table 5 examined the opinions of the teachers who teach live lessons and how students attend the live lessons according to different variables. Accordingly, teachers 'views on students' participation in classes according to age, professional experience, school level and regions differ significantly. 2.9% of teachers aged 51 year and over who teach live lessons express that all of the students attend their lessons, 64% of them less than half of them.0.9% of the teachers in the 30 and under group reported that all of the students attended live lessons, while 79.5% less than half attended. Similar to age, 2.8% of teachers with 21 years or more of professional experience stated that all students attended live lessons, and less than half of those who stated that they attended live lessons was 61.1%.On the other hand, 82.2% of the teachers who have 5 years or less of seniority stated that less than half of the students attended their live lessons. Considering these levels, it is seen that the rate of students attending classes is higher in primary schools compared to other levels. The proportion of teachers who reported that all students attended live lessons was 3.6% in primary schools, 0.5% in secondary schools and 0.3% in secondary education, while the rate of those who reported that more than half attended lessons was 30.4% in primary school, this rate was around 8% at other levels. While the rate of teachers who stated that less than half of the students attend live lessons is 49.6% in primary school, this rate is 78.6% in secondary school and 81.2% in secondary education. Regionally, the rate of teachers who state that all students attend live lessons is 0.3% in Northeast Anatolia and 0.4% in Southeast Anatolia. In addition, the rate of teachers who stated that less than half of the students attended live lessons in Southeastern Anatolia is quite high with 86.3%, 81.4% in Middle East Anatolia and 79.3% in Northeast Anatolia. On the other hand, with 58.4% in Istanbul and 63.8% in West Marmara, the rate of teachers reporting that less than half of the students attend live lessons is the lowest. As we have stated above, the disadvantage of students in disadvantaged regions has increased even more in distance education during the pandemic period with the low rate of attending live lessons.

Table 5. *"How many of the students participated in your live lessons?" The distribution of teachers' opinions on the question and independent variables (%) and chi-square analysis results*

	How many of the students participated in your live lessons?				χ^2	*sd*	*p*
	All	*More than half*	*Half*	*Halfndan azı*			
30 Age and under	0,9	8,3	11,3	79,5			
31-40 Age	1,0	14,3	12,8	71,9	126,44	9	,000*
41-50 Age	1,8	19,0	14,7	64,5			
51 Age and older	2,9	18,9	14,3	64,0			
5 year and under	1,0	6,5	10,3	82,2			
6-10 years	,9	10,2	13,3	75,7			
11-15 years	1,3	18,7	13,3	66,7	265,00	12	,000*
16-20 years	,8	20,5	13,0	65,6			
21 years and above	2,8	20,6	15,5	61,1			
Primary school	3,6	30,4	16,4	49,6			
Secondary school	,5	7,9	13,0	78,6	757,30	6	,000*
Middle School	,3	8,6	9,9	81,2			
Istanbul	2,5	23,3	15,8	58,4			
West Marmara	1,9	17,9	16,3	63,8			
Aegean	1,6	18,5	13,7	66,2			
East Marmara	2,3	15,3	15,0	67,3			
West Anatolia	1,5	15,6	16,0	66,8			
Mediterranean	0,9	13,9	13,6	71,7	265,39	33	,000*
Central Anatolia	0,7	14,5	10,8	74,0			
West Black Sea	0,4	13,1	16,6	69,9			
East Black Sea	1,9	12,7	13,2	72,2			
Northeast Anatolia	0,3	9,5	10,9	79,3			
Central East Anatolia	1,4	9,2	8,0	81,4			
South East Anatolia	0,4	5,9	7,4	86,3			

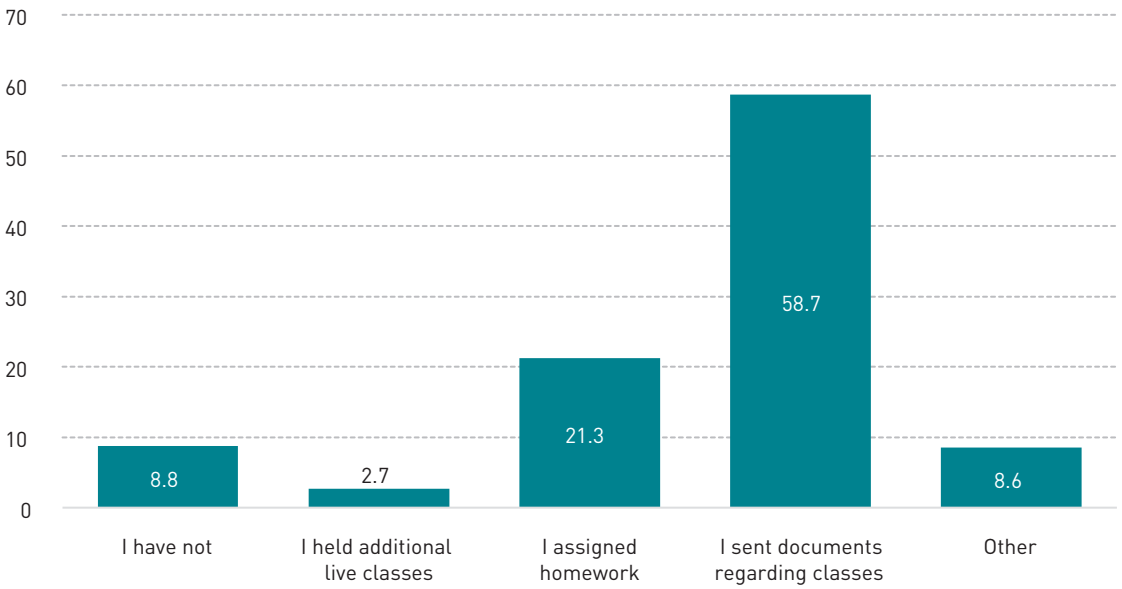
**P<,05.*

Map 2. *Distribution of teachers who say that less than half of the students attend the live lessons during the coronavirus pandemic, by region (%)*



In Figure 3, an additional study for the students who cannot attend the live lessons is shown. 2.7% of the teachers who hold live lessons stated that they hold additional live lessons for students who cannot attend the live lessons. 21.3% of them stated that they gave homework and 58.7% of them stated that they sent documents related to the course. The data here shows that more effective methods should be used to prevent learning losses for students who do not attend live lessons.

Figure 3. *Did you do anything to close the learning gap for non-participating students?*



The work done by teachers who teach live lessons for students who cannot attend the lessons differs according to professional experience, level and regions. 92.3% of the teachers with 6-10 years of professional experience stated that they hold additional live lessons for students who do not attend their live lessons, give homework, send documents related to the lesson or use other methods. According to the grades, 95.7% of primary school teachers, 90.4% of secondary school teachers and 88.3% of secondary school teachers stated that they hold additional live lessons for students who do not attend their live lessons, they give homework, send documents or use other methods. Regarding regions, 94.2% of teachers in Istanbul, Northeast Anatolia (92.2%), Aegean (92%), Mideast Anatolia (91.4%), West Black Sea and Southeast Anatolia (91.3%) stated that they held additional live lessons for students who did not attend live lessons, gave homework, sent documents about the course or used other methods..

Table 6. *"Have you done anything to close the learning gap for non-participating students?" The distribution of teachers' opinions on the question and independent variables (%) and chi-square analysis results*

	Have you done anything to close the learning gap for non-participating students?							
	I have not	*I held additional live classes*	*I assigned homework*	*I sent documents regarding classes*	*Other*	χ^2	*sd*	*p*
5 year and under	9,0	2,1	18,9	59,7	10,3			
6-10 years	7,7	3,2	21,9	58,4	8,8			
11-15 years	8,8	2,6	20,2	61,2	7,2	36,25	16	,003*
16-20 years	9,1	2,1	22,7	59,4	6,7			
21 years and above	9,7	3,1	23,4	55,0	8,8			
Primary school	4,3	2,4	29,9	57,8	5,7			
Secondary school	9,6	2,6	18,1	60,4	9,3	173,20	8	,000*
Middle school	11,7	2,9	17,8	58,0	9,6			
Istanbul	5,8	2,6	26,3	60,3	5,0			
West Marmara	10,3	1,6	20,6	59,5	7,9			
Aegean	8,0	3,4	20,7	61,1	6,8			
East Marmara	10,8	2,2	21,8	59,0	6,2			
West Anatolia	9,2	2,6	26,4	53,2	8,6			
Mediterranean	8,7	2,8	22,4	56,6	9,4			
Central Anatolia	11,9	2,7	19,2	57,3	9,0	123,32	44	,000*
West Black Sea	8,7	1,7	19,0	61,4	9,2			
East Black Sea	10,6	7,2	16,9	58,0	7,2			
Northeast Anatolia	7,8	1,7	15,4	65,2	9,9			
Central East Anatolia	8,6	3,7	17,1	59,9	10,8			
South East Anatolia	8,7	1,8	19,9	57,2	12,5			

**P<,05.*

Figure 4. *Have you had any problems in accessing and using EBA ?*

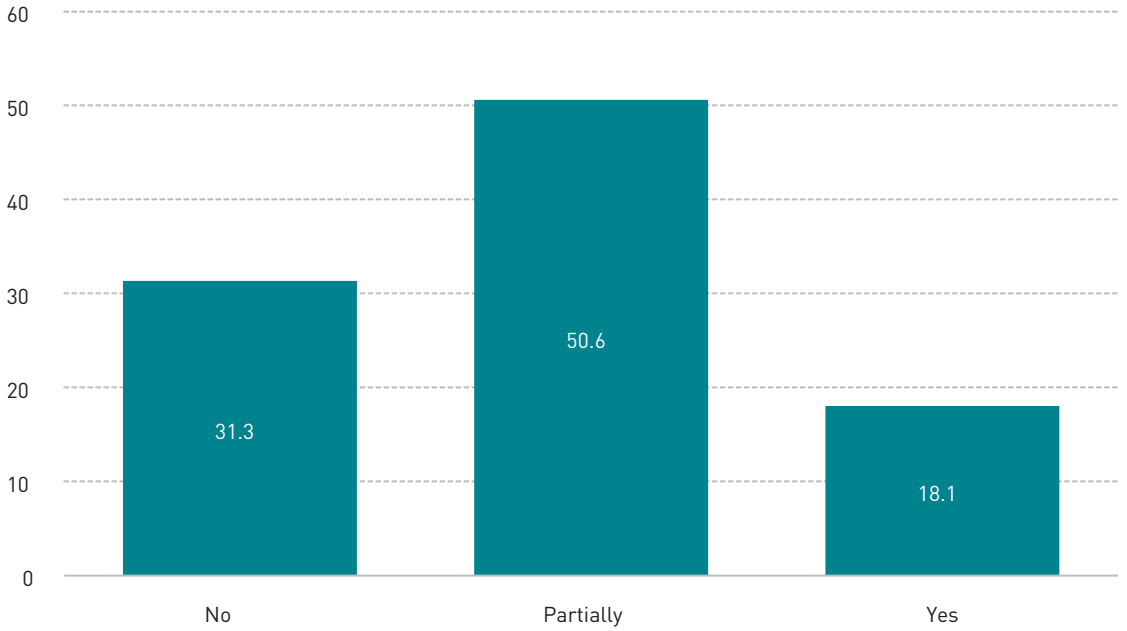


Figure 4 shows the situation of teachers having problems in accessing and using EBA. 31.3% of the teachers stated that they did not have any problems in accessing and using EBA, while 50.6% stated that they had partial problems and 18.1% stated that they had problems. Issues such as insufficiency of EBA infrastructure and weak internet connections caused problems for teachers to access and use EBA.

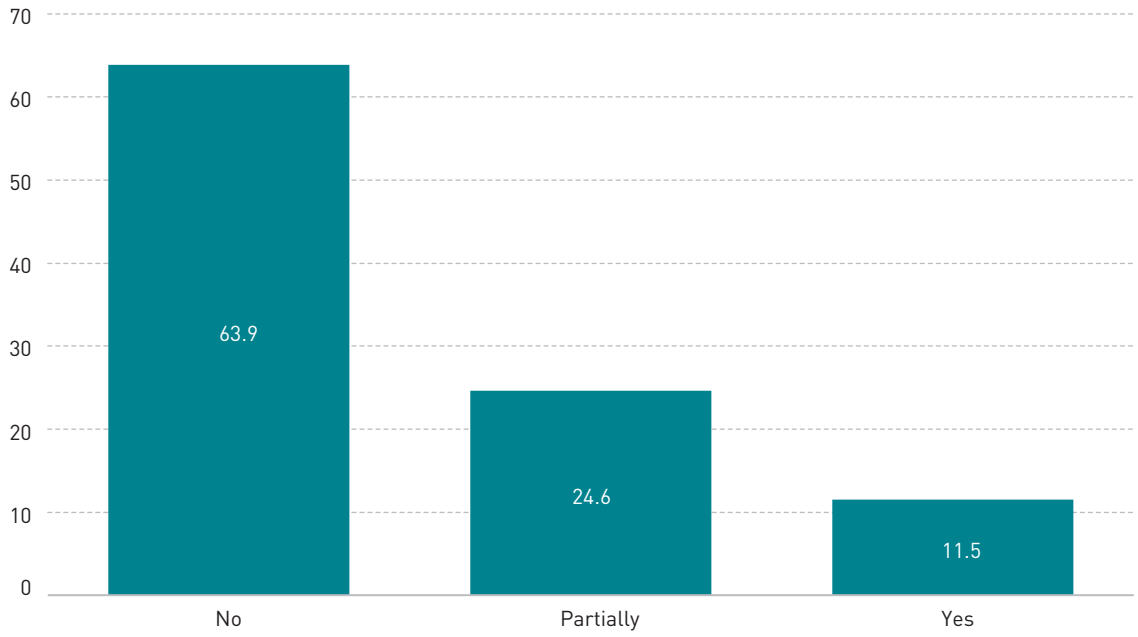
Table 7 shows how the problems teachers had with accessing and using EBA differs according to different variables. Accordingly, the situation of having problems in accessing and using EBA differs according to the levels and regions. While 22.7% of primary school teachers gave the answer yes, 49.1% said partially. 13.6% of secondary education teachers answered yes, 51.4% of said partially. Regarding regions, teachers in the Istanbul region have the least problems in accessing and using EBA (25.7%). The same rate is as the following for the other regions: West Marmara (35.6%), Central Anatolia (35.3%) and Northeast Anatolia (34.9%).

Table 7. *"Have you had any problems in accessing and using EBA?" The distribution of teachers' opinions on the question and independent variables (%) and chi-square analysis results.*

	Have you had any problems in accessing and using EBA?			χ^2	*sd*	*p*
	No	*Partially*	*Yes*			
Primary school	28,2	49,1	22,7			
Secondary school	30,1	53,0	16,9	85,84	4	,000*
Middle school	35,0	51,4	13,6			
Istanbul	25,7	55,8	18,5			
West Marmara	35,6	51,4	13,0			
Aegean	30,8	53,0	16,2			
East Marmara	31,7	51,4	16,9			
West Anatolia	31,0	50,7	18,3			
Mediterranean	29,8	50,8	19,4	42,30	22	,006*
Central Anatolia	35,3	47,6	17,0			
West Black Sea	34,3	46,2	19,5			
East Black Sea	31,2	50,6	18,3			
Northeast Anatolia	34,9	46,1	19,0			
Central East Anatolia	30,9	49,5	19,5			
South East Anatolia	32,5	48,7	18,8			

**P<,05.*

Figure 5. *Did you get help / support from MEB for live-synchronous education?*



In Figure 5, the situation of teachers receiving help / support from the Ministry of National Education for live-synchronous education in the distance education process is analyzed. 11.5% of the teachers stated that they received support from the Ministry of National Education for live-synchronous lessons, 63.9% stated they did not receive any support, and 24.6% stated that they received partial suppmean Education systems were unprepared due to the sudden closure of schools due to the pandemic at the start of the distance education process. In this process, the issue of the competence of the digital skills of teachers and the support of ministries in the world has been one of the most important discussion topics (Theachers Thematic Group & World Bank, 2020; UNESCO, 2020c).

In Table 8, the status of teachers' getting help / support from MEB for live / synchronous education is examined according to the educational level variable. 9.3% of primary school teachers stated that they received support from MEB for live synchronous lessons, while this rate was 11.5% in secondary schools and 14.1% in secondary education. 69% of the primary school teachers stated that they did not receive support or assistance for live-synchronous lessons from MEB, while 59.8% of secondary school teachers and 62.8% of secondary school teachers stated that they did not receive suppmean

Table 8. *"Did you get help / support from MEB for live-synchronous education?" The distribution of teachers' opinions on the question and independent variables (%) and chi-square analysis results*

	Did you get help / support from MEB for live-synchronous education?			χ^2	*sd*	*p*
	No	*Partially*	*Yes*			
Primary school	69,0	21,7	9,3			
Secondary school	62,8	25,6	11,5	54,36	4	,000*
Middle school	59,8	26,2	14,1			

**P<,05.*

3.3. The Concerns and Expectations of Teachers During the Coronavirus Period

In this section, the expectations of teachers for the opening of schools and their concerns about the transmission of coronavirus when schools are opened are analyzed and interpreted according to differing variables.

Figure 6. *Given the coronavirus situation, how safe do you think it would be to send kids back to schools for face-to-face classes this fall?*

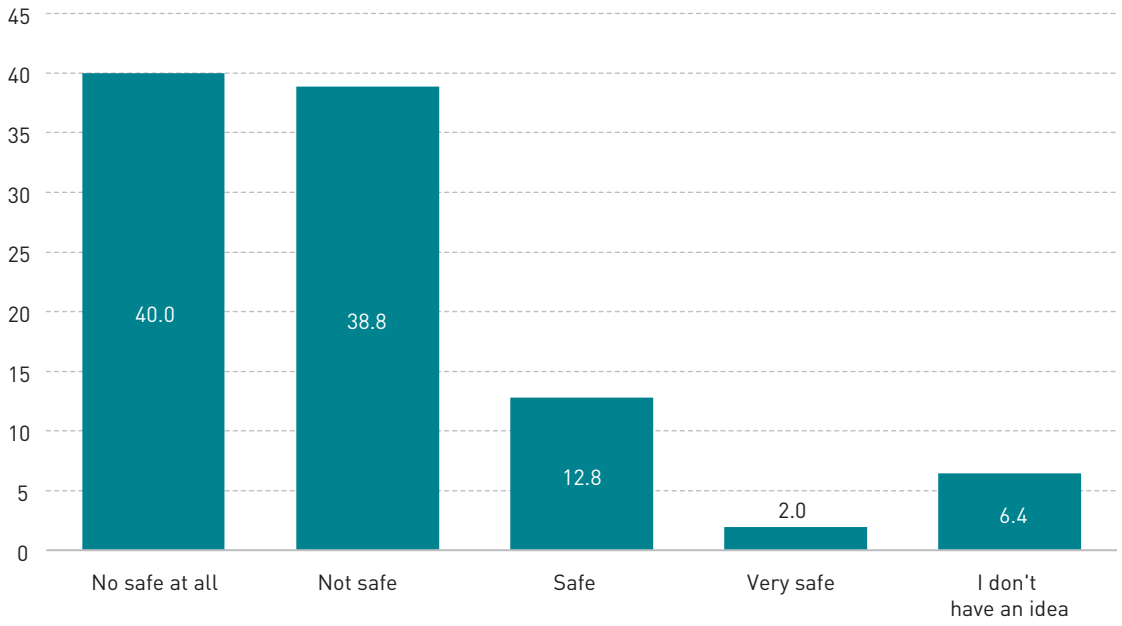


Figure 6 shows teachers' views on how safe it is to send children back to schools for face-to-face lessons this fall, given the coronavirus situation. 12.8% of the teachers found it safe to send students back to schools for face-to-face classes this fall, while 78.8% did not find it safe. According to this data, teachers think that schools will not be safe enough for children if schools are opened after September 21st.

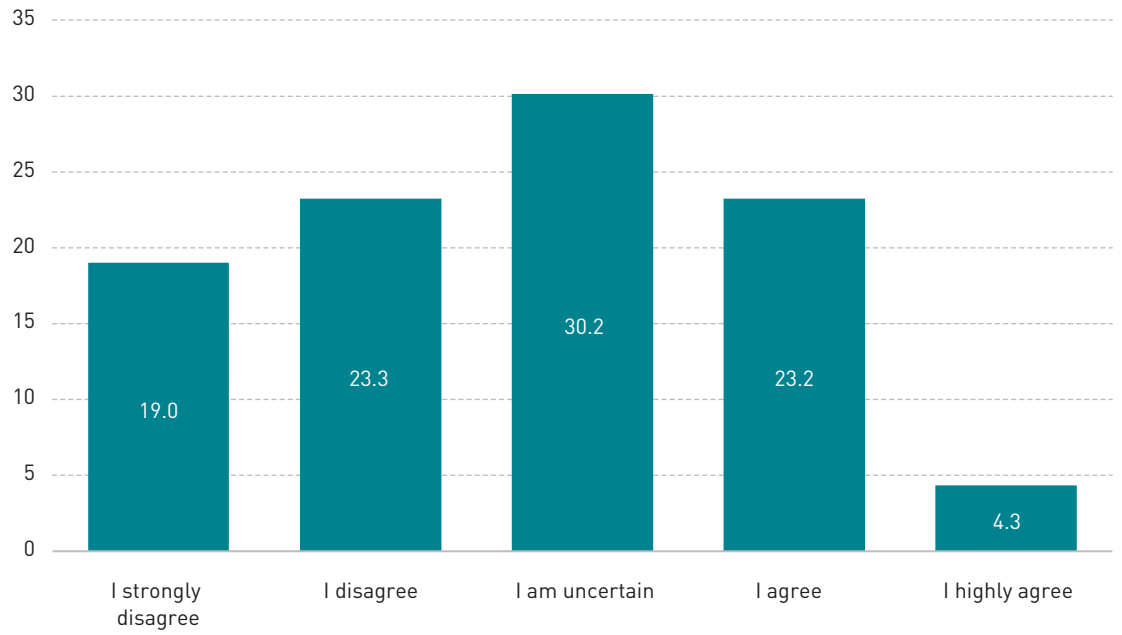
In Table 9, teachers' views on how safe it is to send children back to schools for face-to-face lessons this fall, given the coronavirus situation, are analyzed according to different variables. Teachers' views on the safety of sending children back to schools for face-to-face lessons differ, depending on gender, having children, age, professional experience, and regions. 83.9% of women and 73.8% of men, 81.7% of those who had one child, 79.4% of those did not have a child, and 76.3 of those with two or more children stated that it is not safe to send children to school for face-to-face education. Teachers aged 30 and under (80.1%) and 31-40 years old (81.5%), those with 11-15 years of experience (81.8%), 6-10 years of experience (81.7%) and those with 5 years or less (80.1%) stated that it is not safe to send children to school for face-to-face education more than other groups. Regarding regions, teachers in Central Anatolia (74.8%) are at a lower level than other regions; West Anatolia (81.5%) and Southeast Anatolia (81.2%) in stating that opening schools is not safe for children at the highest level.

Table 9. *"Given the coronavirus situation, how safe do you think it would be to send kids back to schools for face-to-face classes this fall?" The distribution of teachers' opinions on the question and independent variables (%) and chi-square analysis results.*

	Given the coronavirus situation, how safe do you think it would be to send kids back to schools for face-to-face classes this fall?					χ^2	*sd*	*p*
	No safe at all	*Not safe*	*Safe*	*Very safe*	*I don't have an idea*			
Female	45,2	38,7	9,3	,8	5,9	205,25	4	,000*
Male	34,8	39,0	16,2	3,1	6,9			
None	39,0	40,4	12,6	1,4	6,6	48,80	8	,000*
1 child	44,2	37,5	10,3	2,2	5,7			
2 or more children	38,1	38,2	14,7	2,4	6,7			
30 Age and under	41,7	38,4	12,1	1,8	5,9	79,28	12	,000*
31-40 Age	42,7	38,8	10,7	1,6	6,2			
41-50 Age	35,0	38,9	16,2	2,6	7,3			
51 Age and over	35,5	40,5	15,4	2,3	6,3			
5 year and under	41,3	38,8	11,9	1,5	6,5	78,16	16	,000*
6-10 years	43,0	38,7	10,6	2,0	5,7			
11-15 years	41,7	40,1	11,2	1,6	5,5			
16-20 years	37,1	38,3	14,1	2,3	8,2			
21 years and above	35,3	38,3	17,0	2,5	6,8			
Istanbul	38,9	40,0	11,8	,9	8,3	80,46	44	,000*
West Marmara	37,7	41,4	13,5	2,5	4,9			
Aegean	42,6	37,9	12,3	1,9	5,3			
East Marmara	38,7	38,6	13,4	2,5	6,8			
West Anatolia	43,5	37,8	11,9	1,8	5,0			
Mediterranean	38,1	40,7	12,7	2,6	6,0			
Central Anatolia	32,1	42,7	16,2	2,5	6,5			
West Black Sea	36,9	39,3	13,8	2,0	7,9			
East Black Sea	39,3	37,1	16,2	1,5	5,9			
Northeast Anatolia	39,1	37,3	13,5	2,7	7,4			
Central East Anatolia	38,4	40,3	12,4	2,4	6,5			
South East Anatolia	45,6	35,6	11,2	1,2	6,3			

**P<,05.*

Figure 7. *"When schools are opened to face-to-face education, I think that necessary measures will be taken to prevent the spread of coronavirus." What is your opinion about the statement?*



In Figure 7, teachers' opinions on taking necessary measures to prevent the spread of coronavirus are shown when schools are opened to face-to-face education. 42.3% of teachers think that when schools are opened to face-to-face education, necessary measures will not be taken to prevent the spread of coronavirus. 27.5% think that the necessary measures will be taken. Almost one third of the teachers stated that they are undecided about this issue. The most important factors that reduce the spread of the pandemic is social distance, hygiene and mask applications. There is a guide prepared by the Ministry of Health and the Ministry of National Education on the implementation of these measures. However, according to this data, it is seen that a significant part of the teachers are insecure about full compliance with these guidelines and necessary measures to be taken.

Table 10. *"I think that necessary measures will be taken to prevent the spread of coronavirus when schools are opened to face-to-face education" The distribution of teachers' opinions on the question and independent variables (%) and chi-square analysis results*

	"I think that necessary measures will be taken to prevent the spread of coronavirus when schools are opened to face-to-face education"					χ^2	*sd*	*p*
	I strongly disagree	*I disagree*	*I am uncertain*	*I agree*	*I highly agree*			
Female	20,9	25,0	32,1	19,0	3,0	146,47	4	,000*
Male	17,2	21,5	28,3	27,4	5,7			
30 Age and under	20,0	22,7	31,7	21,4	4,3	45,64	12	,000*
31-40 Age	20,5	23,0	30,4	22,2	3,9			
41-50 Age	16,2	23,4	29,4	25,7	5,3			
51 Age and over	16,6	26,3	26,6	26,6	3,8			
5 year and under	19,4	22,4	32,5	21,6	4,2	38,44	16	,001*
6-10 years	20,6	22,9	30,5	21,6	4,4			
11-15 years	20,2	23,0	30,4	22,2	4,1			
16-20 years	17,6	23,4	28,3	25,9	4,9			
21 years and above	16,7	24,8	28,1	26,1	4,3			
I use shuttles/public transportation	24,6	24,9	30,4	16,6	3,5	173,53	4	,000*
I don't use shuttles/public transportation	16,2	22,4	30,0	26,6	4,8			
Primary school	20,7	23,8	30,9	20,8	3,9	33,94	8	,000*
Secondary school	18,7	23,0	30,5	23,5	4,3			
Middle School	17,3	23,2	28,1	26,3	5,1			
Istanbul	18,9	22,9	32,8	21,5	3,8	137,00	44	,000*
West Marmara	17,8	27,3	24,8	23,6	6,4			
Aegean	21,7	22,8	26,0	25,9	3,5			
East Marmara	17,9	22,2	32,2	22,1	5,7			
West Anatolia	17,6	25,1	33,2	20,1	4,0			
Mediterranean	16,2	24,9	31,7	23,0	4,2			
Central Anatolia	14,1	22,9	26,5	31,0	5,6			
West Black Sea	16,5	23,3	29,7	25,3	5,2			
East Black Sea	13,6	20,6	35,3	25,0	5,5			
Northeast Anatolia	17,7	21,6	28,5	26,5	5,7			
Central East Anatolia	21,3	22,9	31,4	20,5	3,9			
South East Anatolia	25,3	22,3	28,9	20,4	3,0			

**P<,05.*

In Table 10, the opinions of teachers about taking necessary measures to prevent the spread of coronavirus when schools are opened face to face are examined according to different variables. Accordingly, opinions differ according to gender, age, professional experience, use of service / public transportation while going to school, level and region, when schools are opened, that sufficient measures will be taken to prevent the spread of the virus. Female teachers (45.9%), compared to men (38.7%), teachers in the 31-40 age group (43.5%)

compared to other age groups, teachers with 6-10 years of professional experience (43.5%) teachers who come to school by shuttle or public transportation (49.5%) compared to those with other professional experience, primary school teachers (44.5%) compared to other level teachers, teachers in the Southeastern Anatolia region (47.6%) stated at a higher rate that they did not think that the necessary measures would be taken according to the regions.

Figure 8. *What is your opinion about the statement, "I worry that the number of coronavirus cases will increase when schools are opened"?*

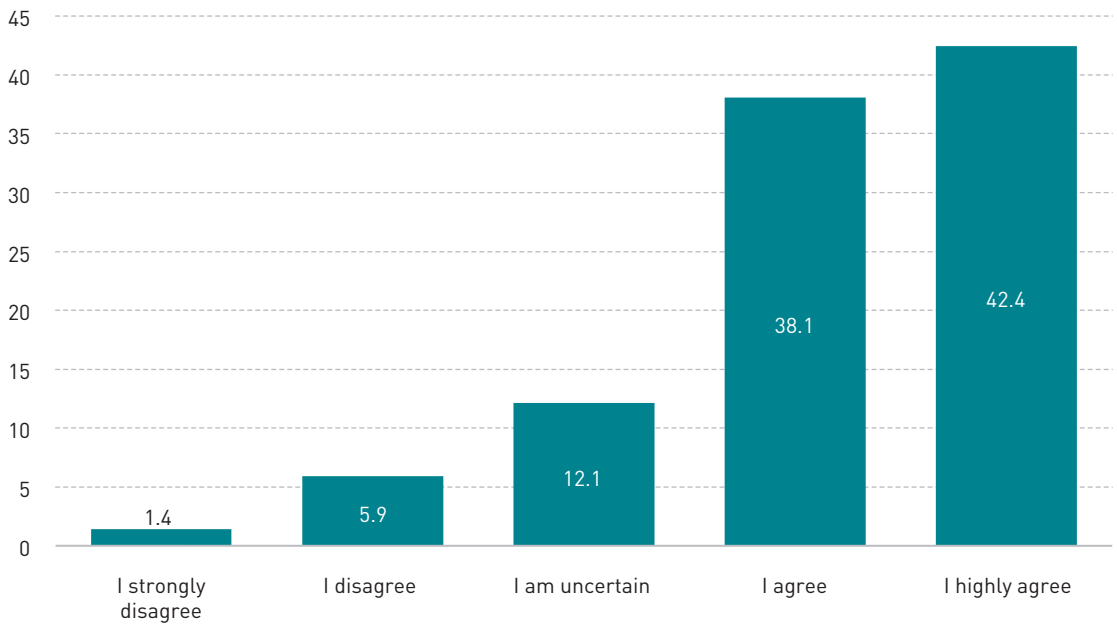


Figure 8 shows that teachers are worried about an increase in the number of coronavirus cases when schools are opened. It was observed that 80.5% of the teachers were worried that the number of cases would increase with the opening of schools and 7.3% did not worry. This data shows that there is serious concern among teachers that the number of cases will increase with the opening of schools. One of the main sources of concern, as seen in the previous question, is the concern that the necessary measures will not be taken sufficiently.

Table 11 examines the situation of teachers worrying about the increase in the number of coronavirus cases when schools are opened according to different variables. It is seen that the situation of worrying about the increase in the number of coronavirus cases varies according to gender, age, professional experience, school service or public transportation and regions. Concerning the increase in the number of coronavirus cases when schools are opened; female teachers (86.1%) compared to males (75%), teachers between the ages of 31-40 (83.9%) compared to other age groups, teachers with 6-10 years of experience (83.6%) compared to other professional experience categories. Teachers who come to school by shuttle or public transportation (86.2%) worry on this matter much more than those who do not come by bus or public transport, whereas teachers in the Southeastern Anatolia region (83.2%) are much higher than those in other regions.

Table 11. *"I worry that the number of coronavirus cases will increase when schools are opened" The distribution of teachers' opinions on the question and independent variables (%) and chi-square analysis results.*

	"I worry that the number of coronavirus cases will increase when schools are opened?					χ^2	*sd*	*p*
	I strongly disagree	*I disagree*	*I am uncertain*	*I agree*	*I highly agree*			
Female	0,4	3,5	9,9	37,0	49,1	279,71	4	,000*
Male	2,4	8,3	14,2	39,2	35,8			
30 Age and under	0,9	4,0	12,4	36,4	46,3	191,12	12	,000*
31-40 Age	1,3	4,3	10,5	38,1	45,8			
41-50 Age	1,8	9,1	14,1	39,0	35,9			
51 Age and over	2,2	11,2	13,8	40,6	32,2			
5 year and under	,9	4,2	12,9	37,4	44,7	164,24	16	,001*
6-10 years	1,3	4,2	10,9	37,0	46,6			
11-15 years	1,6	5,1	9,8	38,7	44,9			
16-20 years	1,7	6,1	13,1	40,4	38,6			
21 years and above	1,8	10,7	14,2	38,1	35,1			
I use shuttles/public transportation	1,0	3,5	9,3	35,8	50,4	155,37	4	,000*
I don't use shuttles/public transportation	1,6	7,2	13,5	39,3	38,4			
Istanbul	0,6	4,7	15,9	35,3	43,4	74,17	44	,003*
West Marmara	1,5	6,4	10,1	42,3	39,6			
Aegean	1,5	5,0	11,1	36,5	45,9			
East Marmara	2,1	6,9	12,0	40,1	38,9			
West Anatolia	1,5	5,3	11,2	38,6	43,4			
Mediterranean	1,5	6,8	12,8	37,7	41,2			
Central Anatolia	2,2	7,6	11,9	38,9	39,5			
West Black Sea	1,5	7,1	13,8	37,9	39,6			
East Black Sea	0,4	6,3	10,7	43,0	39,7			
Northeast Anatolia	1,0	6,4	11,5	40,8	40,3			
Central East Anatolia	0,9	6,3	12,0	40,1	40,7			
South East Anatolia	1,5	5,0	10,4	36,4	46,8			

**P<,05.*

Figure 9. *"When schools open, I worry that children will carry coronavirus to teachers." What is your opinion about the statement?*

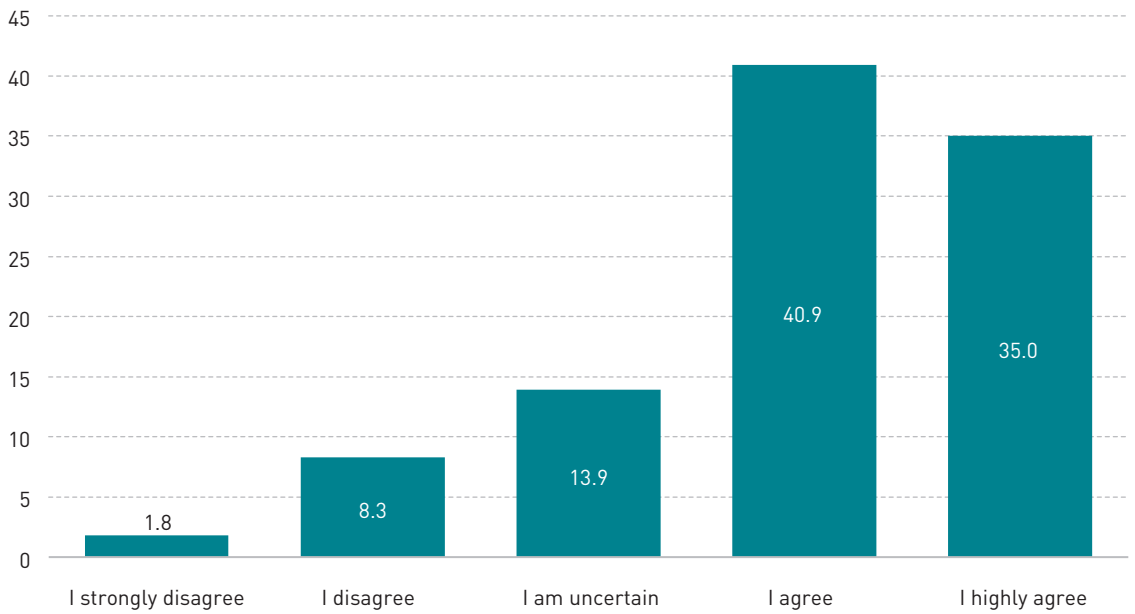


Figure 9 shows the opinions of teachers about the concern of children infecting teachers when schools are opened. 75.9% of teachers stated that they are concerned students may infect them when the schools were opened, and 10.1% said they did not agree with this idea. This data clearly shows that teachers are concerned about the transmission of the virus from students.

Table 12 shows teachers' opinions about the anxiety of children infecting teachers with viruses when schools are opened according to different variables. Teachers who are concerned about children infecting teachers with viruses differ according to gender, age, professional experience, the status of going to school by service or public transportation, and the level. Teachers are worried about children infecting teachers when schools are opened for women (81.2%) compared to men (70.7%), teachers aged 31-40 (78.3%) compared to other age categories, teachers with 6-10 years of experience (78.6%) compared to teachers in other professional experience categories, those who use service or public transportation (81%) are at a much higher level than those who do not.

Table 12. *"I worry that when schools open, children will carry coronavirus to teachers" The distribution of teachers' opinions on the question and independent variables (%) and chi-square analysis results*

	I worry that when schools open, children will carry coronavirus to teachers					χ^2	*sd*	*p*
	I strongly disagree	*I disagree*	*I am uncertain*	*I agree*	*I highly agree*			
Female	0,8	5,8	12,2	40,9	40,3	213,27	4	,000*
Male	2,8	10,8	15,7	40,9	29,8			
30 Age and under	1,4	6,6	14,3	41,0	36,7	91,54	12	,000*
31-40 Age	1,5	7,1	13,0	40,9	37,4			
41-50 Age	2,4	10,7	15,0	41,4	30,5			
51 Age and over	2,9	13,1	14,8	38,6	30,6			
5 year and under	1,3	7,2	14,6	41,4	35,5	75,88	16	,001*
6-10 years	1,7	6,4	13,3	40,2	38,4			
11-15 years	1,9	7,6	12,5	41,6	36,4			
16-20 years	1,9	9,5	14,7	42,0	31,9			
21 years and above	2,5	11,8	14,7	39,8	31,2			
I use shuttles/public transportation	1,3	6,3	11,4	39,0	42,0	117,22	4	,000*
I don't use shuttles/ public transportation	2,1	9,3	15,2	41,9	31,5			
Primary school	1,5	7,2	13,5	40,7	37,1	26,10	8	,000*
Secondary school	1,9	8,4	14,2	40,3	35,2			
Middle School	1,9	10,1	14,1	42,0	32,0			

**P<,05.*

Figure 10. *"If schools are not opened and distance education (EBA TV) is done, I think children will fall behind in their education." What is your opinion about the statement?*

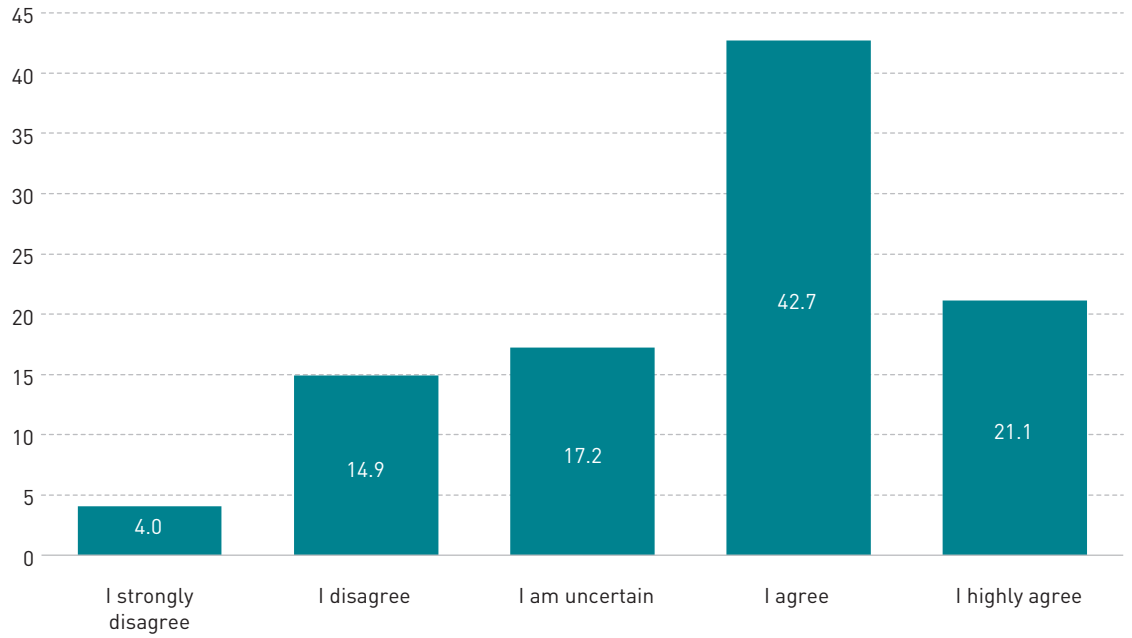


Figure 10 shows the opinions of the teachers about the status of children withdrawing from their education schools are not opened and distance education is continued. 63.8% of the teachers stated that students would be withdrawn from their education is schools are not opened and distance education is continued, while 18.9% of them did not agree with this idea.

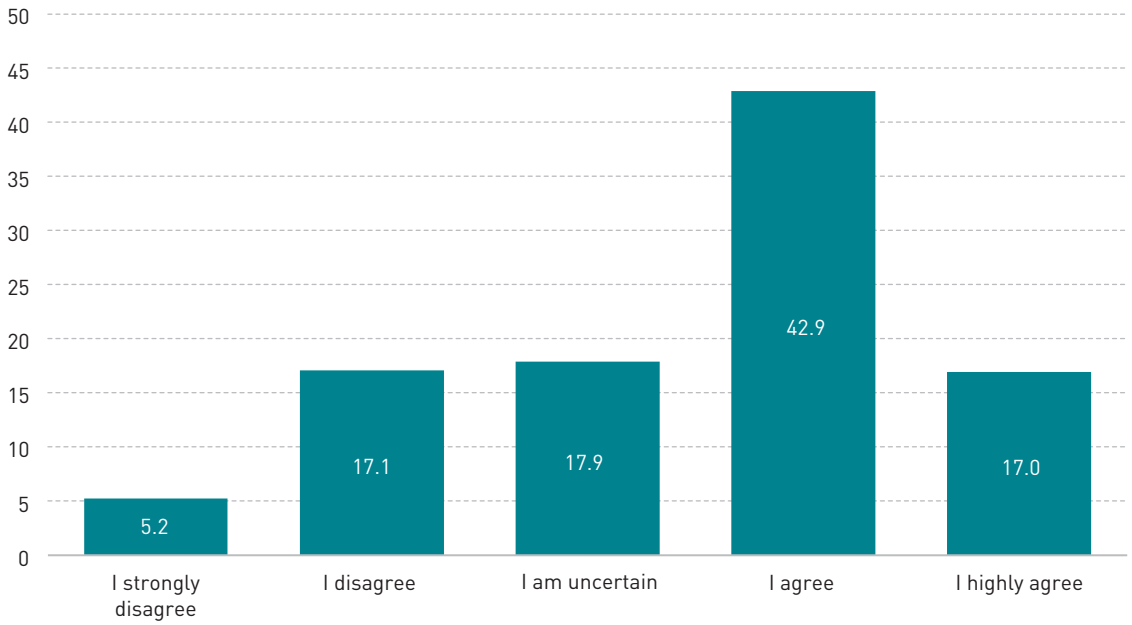
Table 13 examines the opinions of the teachers about the status of children being withdrawn from their education if the schools are not opened and if the distance education is continued according to different variables. According to this, teachers' opinions about the status of children falling behind from their education when schools are not opened and distance education is carried out vary according to gender, having children, age, professional experience and regions. Male teachers (68.4%) compared to women (59.2%), teachers with two or more children (68.3%) compared to those without children (62.4%) and those with only one child (60%), 41 -Teachers between the ages of 50 (67.2%) compared to teachers in other age groups, teachers with 16-20 years of professional experience (67.2%) compared to those in the other professional experience category (71%) think that in case schools are not opened and distance education is continues, children will fall behind in their education.

Table 13. *"If schools are not opened and distance education (EBA TV) is done, I think children will fall behind in their education" The distribution of teachers' opinions on the question and independent variables (%) and chi-square analysis results*

	If schools are not opened and distance education (EBA TV) is done, I think children will fall behind in their education					χ^2	*sd*	*p*
	I strongly disagree	*I disagree*	*I am uncertain*	*I agree*	*I highly agree*			
Female	3,8	17,0	19,9	40,8	18,4	106,84	4	,000*
Male	4,3	12,8	14,5	44,6	23,8			
None	4,1	14,8	19,0	42,2	19,9	58,01	8	,000*
1 child	4,6	17,5	17,8	40,4	19,6			
2 or more children	3,6	13,1	15,0	44,8	23,5			
30 Age and under	3,4	13,9	20,2	40,4	22,0	64,37	12	,000*
31-40 Age	4,5	15,3	17,5	41,4	21,3			
41-50 Age	3,5	14,8	14,6	45,2	22,0			
51 Age and over	5,4	16,2	15,1	49,4	14,0			
5 year and under	3,2	13,5	20,4	40,3	22,5	68,79	16	,001*
6-10 years	4,1	16,4	18,5	41,1	19,9			
11-15 years	4,7	14,3	17,1	41,4	22,5			
16-20 years	4,2	14,3	13,7	45,3	22,5			
21 years and above	4,1	15,6	14,5	46,8	18,9			
Istanbul	4,9	15,9	18,4	42,3	18,4	124,00	44	,000*
West Marmara	4,0	21,5	13,8	40,5	20,2			
Aegean	4,8	18,8	15,9	42,0	18,6			
East Marmara	4,5	15,1	18,1	40,3	21,9			
West Anatolia	4,8	17,8	19,3	42,9	15,2			
Mediterranean	3,8	13,2	16,7	45,1	21,3			
Central Anatolia	2,7	12,8	13,5	45,2	25,8			
West Black Sea	4,6	13,2	16,0	43,0	23,3			
East Black Sea	1,8	14,0	16,9	44,5	22,8			
Northeast Anatolia	2,9	10,3	16,7	41,5	28,5			
Central East Anatolia	3,1	10,0	20,3	41,0	25,5			
South East Anatolia	3,7	14,2	18,1	42,8	21,2			

**P<,05.*

Figure 11. *"If schools are not opened and distance education (EBA TV) is done, I think children will be affected emotionally." What is your opinion about the statement?*



In Figure 11 shows the teachers' opinions about the negative emotional impact on children if schools are not opened and distance education (EBA TV) is continued. 59.9% of the teachers stated that children would be affected emotionally negatively during the period when schools were not opened and distance education was performed, while 22.3% stated that they would not be affected. Institutions such as the World Bank, UNESCO, and OECD have emphasized that children were affected negatively socio-emotionally during the school closure and distance education process. It is defined as an issue that negatively affects children, especially when children do not spend time with their peers at school (Reimers & Schleicher, 2020; UNES-CO 2020a, 2020b; World Bank, 2020a).

Table 14 examines teachers' opinions on the negative emotional impact on children if schools are not opened and distance education (EBA TV) is continues according to different variables. According to this, if schools are not opened and distance education (EBA TV) is continued, the opinions of the teachers about the negative impact emotional on children differ according to gender, having children, age and professional experience. Male teachers (62.5%) compared to female teachers (57.1%), teachers with two or more children (63.3%) compared to those without a child and one child, between 41-50 years old (61%) according to other age categories and teachers with 11-15 to 16-20 years of experience (60.5%) compared to teachers with other professional experience, think that students would be negatively emotionally impacted if schools are not opened and distance education (EBA TV) continues.

Table 14. *"If schools are not opened and distance education (EBA TV) is done, I think children will be emotionally affected negatively." The distribution of teachers' opinions on the question and independent variables (%) and chi-square analysis results*

	If schools are not opened and distance education (EBA TV) is done, I think children will be emotionally affected negatively					χ^2	*sd*	*p*
	I strongly disagree	*I disagree*	*I am uncertain*	*I agree*	*I highly agree*			
Female	5,3	18,2	19,4	41,7	15,4	33,24	4	,000*
Male	5,2	16,0	16,3	44,0	18,5			
None	4,9	16,7	19,9	42,4	16,1			
1 child	6,2	18,7	18,1	41,2	15,8	41,16	8	,000*
2 or more children	4,8	16,3	15,7	44,6	18,7			
30 Age and under	4,2	15,3	20,8	41,8	17,9			
31-40 Age	5,9	17,2	17,5	42,7	16,8	49,91	12	,000*
41-50 Age	5,0	17,6	16,4	43,1	18,0			
51 Age and over	5,4	20,6	15,8	46,9	11,2			
5 year and under	4,9	14,9	21,1	41,2	17,8			
6-10 years	4,8	17,8	18,8	43,0	15,7			
11-15 years	5,7	17,3	16,4	41,4	19,1	48,66	16	,001*
16-20 years	6,0	17,0	16,5	44,7	15,8			
21 years and above	5,2	18,4	15,2	44,7	16,4			

**P<,05.*

Anxiety Score

The first six research questions discussed in this section express the anxiety of teachers. Besides the analysis of these questions, the anxiety scores of the teachers were formed by starting from all of these questions. The created anxiety score was analyzed according to different variables. In Table 15, it is seen that the anxiety score averages of the teachers differ according to gender and whether they use buses or public transportation while going to school. According to female teachers, teachers using buses or public transportation while going to school are more anxious than teachers who do not.

Table 15. *Independent samples t test results related to the variables of teachers' anxiety score, gender and using service / public transportation while going to school*

Teachers	*n*	*Mean*	*S.D*	*t*	*sd*	*p*
Female	4.523	3,8364	,486	13,382	8743,9	0,000*
Male	4.541	3,6842	,592			
I use shuttles/public transportation	3.031	3,8387	,506	10,081	6660,5	0,000*
I don't use shuttles/public transportation	6.033	3,7207	,562			

**P<,05.*

In Table 16, it is seen that the anxiety score averages of the teachers differ in at least one or more groups according to age, professional seniority and level. The Scheffe Test was conducted to determine in which group or groups this average anxiety score differed. According to the results of the analysis, the anxiety levels of teachers between the ages of 30 and under and between 31-40 year is higher than other age groups. The anxiety level of teachers with 15 years and less professional seniority is more compared to teachers with 16 years or more. The anxiety level of primary and secondary school teachers is higher than teachers at secondary education level.

Table 16. *One-way analysis of variance (ANOVA) results of teachers' anxiety score for variables of age, total working time, and school type*

Teachers	*n*	*Mean*	*S.D*	*C.V*	*KT*	*sd*	*KO*	*F*	*p*
30 Age and under	2110	3,8078	,52033	G.rası	35,924	3	11,975		
31-40 Age	4014	3,8000	,53022	G.İçi	2672,972	9060	,295		
41-50 Age	2290	3,6846	,57417		2708,896	9063		40,589	,000
51 Age and over	650	3,6259	,58112	Total					
Total	9064	3,7602	,54671						
5 year and under	2082	3,7976	,51999	G.Arası	26,495	4	6,624		
6-10 years	2223	3,7962	,53497	G.İçi	2682,401	9059	,296		
11-15 years	1692	3,7976	,53710	Total	2708,896	9063		22,370	,000
16-20 years	1276	3,7206	,56095						
21 years and over	1791	3,6647	,57645						
Total	9064	3,7602	,54671						
Primary school	2807	3,7953	,54163	G.rası	11,349	2	3,783		
Secondary school	3291	3,7681	,54469	G.İçi	2697,547	8592	,298	12,706	,000
Middle school	2497	3,7057	,55043	Total	2708,896	8594			
Total	8595	3,7846	,55089						

**P<,05.*

Figure 12. *When do you think schools should be opened so that children can go to schools safely?*

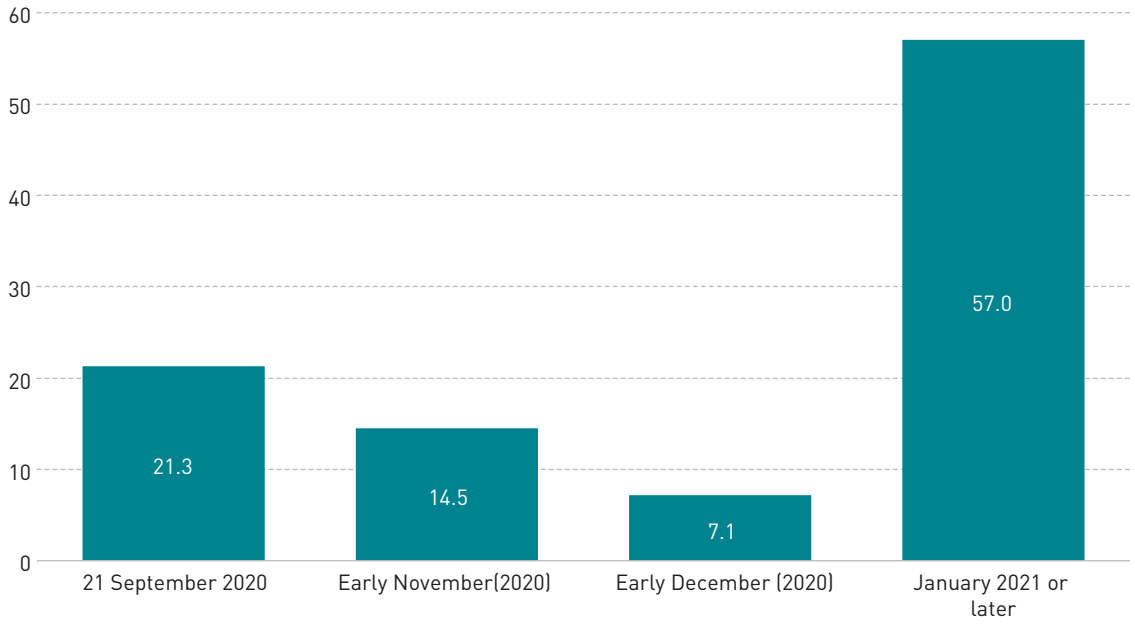


Figure 12 shows the opinions teachers have about when schools should be opened so that children can go to schools safely. 57% of teachers stated that schools should be opened on January 2021 and after in order for children to go to schools safely. 21.3% of teachers said schools should be opened on September 21, 14.5% said in November 2020 and 7% stated that schools should be opened at the beginning of December 2020.

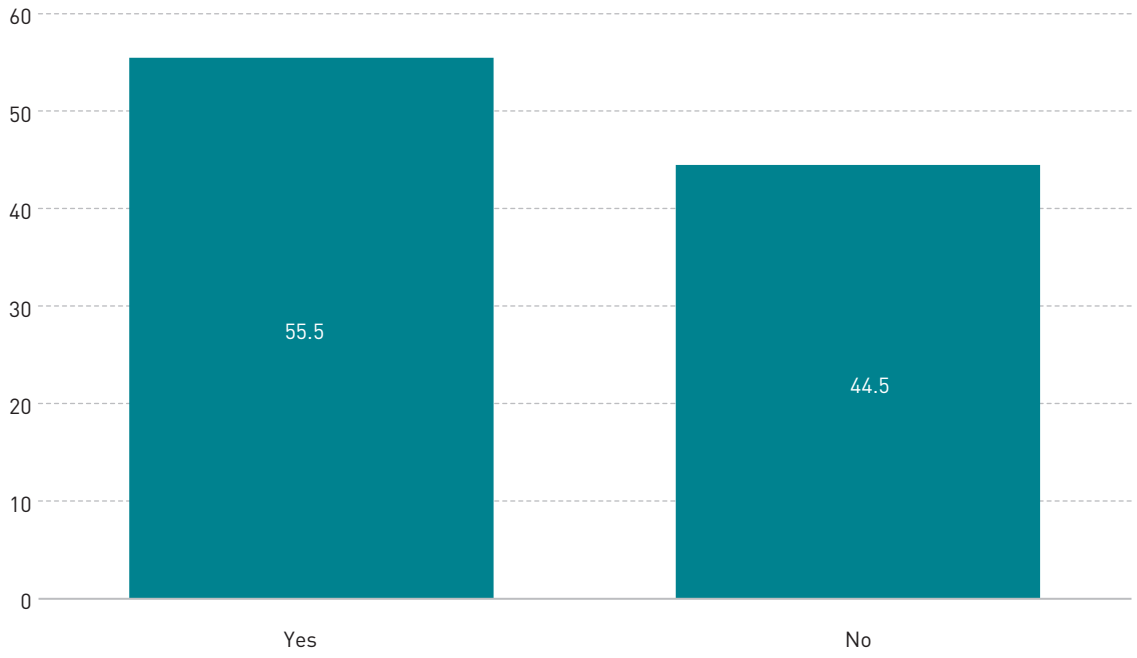
Table 17 examines how the opinions teachers have about when schools should be opened so that children can safely go to schools differ according to different variables. These opinions differ according to gender, number of children, age and professional experience. 61.9% of female teachers said schools should be opened in January 2021 or later, and 17% said on September 21. 55.2% of male teachers said in January 2021 or after, while 25.7% said September 21st. 24.5% of teachers who have two or more children, 18.1% of teachers who have one child, and 20.5% of teachers who do not have children stated September 21 as the safe opening date for schools. 56.2% of teachers with two or more children, 60.8% of teachers with one child and 55.2% of teachers without children stated that it would be safe to open schools in January 2021 or later. Teachers between the ages of 41-50 and those over the age of 51 stated that would be safe to open schools on September 21st, at a higher rate than teachers between the ages of 31-40 and 30 and below. Teachers between the ages of 41-50 and those over the age of 51, at a lower rate than teachers aged 31-40 and 30 and under stated that it was safe to open schools on or after January 2021. Considering professional experience, teachers with a professional seniority of 21 years or more (27.5%) stated that would be safe to open schools on September 21, at a much higher right than teachers in all other professional experience categories. Teachers in this professional seniority group (51%) stated at a much lower rate than teachers in other experience categories that it would be safe to open schools in January 2021 and beyond.

Table 17. *"When do you think schools should be opened so that children can go to schools safely?" The distribution of teachers' opinions on the question and independent variables (%) and chi-square analysis results*

	When do you think schools should be opened so that children can go to schools safely?				χ^2	*sd*	*p*
	21 September 2020	*Early November (2020)*	*Early December (2020)*	*January 2021 or later*			
Female	17,0	14,2	7,0	61,9	118,14	3	,000*
Male	25,7	14,8	7,3	52,2			
None	20,5	16,2	8,1	55,2			
1 child	18,1	13,9	7,2	60,8	56,35	6	,000*
2 or more children	24,5	13,2	6,1	56,2			
30 Age and under	18,2	15,2	8,6	58,0			
31-40 Age	19,2	13,1	6,6	61,1	108,56	9	,000*
41-50 Age	26,5	15,6	7,1	50,8			
51 Age and over	26,3	17,2	5,5	50,9			
5 year and under	20,0	14,6	8,4	57,0			
6-10 years	18,4	13,5	7,3	60,8			
11-15 years	18,7	13,7	6,6	61,1	88,57	12	,000*
16-20 years	23,3	16,1	7,0	53,7			
21 years and above	27,5	15,5	6,1	51,0			

**P<,05.*

Figure 13. *In line with the recommendation of the Scientific Committee, do you think that MEB will offer gradual and less frequent faceto-face education in public schools as of September 21, 2020?*



In Figure 13, in line with the recommendation of the Scientific Committee, the opinions of the teachers that the Ministry of National Education will offer face-to-face education in state schools as of September 21, 2020, are shown. 55% of teachers think that MEB will offer face-to-face education in state schools as of 21 September 2020, in line with the recommendation of the Scientific Committee, while 44.5% do not think that the MEB will offer face-to-face education.

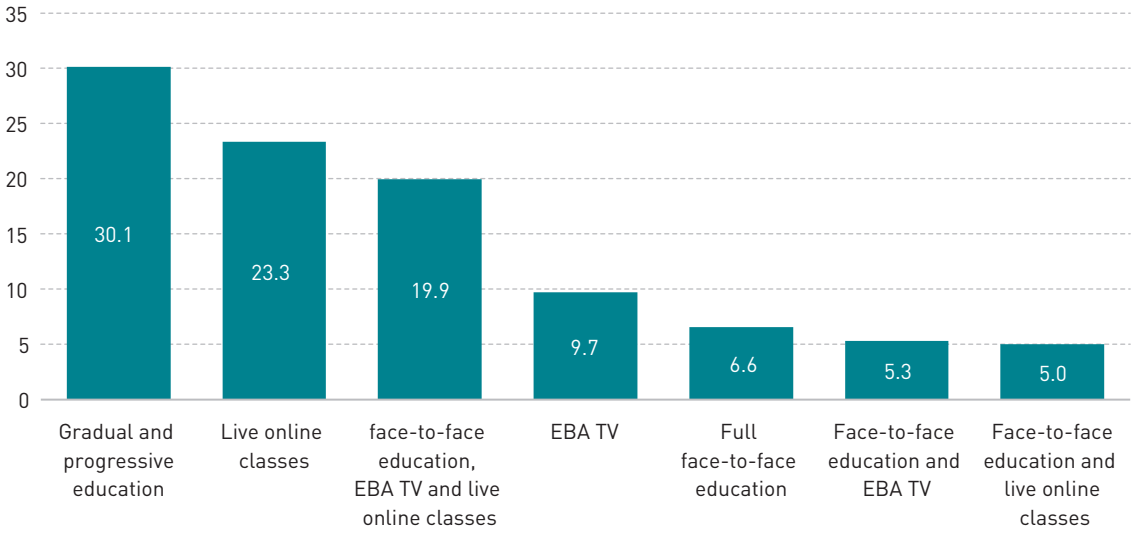
Table 18 examines the opinions of teachers on whether MEB will offer face-to-face education in state schools as of September 21, 2020 in a gradual and progressive manners in line with the recommendation of the Scientific Committee according to the education level variable. 58.1% of secondary school teachers, 55.8% of secondary school teachers and 53.9% of primary school teachers, think that MEB will offer face-to-face education in public schools as of 21 September 2020.

Table 18. *"In line with the recommendation of the Scientific Committee, do you think that MEB will offer gradual and less frequent face-to-face education as of September 21, 2020 in public schools?" The distribution of teachers' opinions on the question and independent variables (%) and chi-square analysis results*

	In line with the recommendation of the Scientific Committee, do you think that MEB will offer gradual and less frequent face-to-face education as of September 21, 2020 in public schools?		χ^2	*sd*	*p*
	Yes	*No*			
Primary school	53,9	46,1			
Secondary school	55,8	44,2	16,15	2	,001*
Middle school	58,1	41,9			

**P<,05.*

Figure 14. *What kind of education do you think should be offered to students in public schools affiliated to MEB as of September 21, 2020?*



In Figure 14, the opinions of teachers on how to provide students with an education in public schools affiliated to the Ministry of National Education as of September 21, 2020 are shown.

30.1% of teachers said MEB should offer students progressive and gradual education, 23.3% said online live lectures, 19.9% said face-to-face education along with EBA TV, 9.7% said EBA TV, 6.6% said full face-to-face education, 5.3% said face-to-face education and EBA TV, and 5% said face-to-face education and online live lessons.

Parent Profile

In this section, general profiles of the parents surveyed are given . These include the region they live in, their gender, the number of children they have , their age and education status, the type of school of the child goes to, the status of having a computer and internet at home, and the use of shuttles / public transportation while going to school.

Within the scope of the research, a total of 20,052 parents in 80 provinces participated in the survey. According to regions, the number of students in formal education in public schools have been weighed. Table 19 shows the distribution of parents by region. Looking at this sample, we can see that the distribution of parents is highest in Istanbul (16.3%), Southeast Anatolia (16%) and Mediterranean (14.1%) regions. It is striking that the regions with the least participation of parents are Eastern Black Sea (2.8%), Northeast Anatolia (3.2%) and West Marmara (3.4%).

Table 19. *Distribution of Parents by Region*

	n	*%*
Istanbul	3262	16,3
West Marmara	675	3,4
Aegean	2132	10,6
East Marmara	1797	9,0
West Anatolia	1768	8,8
Mediterranean	2819	14,1
Central Anatolia	1008	5,0
West Black Sea	987	4,9
East Black Sea	558	2,8
Northeast Anatolia	643	3,2
Central East Anatolia	1200	6,0
South East Anatolia	3203	16,0
Total	20052	100,0

Demographic information including gender, number of children, age and education status of

parents is given in Table 20. According to the data obtained, 67.1% of the parents participating in the research are women and 32.9% are men. Questions such as the number of children, age and education level were asked to parents aiming to see the effects of parents on children's education processes more clearly and to reveal the significance of these differences. 69.1% of the parents participating in the study have one child, 24.6% two children, 5.5% three children and 0.8% have four or more children in primary, secondary, or high school education. Looking at the age distribution, 10.4% of the parents are between the ages of 30 and under, 54.7% are between the ages of 31-40, 30.9% are between the ages of 41-50 and 3.9% are aged 51 and over. When the percentages of parents according to their education level are considered, 24.2% of them have primary school degrees, 19.1% have secondary school / primary education, 26.7% went to high school, 26.8% are university (associate / undergraduate) graduates and 3%, have master's / doctoral degrees.

Table 20. *Demographic chara cteristics of the parents (gender, number of children, age and education level)*

Gender	*n*	*%*
Female	13445	67,1
Male	6607	32,9
Total	20052	100,0
Number of children attending primary school, secondary school and middle school	*n*	*%*
1 child	13854	69,1
2 child	4936	24,6
3 child	1095	5,5
4 and above child	166	,8
Total	20052	100,0
Age	*n*	*%*
30 Age and under	2093	10,4
31-40 Age	10978	54,7
41-50 Age	6193	30,9
51 Age and over	788	3,9
Total	20052	100,0
Education statu	*n*	*%*
Primary school	4846	24,2
Secondary school / Primary school	3822	19,1
High school	5362	26,7
Universty (BA)	5370	26,8
Masters/PhD	652	3,3
Total	20052	100,0

In Table 21, answers to the questions about the type of school of their child / children attends, the status of having a computer and internet at home, and their use of shuttles / public transportation while going to school are given. According to the table, the school types of children (school type of the older child is considered if there is more than one) are as follows. 36.5% attend secondary school, 27.4% primary school, 13.8% Anatolian high school, 5.9% imam hatip schools, 5% are in Anatolian imam hatip high schools, 4.3% are in Anatolian vocational and technical high schools and other high schools, 2.3% are in science high schools and 0.4% are in social sciences high schools. While 57.2% of the parents participating in the research have a computer at their home, 42.8% do not. According to the answers given according to internet availability at home, it is seen that 69% of the parents have internet at home, 11.5% do not have internet at home and 18.5% have internet only on their mobile phones. As for the question of using public transportation or shuttles in accessing school, 37.5% of the parents answered yes, while 62.5% answered no.

Table 21. *Characteristics of parents' spouses and children (type of school, computer and internet at home, use of service / public transportation to school)*

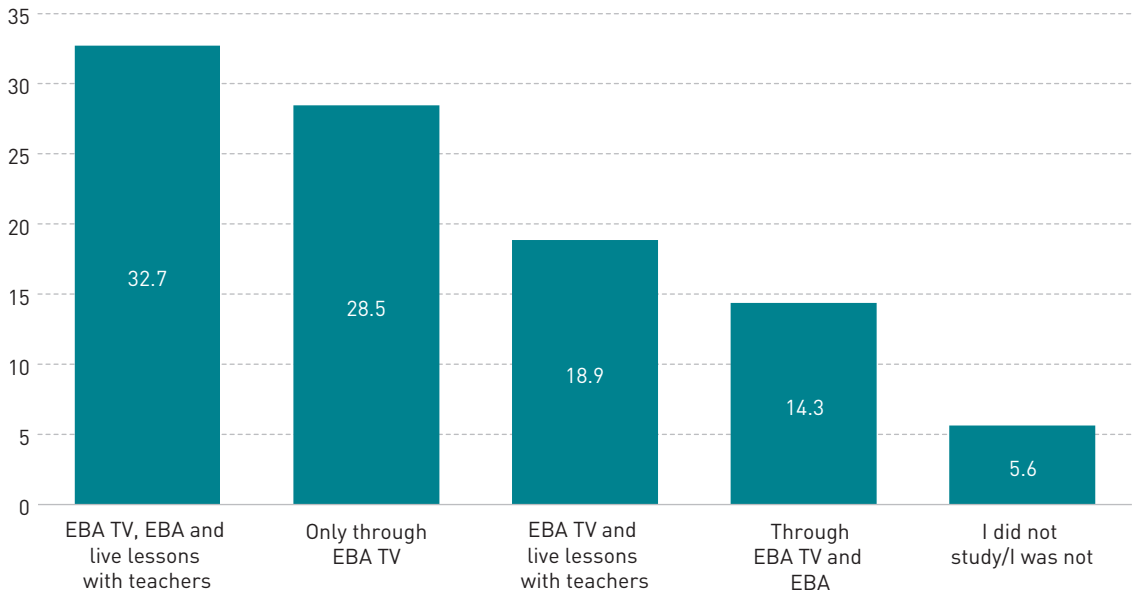
School type of children (school type of the older child if there is more than one child)	*n*	*%*
Primary school	5495	27,4
Secondary school	7324	36,5
İmam hatip secondary school	1183	5,9
Anadolu imam hatip high school	1006	5,0
Anadolu high school	2774	13,8
Anadolu voccational and technical high school	863	4,3
Social sciences high schools	85	,4
Science high school	455	2,3
Other	866	4,3
Total	20052	100,0
Having a computer at home	*n*	*%*
Yes	11461	57,2
None	8591	42,8
Total	20052	100,0
Having a internet at home	*n*	*%*
None	2310	11,5
Yes	14026	69,9
Only mobile phone	3716	18,5
Total	20052	100,0
Does your child uses shuttles or public transportation to go to school?	*n*	*%*
Yes	7510	37,5
No	12542	62,5
Total	20052	100,0

3.5. Education in the Coronavirus Era According to Parents

In this part of the study, parents' opinions of the closure of schools due to the coronavirus, how children receive distance education, live-synchronous lessons with their teachers, how often they participate in live lessons, parents' helping children study and the distance education process are examined. Parents' opinions were analyzed in order to find out about the problems regarding the technological tools needed.

Figure 15 shows the rates of the answers given to the questions about how the students received distance education during the closure of schools and the distance education application.32.7% of the parents participating in the study stated that their child / children's education continues by doing live lessons with EBA TV, EBA with their teacher / teachers.18.9% of the parents stated that their child / children had live lessons with EBA TV and their teachers. The proportion of those who continued their education process only on EBA TV without doing live lessons with their teachers during the distance education process is 28.5%, the rate of those who continued the process only from EBA TV and EBA is 14.3%, and the rate of those who continued the process only from EBA is 5.6.% When looking at the figure in general, it is seen that 48.4% of children cannot participate in the live lessons with their teachers. These students tried to be included in education via channels such as EBA and EBA TV.

Figure 15. *How did your child / children receive distance education during the coronavirus pandemic?*



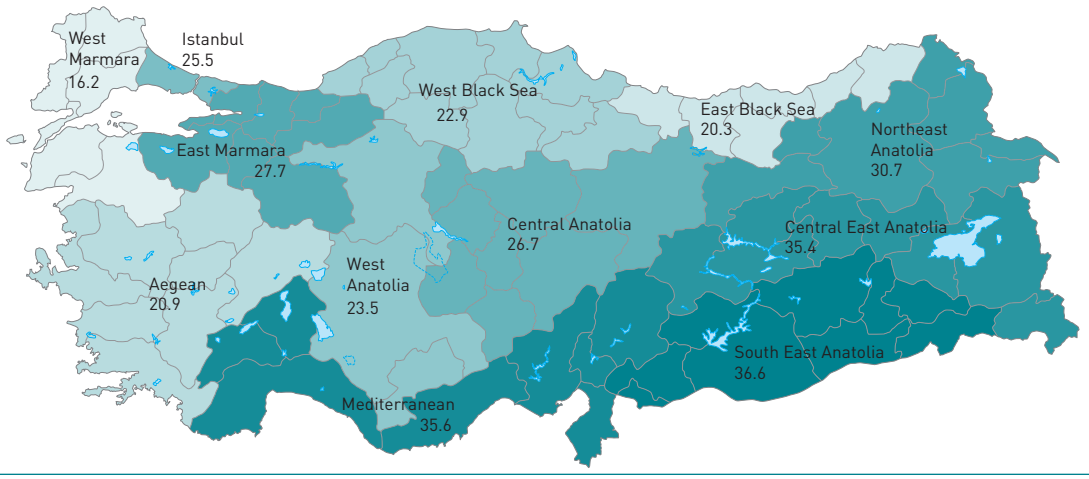
In Table 22, how the distance education of children differs according to different variables as laid out by parents participating in the research is examined. The situation of receiving distance education during the coronavirus process differs according to the number of children. According to the opinions of the parents participating in the study, families who have four or more children in the distance education process have the highest number of children / children taking lessons only from EBA TV at 38.9%. According to the opinions of the parents who participated in the study, the highest rate among those who continue their education by doing live lessons with EBA TV, EBA and their teachers during the distance education process is observed to be highest in families with two children at 39%. The lowest rate is in families with four or more children at 25.1%. According to the school level the rate of those who received education only from EBA TV is the primary school with 39%. In the process of receiving distance education from EBA TV and EBA, the highest rate is primary school with 18% and the lowest rate is secondary school with 12.9%. In addition, in the process of receiving distance education by doing live lessons with EBA TV, EBA and their teachers, the highest rate was observed at the primary school level with 39.3% and the lowest rate at the primary school with 21.1%. According to the state of having a computer, 17.7% of the parents have a computer and 42.2% of the parents who do not have a computer at home continued their education only on EBA TV. 41.8% of the students who have a computer at home participated in education by doing live lessons with EBA TV, EBA and their teachers, while this rate was 20.6% for students who do not have a computer at home. In the case of receiving distance education during the coronavirus process according to their Internet possession, 55.8% of those who do not have Internet at home continued their education only on EBA TV, while this rate is 21.1% for those who have Internet at home, and 39.4% for those who are only on mobile phones. While 38% of those who have internet at home have live lessons with EBA TV, EBA and their teachers, this ratio is 13% for those who do not have internet at home and 15.3% for those who have internet only on their mobile phone. The situation of receiving distance education during the coronavirus process differs according to the regions. When looking at the distance education process of children by the regions, the rate of receiving distance education only from EBA TV is highest in Southeast Anatolia Region (36.6%), while the lowest level is in West Marmara Region (16.2%). Considering the situation of having live lessons with EBA TV, EBA and their teachers, Middle East Anatolia has the lowest rate with 22.8% and Southeast Anatolia with 26.9%, while West Marmara has the highest rate with 44.8% and Aegean regions have a rate of 41.3%.

Table 22. *"How did your child / children receive distance education during the coronavirus pandemic?" The distribution of parents' views on the question as per independent variables (%) and chi-square analysis results*

	How did your child / children receive distance education during the coronavirus pandemic?					χ^2	*sd*	*p*
	Only through EBA TV	*Only through EBA TV*	*Through EBA TV and EBA*	*EBA TV, EBA and live lessons with teachers*	*EBA TV, EBA and live lessons with teachers*			
1 child	29,5	6,2	15,0	18,6	30,6			
2 child	24,6	4,2	12,8	19,4	39,0	169,69	12	,000*
3 child	32,1	4,8	13,0	19,6	30,5			
4 and above child	38,9	5,4	15,0	15,6	25,1			
Primary school	39,0	4,8	18,0	17,2	21,1			
Secondary school	24,0	5,3	12,9	18,5	39,3	726,19	8	,000*
Middle school	24,7	6,6	13,1	20,8	34,8			
There is a computer	17,7	4,7	14,7	21,0	41,8	1818,3	4	,000*
Computer none	42,8	6,8	13,9	16,0	20,6			
Internet none	55,8	6,0	10,1	15,1	13,0			
There is	21,1	5,6	15,0	20,4	38,0	1553,4	8	,000*
Only mobile phone	39,4	5,6	14,5	15,3	25,1			
Istanbul	25,5	7,3	16,6	15,3	35,3			
West Marmara	16,2	5,6	11,4	22,0	44,8			
Aegean	20,9	4,6	14,4	18,9	41,3			
East Marmara	27,7	4,8	13,8	18,2	35,5			
West Anatolia	23,5	7,2	12,7	23,0	33,6			
Mediterranean	35,6	5,3	14,5	18,7	26,0	618,94	44	,000*
Central Anatolia	26,7	3,6	16,8	19,1	33,8			
West Black Sea	22,9	4,5	11,7	24,0	36,9			
East Black Sea	20,3	5,9	11,5	22,9	39,4			
Northeast Anatolia	30,7	5,6	12,2	20,4	31,1			
Central East Anatolia	35,4	6,1	17,2	18,6	22,8			
South East Anatolia	36,6	5,2	13,7	17,6	26,9			

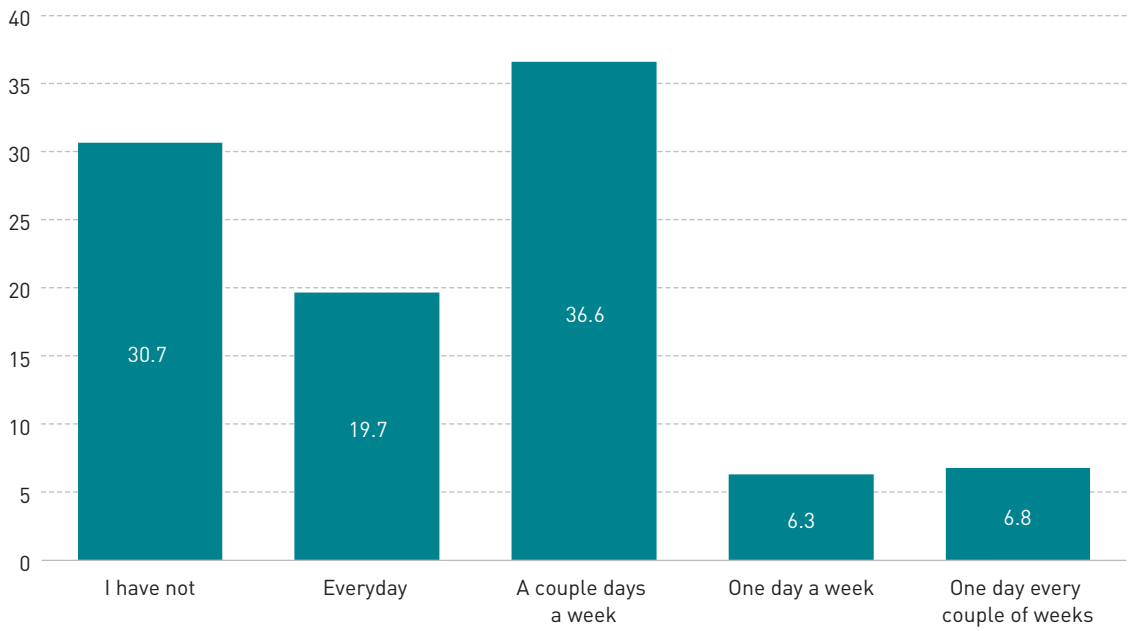
**P<,05.*

Map 3. *Distribution of parents who say that their child / children receive distance education only from EBA TV during the coronavirus pandemic by region (%)*



In Figure 16, the live-synchronous education of children with their teachers is analyzed according to parents during the coronavirus process. Approximately 70% of the parents stated that during the coronavirus process, their child and their teacher (s) were doing live lessons at regular intervals.

Figure 16. *Did the teacher (s) provide live-synchronous (simultaneous) teaching with your child (for the older child if there is more than one child) during the coronavirus pandemic? If so, how often?*



In Table 23, according to the opinions of the parents participating in the research, how the child's live-synchronous education with the teacher (s) differs according to some variables is analyzed. According to this, parents whose children are in secondary school (77.8%) and parents who are in secondary education (73.5%) stated that their children and teachers (s) do live lessons at certain intervals compared to parents whose children are in primary school (63.3%). Looking at the regions; 81% of parents in West Marmara, 78.3% of parents in East Black Sea, 74.3% of parents in West Black Sea and 73.3% of parents in Aegean said their children had live lessons with teachers. 62.3% of parents in Middle East Anatolia, 65.3% of parents in the Mediterranean and 67.1% of parents in Istanbul said the teacher (s) held regular live lessons their children.

Table 23. *"Did the teacher (s) do live-synchronous (simultaneous) education with your child (for the older child if there is more than one child) during the coronavirus pandemic?" The distribution of parents' views on the question as per independent variables (%) and chi-square analysis results*

	Did the teacher (s) do live-synchronous (simultaneous) education with your child (for the older child if there is more than one child) during the coronavirus pandemic?					χ^2	*sd*	*p*
	They didn't	*Everyday*	*A couple days a week*	*One day a week*	*One day a week*			
Primary school	46,7	19,8	23,7	4,2	5,5			
Secondary school	22,2	20,6	42,3	7,3	7,6	1137,5	8	,000*
Middle School	26,5	18,0	42,0	6,9	6,6			
Istanbul	32,9	16,4	36,8	6,7	7,3			
West Marmara	19,0	27,0	40,0	7,3	6,8			
Aegean	26,7	26,6	36,4	4,9	5,3			
East Marmara	31,1	23,5	33,3	6,3	5,9			
West Anatolia	28,5	25,3	36,1	5,4	4,8			
Mediterranean	34,7	18,4	35,6	5,5	5,7			
Central Anatolia	28,2	15,3	41,1	7,9	7,4	508,74	44	,000*
West Black Sea	25,7	25,3	37,7	6,5	4,8			
East Black Sea	21,7	25,4	39,8	5,7	7,3			
Northeast Anatolia	28,7	20,4	39,3	5,6	6,1			
Central East Anatolia	37,8	13,7	37,3	4,7	6,7			
South East Anatolia	32,5	13,4	35,8	8,1	10,1			

**P<,05.*

Maps 4. *Distribution of parents who say that their teacher (s) are doing live-synchronous (simultaneous) education every day with their child (for the older child if there is more than one child) during the coronavirus process by region (%)*

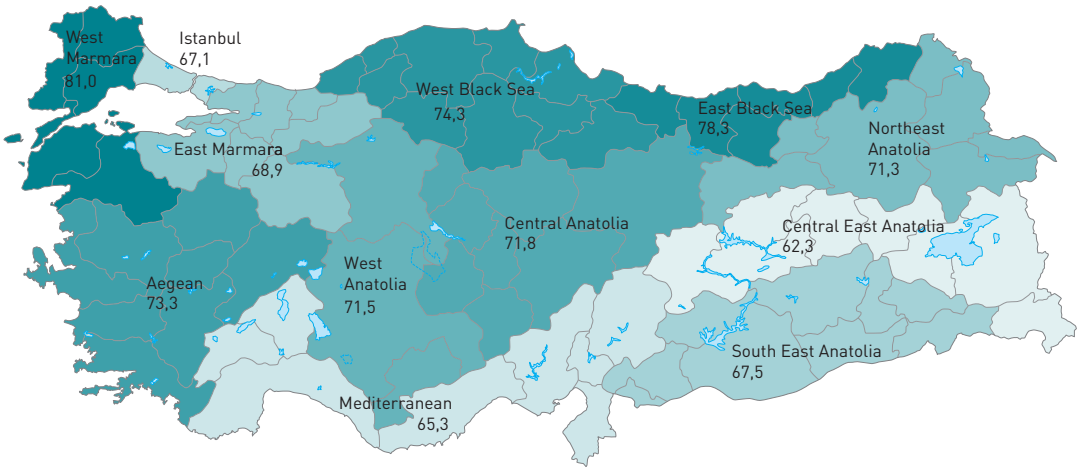


Table 24 shows the distribution of parents' views on the situation of the child (s) and the teacher (s) having live-synchronous education in during the coronavirus pandemic according to the children's participation rates in the live lessons. 39.9% of the children of parents participating in the study attended all the live lessons, 28.3% more than half of the lessons, 13.5% half and 18.3% less than half. During the coronavirus pandemic, 58.4% of the children who attended all of the live lessons that teachers had with children were daily, 33.1% a few days a week, 31.6% one day a week, 30.6% once a few weeks. In this process, the rate of students attending all the lessons held every day was 58.4%, while the rate of students attending less than half was 8.6%. Students who consistently attend lectures that teachers consistently conduct have higher attendance rates among other levels, while participation in less than half of these lessons is the lowest.

Table 24. *Distribution of parents' views on the situation of having a live-synchronous (simultaneous) education between the child (s) and the teacher (s) during the coronavirus pandemic according to the children's participation in the live lessons (%)*

		How often did your child attend the live lessons?				
		Joined all	*More than to half*	*to Half*	*less than half*	*Total*
Did the teacher (s) do live-synchronous (simultaneous) education with your child (for the older child if there is more than one child) during the coronavirus pandemic?	*Everyday*	58,4	25,1	7,9	8,6	100,0
	A couple days a week	33,1	33,1	16,3	17,5	100,0
	One day a week	31,6	23,2	17,5	27,6	100,0
	One day in a few weeks	30,6	16,0	11,2	42,2	100,0
Total		39,9	28,3	13,5	18,3	100,0

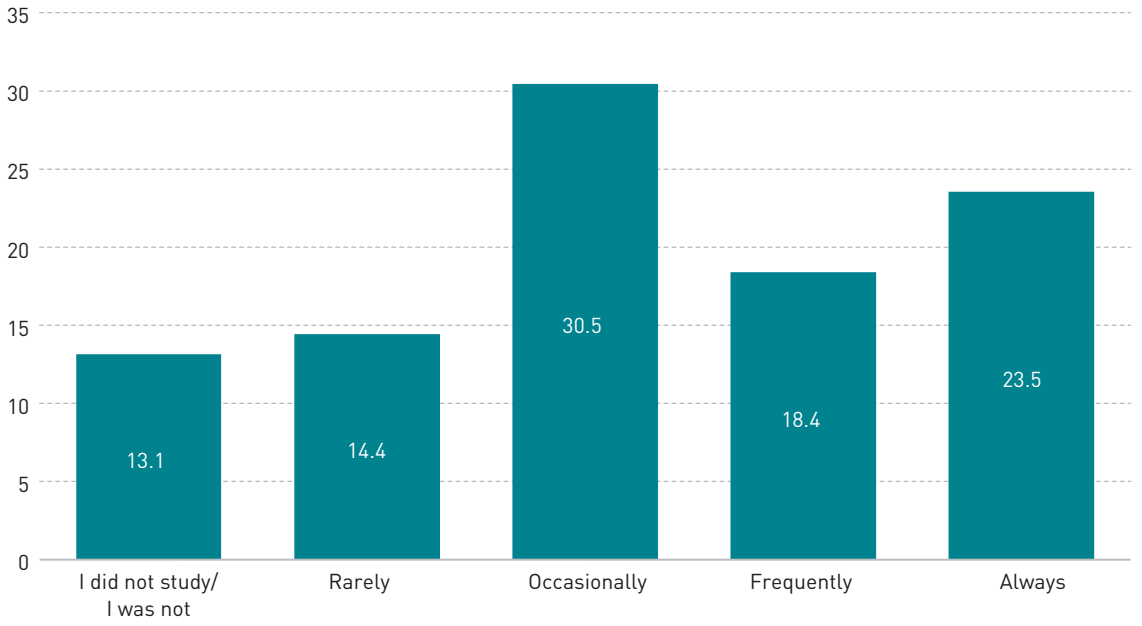
According to the opinions of the parents participating in the study, how students' participation in live lessons differs according to different variables is examined in Table 25. The opinions of the parents about the number of children, school level, computer ownership, Internet availability and the participation of students in lessons differ according to the regions is examined. According to this, parents with one child (41.1%) compared to parents with other children, graduate / doctorate graduate parents (53%) compared to parents with other graduation status, parents whose child / children are in primary school (49.5%) other parents who have a computer at home (46.3%), parents who have internet at home (44.6%) compared to other parents, West Marmara (47%) and Aegean regions (45%, 5) stated that the child / children attended all the live lessons at the highest level compared to the parents in other regions. In addition, parents with four or more children (26.1%) compared to parents with other children, primary school graduates (23.5%) compared to parents with other graduates, parents whose children / children are in secondary education (21.6%) , parents who do not have a computer at home (27%), parents who do not have internet at home (34.4%) compared to other parents, Southeast Anatolia (22.2%) and Middle East Anatolia (21%) 9) stated that their child / children attended less than half of the live lessons at the highest level compared to parents in other regions.

Table 25. *"How often did your child attend the live lessons?" The distribution of parents' views on the question as per independent variables (%) and chi-square analysis results*

	How often did your child attend the live lessons?				χ^2	sd	p
	joined all	more than half	to half	less than half			
1 Child	41,1	27,7	13,5	17,7	56,08	9	,000*
2 Child	39,1	29,1	13,1	18,8			
3 Child	29,3	31,8	15,8	23,2			
4 And above child	34,1	18,2	21,6	26,1			
Primary school	29,9	27,0	19,6	23,5	495,61	12	,000*
Secondary school / primary school	34,4	26,9	17,2	21,4			
High school	42,6	28,5	12,4	16,5			
University (ba)	47,1	29,8	8,6	14,6			
Masters/phd	53,0	27,9	5,6	13,5			
Primary school	49,5	24,5	10,8	15,3	250,99	6	,000*
Secondary school	40,7	28,6	12,8	17,9			
Middle school	31,0	30,5	16,9	21,6			
There is a computer	46,3	29,2	11,3	13,2	674,64	3	,000*
Computer none	29,0	26,6	17,4	27,0			
Internet none	25,7	22,5	17,4	34,4	642,98	6	,000*
There is	44,6	28,7	12,2	14,4			
Only mobile phone	26,8	29,3	17,2	26,6			
Istanbul	43,6	26,7	12,3	17,3	204,68	33	,000*
West Marmara	47,0	27,1	10,5	15,5			
Aegean	45,5	28,1	12,4	14,0			
East Marmara	41,4	26,8	13,8	18,0			
West Anatolia	44,7	25,8	13,6	15,9			
Mediterranean	38,2	27,8	12,9	21,1			
Central Anatolia	39,7	26,8	13,9	19,6			
West Black Sea	42,6	29,7	14,4	13,3			
East Black Sea	37,5	30,3	12,8	19,3			
Northeast Anatolia	33,1	30,3	18,4	18,2			
Central East Anatolia	27,5	32,7	17,9	21,9			
South East Anatolia	33,3	30,4	14,0	22,2			

*p<0,05.

Figure 17. *Have you studied / helped your child / children study? If you studied / helped with lessons, how often?*



In Figure 17, the status and frequency of parents helping their children study during the distance education process is analyzed. According to these results, 23.5% of the parents stated that they always help their child / children in their lessons during the distance education process. 18.4% of the parents interviewed stated that they help their child / children frequently, 30.5% occasionally and 14.4% rarely in their lessons. Finally, 13.1% of the parents stated that they did not help their child / children in their lessons during the distance education process and they did not study together. When looking at the figures in general, it can be stated that more than half of the parents participating in the study helped their child / children at least occasionally in their lessons in this process.

In Table 26, how the parents participating in the research study / help with their child / children during the distance education process differ according to different variables is analyzed. Parents 'views on students' participation in classes differ according to gender, age, number of children, school level and regions. According to gender, male parents (14.1%) according to female parents, 51 years and older parents (30.8%) compared to parents of other age, parents with three children (20.4%) compared to parents with other children, primary school graduates (21.2%) compared to parents with other graduation status, parents whose children / children are in secondary education (25.3%) compared to parents with children / children at other levels, Southeast Anatolia (16.2%) and Parents in the Middle East Anatolia

region (16.2%) stated that they do not study with their child / children at a much higher rate than the parents in other regions. In addition, female parents by gender (27.1%) compared to male parents, parents aged 30 and under (37.1%) compared to parents of other age, parents with one child (25.2%) compared to parents with other children, university graduated parents (28%) compared to parents with other graduation status; 8) stated that they always study with their child at a higher rate than parents in other categories.

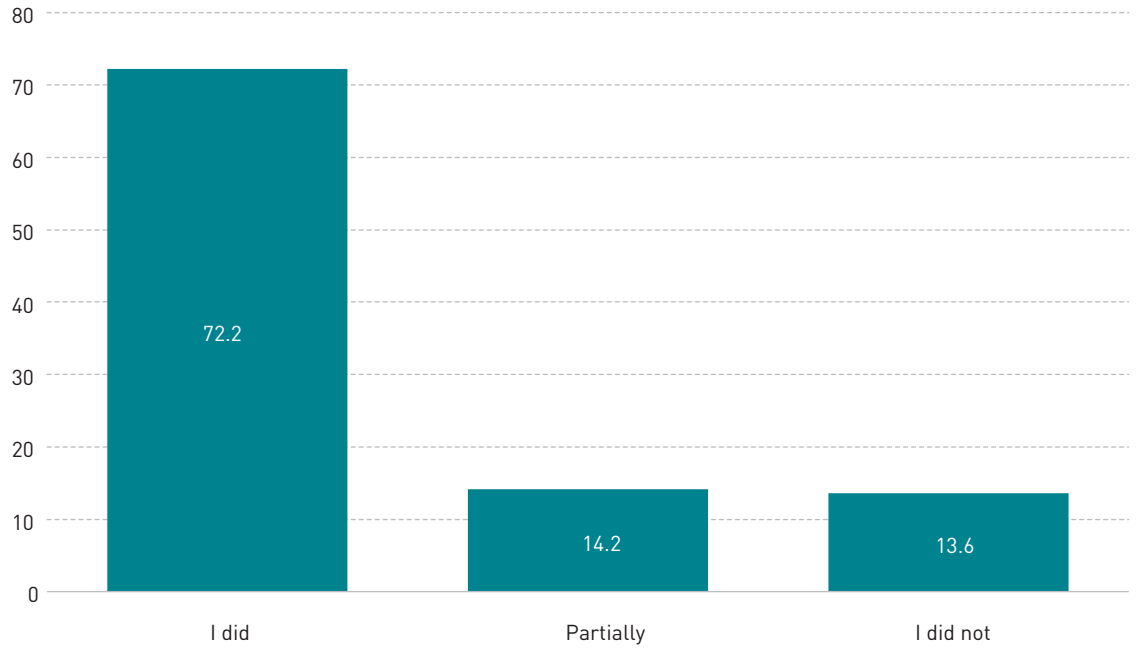
Table 26. *"Have you studied / helped your child / children?" The distribution of parents' views on the question as per independent variables (%) and chi-square analysis results*

	Have you studied / helped your child / children?					χ^2	*sd*	*p*
	I did not study/ I was not	*Rarely*	*Occasionally*	*Frequently*	*Always*			
Female	12,7	13,3	29,3	17,6	27,1	286,90	4	,000*
Male	14,1	16,7	32,8	20,0	16,4			
30 Age and under	4,0	9,7	29,6	19,5	37,1	1011,2	12	,000*
31-40 Age	10,4	14,1	30,2	19,1	26,2			
41-50 Age	18,8	16,5	31,4	17,4	16,0			
51 Age and over	30,8	15,7	29,1	14,6	9,8			
1 Child	13,2	14,1	29,2	18,3	25,2	179,85	12	,000*
2 Child	11,2	15,1	32,9	19,6	21,2			
3 Child	20,4	15,3	35,1	13,9	15,4			
4 And above child	16,3	17,5	33,7	23,5	9,0			
Primary school	21,2	17,9	31,3	12,6	17,0	963,87	16	,000*
Secondary school / primary School	13,0	15,7	34,4	14,1	22,8			
High school	11,5	13,6	31,3	18,2	25,5			
University (ba)	8,2	11,8	26,4	25,5	28,0			
Masters/phd	8,0	10,1	27,3	30,2	24,4			
Primary school	3,0	8,0	23,3	21,8	43,9	2916,4	8	,000*
Secondary school	11,8	16,0	35,1	18,9	18,2			
Middle school	25,3	18,5	31,0	14,1	11,1			
Istanbul	12,8	14,5	31,6	17,4	23,7	382,03	44	,000*
West Marmara	15,4	13,8	28,7	19,3	22,8			
Aegean	9,9	12,8	28,4	19,7	29,2			
East Marmara	11,0	11,7	29,5	19,0	28,8			
West Anatolia	11,4	12,5	27,9	20,8	27,4			
Mediterranean	12,6	13,8	30,1	18,4	25,1			
Central Anatolia	12,1	13,1	31,4	19,5	23,8			
West Black Sea	13,0	12,8	28,2	19,4	26,7			
East Black Sea	15,8	17,2	28,1	18,1	20,8			
Northeast Anatolia	14,8	19,3	30,7	14,8	20,4			
Central East Anatolia	16,2	18,3	26,4	19,1	20,0			
South East Anatolia	16,2	16,9	35,6	16,6	14,7			

**p<0,05.*

Figure 18 shows the situations where parents have problems with the need for television, which is the technological tool that the child / children need during the distance education process. According to this figure, 72.2% of the parents answered that they did not have a problem, 14.2% of them partially experienced it and 13.6% of them had a problem.

Figure 18. *Have you had any problem (s) about television, which is the technological tool your child / children need for distance education?*



In Table 27, the situation of parents having problems with the need for television, which is the technological tool that the child / children need in the distance education process, is analyzed according to different variables. 72.6% of parents with one child, 72.2% of parents with two children, 68.6% of parents with three children and 58.1% of parents with four or more children stated that they do not have any problems regarding the need for television. When we examine the table according to the regions, the rate of having problems with the need for television is highest in the regions of Middle East Anatolia (18%), Southeast Anatolia (15.4%) and Istanbul (14.8%), Western Black Sea (10.6%) and Aegean (11.1%) regions.

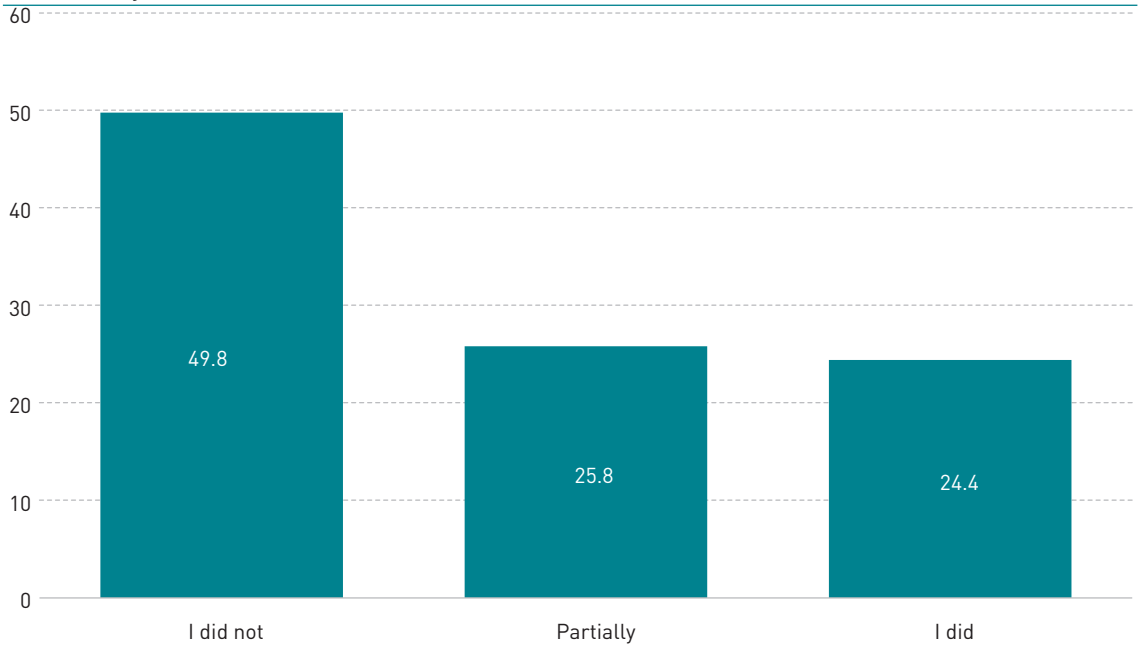
Table 27. *"Have you had any problem (s) about television, which is the technological tool that your child / children need for distance education? " The distribution of parents' views on the question as per independent variables (%) and chi-square analysis results*

	Have you had any problem (s) about television, which is the technological tool that your child / children need for distance education?			χ^2	*sd*	*p*
	I did not	*Partially*	*I did*			
1 child	72,6	13,8	13,5	28,26	6	,000*
2 child	72,2	14,2	13,5			
3 child	68,6	17,2	14,2			
4 and above child	58,1	23,4	18,6			
Istanbul	70,6	14,6	14,8	148,04	22	,000*
West Marmara	77,0	11,3	11,7			
Aegean	76,7	12,3	11,1			
East Marmara	73,8	12,8	13,4			
West Anatolia	72,9	14,0	13,1			
Mediterranean	73,6	13,4	13,0			
Central Anatolia	74,7	12,9	12,4			
West Black Sea	78,0	11,3	10,6			
East Black Sea	77,8	11,8	10,4			
Northeast Anatolia	68,1	17,3	14,6			
Central East Anatolia	65,4	16,6	18,0			
South East Anatolia	67,2	17,5	15,4			

**P<,05.*

In Figure 19, the situations experienced by the parents participating in the research about mobile phones, which is one of the technological tools that their child / children need, during the distance education process is shown. 49.8% of the parents stated that they do not have any problems, 25.8% of them partially have problems and 24.4% of them have problems due to the need for a mobile phone.

Figure 19. *Have you had any problem (s) about mobile phones, which is the technological tool your child / children need for distance education?*



In Table 28, the situation of parents having problems with mobile phones, which is the technological tool needed by the child / children during the distance education process, is discussed according to different variables. According to the table, 51% of parents with one child, 47.7% of parents with two children, 46.3% of parents with three children and 33.1% of parents with four or more children said that they did not have any problems regarding the need for mobile phones. Considering the table according to the regions, the rates of having problems with mobile phone need are the highest in Middle East Anatolia (31.7%), Southeast Anatolia (28.3%) and Istanbul (25.7%), In West Marmara (18.2%), West Anatolia (20.5%) and West Black Sea (21.2%) regions.

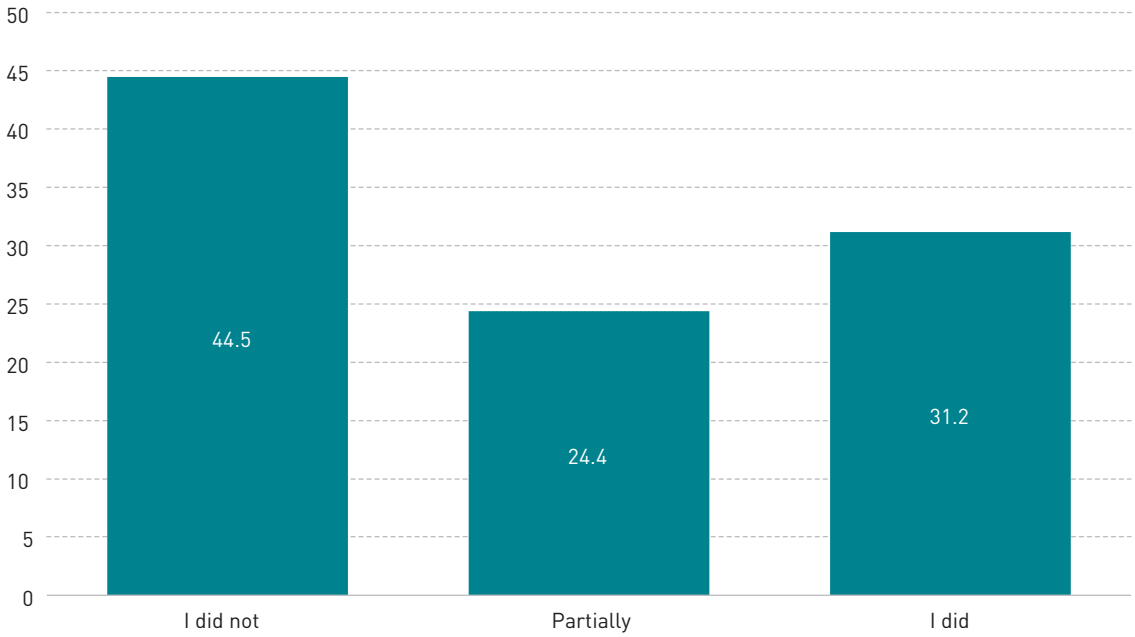
Table 28. *"Have you had any problem (s) about mobile phones, which is the technological tool that your child / children need for distance education? " The distribution of parents' views on the question as per independent variables (%) and chi-square analysis results*

	Have you had any problem (s) about mobile phones, which is the technological tool that your child / children need for distance education?			χ^2	*sd*	*p*
	I did not	*Partially*	*I did*			
1 child	51,0	25,3	23,8	44,31	6	,000*
2 child	47,7	27,2	25,0			
3 child	46,3	25,8	27,9			
4 and above child	33,1	31,3	35,5			
Istanbul	49,5	24,8	25,7	205,16	22	,000*
West Marmara	55,6	26,2	18,2			
Aegean	52,1	26,0	21,9			
East Marmara	48,2	26,1	25,7			
West Anatolia	53,6	25,8	20,5			
Mediterranean	52,2	26,0	21,8			
Central Anatolia	52,8	24,4	22,8			
West Black Sea	55,4	23,4	21,2			
East Black Sea	57,8	18,5	23,7			
Northeast Anatolia	50,4	24,4	25,2			
Central East Anatolia	43,5	24,8	31,7			
South East Anatolia	42,0	29,6	28,3			

**P<,05.*

In Figure 20, the situations that the parents participating in the research experienced about the internet, which is one of the technological tools that their child / children need during the distance education process, are shown. Looking at the figure, 44.5% of the parents who participated in the study stated that they did not have any problems, 24.4% of them partially lived and 31.2% of them stated that they had problems due to the need for internet.

Figure 20. *Have you had any problem (s) about internet, which is the technological tool your child / children need for distance education?*



In Table 29, the situation of parents having problems with the internet is analyzed according to different variables. 20.4% have problems with the need for internet, 50.8% only have a mobile phone and 65.2% do not have the internet. When the table is examined by regions, the rates of having problems with internet need are the highest in Middle East Anatolia (40.4%), Southeastern Anatolia (39.6%) and Northeast Anatolia (34.2%) regions, while Western Anatolia (23%, 7), West Marmara (25.2%) and Eastern Black Sea (25.6%) regions, on the other hand, had the lowest rates of difficulty in internet need.

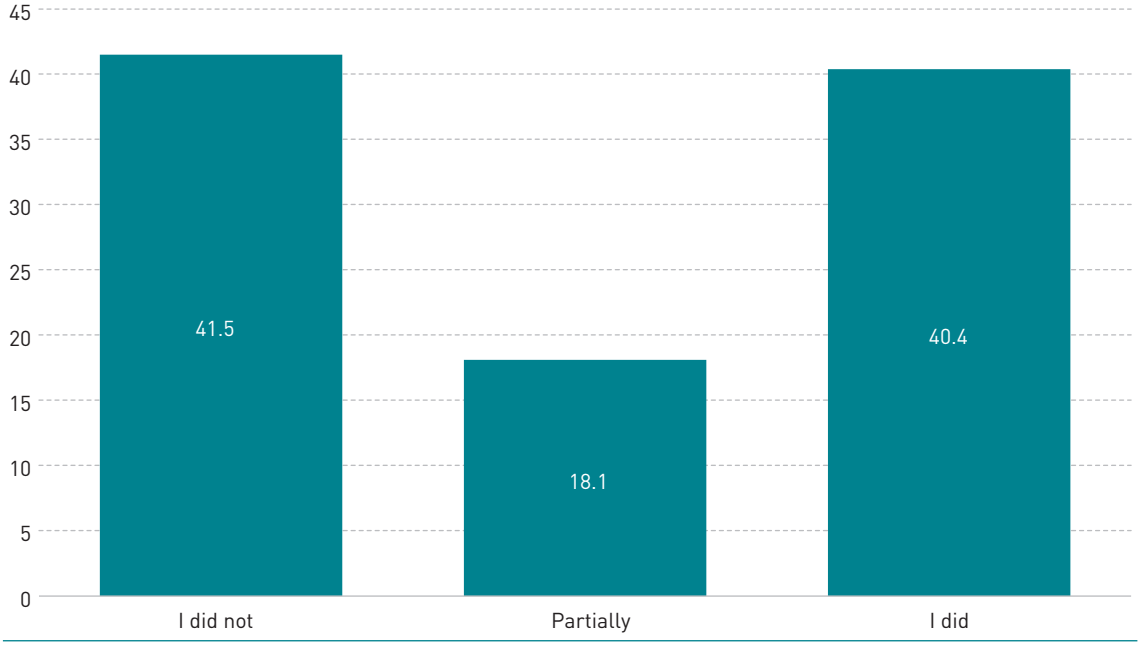
Table 29. *"Have you had any problem (s) about internet, which is the technological tool that your child / children need for distance education? " The distribution of parents' views on the question as per independent variables (%) and chi-square analysis results*

	Have you had any problem (s) about internet, which is the technological tool that your child / children need for distance education?			χ^2	*sd*	*p*
	I did not	*Partially*	*I did*			
Internet None	20,0	14,8	65,2			
There is	54,2	25,4	20,4	2942,9	4	,000*
Only mobile phone	22,9	26,3	50,8			
Istanbul	45,6	24,0	30,4			
West Marmara	50,4	24,3	25,2			
Aegean	47,6	25,3	27,1			
East Marmara	45,9	24,2	30,0			
West Anatolia	50,5	25,8	23,7			
Mediterranean	44,8	24,6	30,6	305,33	22	,000*
Central Anatolia	46,4	23,9	29,7			
West Black Sea	48,8	23,4	27,8			
East Black Sea	53,6	20,8	25,6			
Northeast Anatolia	45,4	20,4	34,2			
Central East Anatolia	35,7	23,9	40,4			
South East Anatolia	35,2	25,1	39,6			

**p<0,05.*

In Figure 21, the situations experienced by the parents participating in the research about computers, which is the technological tool that their child / children need during the distance education process, is shown. According to the figure, 41.5% of the parents stated that they do not have any problems, 18.1% of them partially live and 40.4% of them have problems due to the need for a computer.

Figure 21. *Have you had any problem (s) about computers, which is the technological tool your child / children need for distance education?*



In Table 30, the situation of parents having problems with the computer, which is the technological tool needed by the child / children during the distance education process, is examined according to different variables. Looking at the table, 42.6% of parents with one child, 39.2% of parents with two children, 40.1% of parents with three children, and 28.7% of parents with four or more children. stated that they did not have any problems with the computers. While 21.1% of those who have problems with the need for a computer during the distance education process have a computer, 66.1% do not have a computer. When we examine the data according to the regions, the rates of having problems regarding the need for computers are the lowest in West Marmara (29.9%), West Anatolia (32.8%) and Aegean (37%) regions; In the Middle East Anatolia (51.5%), Northeast Anatolia (46.7%) and Southeastern Anatolia (46.4%) regions, the rate of experiencing difficulties regarding the need for a computer was at the highest level.

Table 30. *"Have you had any problem (s) about computers, which is the technological tool that your child / children need for distance education?" The distribution of parents' views on the question as per independent variables (%) and chi-square analysis results*

	Have you had any problem (s) about computers, which is the technological tool that your child / children need for distance education?			χ^2	*sd*	*p*
	I did not	*Partially*	*I did*			
1 child	42,6	18,0	39,4	66,14	6	,000*
2 child	39,2	19,6	41,2			
3 child	40,1	14,8	45,1			
4 and above child	28,7	9,6	61,7			
There is a computer	54,6	24,3	21,1	4121,1	2	,000*
None	24,0	9,9	66,1			
Istanbul	42,2	19,5	38,3	238,73	22	,000*
West Marmara	48,3	21,8	29,9			
Aegean	43,5	19,6	37,0			
East Marmara	40,5	19,0	40,5			
West Anatolia	47,0	20,2	32,8			
Mediterranean	41,1	17,3	41,5			
Central Anatolia	44,2	16,6	39,2			
West Black Sea	44,9	17,3	37,8			
East Black Sea	47,8	15,1	37,1			
Northeast Anatolia	39,5	13,8	46,7			
Central East Anatolia	32,5	16,0	51,5			
South East Anatolia	36,6	17,0	46,4			

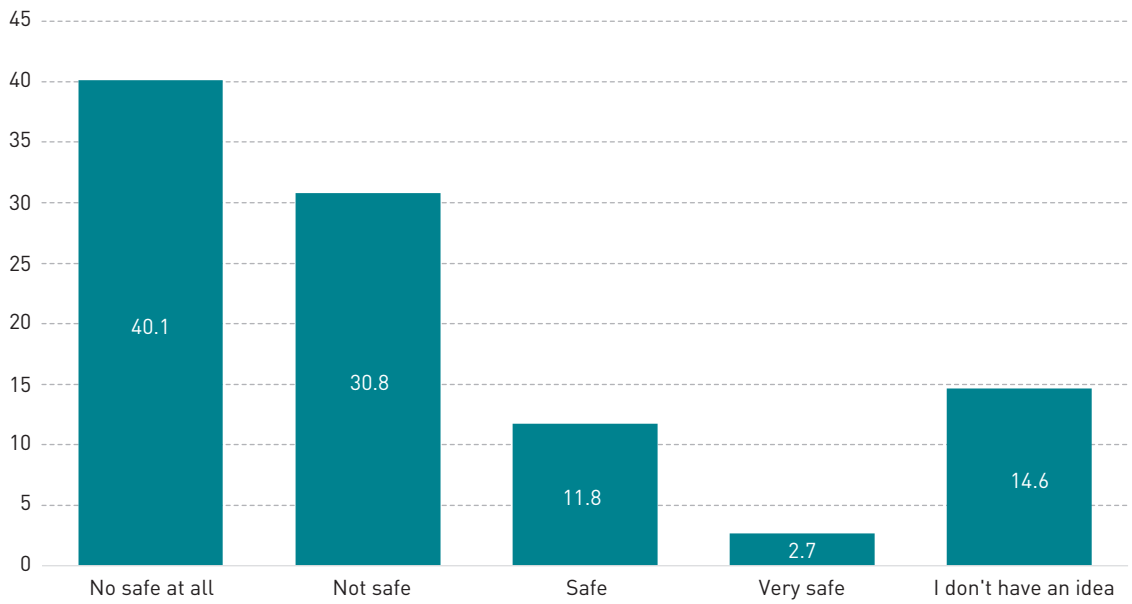
**P<,05.*

3.6. The Concerns and Expectations of Parents During the Coronavirus Era

In this section, we tried to find out the concerns and expectations of parents about the educational processes during the coronavirus period. Issues such as the adequacy of the measures taken with the start of face-to-face education, the concern that the number of cases will increase in the process, the concern of virus transmission from school to the household, the adequacy of EBA TV for education when schools are not opened, the concerns about the opening date of the schools so that children can go to schools safely will be discussed.

In Figure 22, the opinions of the parents participating in the research on how safe it is to send children back to schools for face-to-face lessons this fall are given. Looking at the figure, 14.5% of the parents who participated in the study found it safe to send students to school for face-to-face lessons this fall, while 70.9% of the parents stated that they did not find it safe to send students to school and 14.6% of the parents did not have any opinion on this issue they are. Generally speaking, parents think that it is not safe for their children to attend education face to face in the fall.

Figure 22. *Given the coronavirus situation, how safe do you think it would be to send kids back to schools for face-to-face classes this fall?*



In Table 31, parents' views on how safe it is to send children back to schools for face-to-face classes this fall are analyzed according to different variables. The level of trust in sending children back to schools for face-to-face lessons this fall differs according to the number of children they have, the education level of the parents, the educational levels of the children, their computer and internet ownership and the region they live in. According to the table, 72.1% of female parents and 68.5% of male parents do not find it safe for children to return to school for face-to-face lessons in fall. 69.3% of parents aged 30 and under, 72% of parents between the ages of 31-40, 70.3% of parents aged 41-50, and 59.8% of parents aged 51 and over stated that it is not safe to return. When we look at the table according to the education levels of parents, 65.7% of primary school graduates, 67.5% of secondary / primary school graduates, 72.9% of high school graduates, 75.3% of university graduates and 76.7% of master's / doctoral graduates stated that it is not safe for children to return to school. Considering the education levels, 75% of the parents who attended primary school, 70.5% of the parents who attend ed secondary school and 68% of the parents whose children are in secondary school do not find it safe for their children to return to school. Regionally, Southeast Anatolia has the lowest rates with 65.4%, Northeast Anatolia with 66.7% and the Middle East Anatolia region with 68.4%, Aegean with 75.5%, West Anatolia with 75.3% and Istanbul with 73.2% of the parents do not find it safe for their children to return to school.

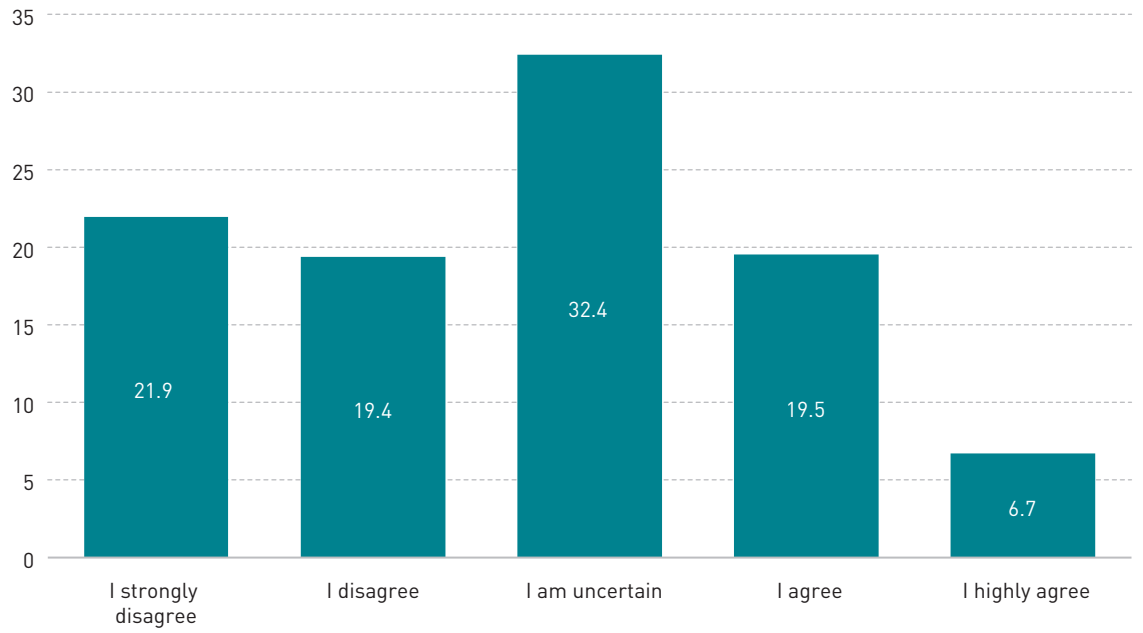
Table 31. *"Given the coronavirus situation, how safe do you think it would be to send kids back to schools for face-toface classes this fall?" The distribution of parents' views on the question as per independent variables (%) and chi-square analysis results*

	Given the coronavirus situation, how safe do you think it would be to send kids back to schools for face-toface classes this fall?					χ^2	*sd*	*p*
	No safe at all	*Not safe*	*Safe*	*Very safe*	*I don't have an idea*			
Female	40,9	31,2	10,1	2,2	15,7	179,34	4	,000*
Male	38,5	30,0	15,3	3,7	12,5			
30 Age and under	42,6	26,7	8,9	2,4	19,4	189,27	12	,000*
31-40 Age	41,4	30,6	10,8	2,2	15,0			
41-50 Age	37,3	33,0	13,7	3,4	12,6			
51 Age and over	37,8	27,0	17,5	4,1	13,6			
1 child	41,2	30,7	11,5	2,5	14,1	79,64	12	,000*
2 child	38,4	31,8	11,6	2,7	15,5			
3 child	34,0	28,2	15,8	5,3	16,7			
4 and above child	38,6	28,3	15,7	1,8	15,7			
Primary school	37,4	28,3	11,1	3,0	20,2	528,86	16	,000*
Secondary school/Primary school	39,1	28,4	9,9	2,8	19,7			
High school	42,0	30,9	10,6	2,2	14,4			
University (BA)	41,3	34,0	14,6	2,7	7,4			
Masters/PhD	40,8	35,9	14,6	3,8	4,9			
Primary school	44,8	30,2	10,0	1,7	13,3	141,36	8	,000*
Secondary school	39,1	31,4	11,3	2,5	15,6			
Middle School	37,0	31,0	14,1	3,7	14,2			
Istanbul	41,4	31,8	9,0	2,6	15,2	248,91	44	,000*
West Marmara	39,0	34,0	12,2	2,4	12,5			
Aegean	44,4	31,1	9,3	1,7	13,5			
East Marmara	43,2	30,6	9,8	2,1	14,2			
West Anatolia	46,5	28,8	9,0	2,2	13,4			
Mediterranean	36,9	31,4	13,1	2,9	15,7			
Central Anatolia	37,2	32,4	13,6	2,3	14,5			
West Black Sea	36,0	33,8	14,7	2,3	13,2			
East Black Sea	40,0	32,3	9,7	2,7	15,3			
Northeast Anatolia	36,8	29,9	12,6	1,9	18,8			
Central East Anatolia	38,3	30,1	14,0	2,8	14,7			
South East Anatolia	37,2	28,2	15,5	4,4	14,7			

**p<0,05.*

In Figure 23, the opinions of the parents participating in the research about taking the necessary measures to prevent the spread of coronavirus are given when the schools are opened to face-to-face education are shown. According to the figure, 41.3% of the parents participating in the research think that the necessary measures will not be taken while 26.2% think that the necessary measures will be taken. 32.4% of the parents who participated in the study stated that they were undecided about this issue.

Figure 23. *"When schools are opened to face-to-face education, I think that necessary measures will be taken to prevent the spread of coronavirus." What is your opinion about the statement?*



In Table 32, the opinions of parents about taking the necessary measures to prevent the spread of coronavirus when schools are opened face to face are discussed according to different variables. According to the table, the responses on whether sufficient measures will be taken to prevent the spread of the virus when schools are opened differ according to age, number of children, graduation status, use of service / public transportation while going to school, grade and region. In addition, parents between the ages of 31-40 (41.9%) compared to parents in other age groups, parents with one child (42.5%) compared to parents with other children, graduate / doctorate graduates (48%) parents with other graduates. parents with children / children at the primary school level (45.3%) compared to parents with children / children at the other level (% 52.1), Aegean (%) 46.5) and Middle East Anatolia (44.6%) regions expressed more negative opinions about the necessary measures to be taken compared to other regions.

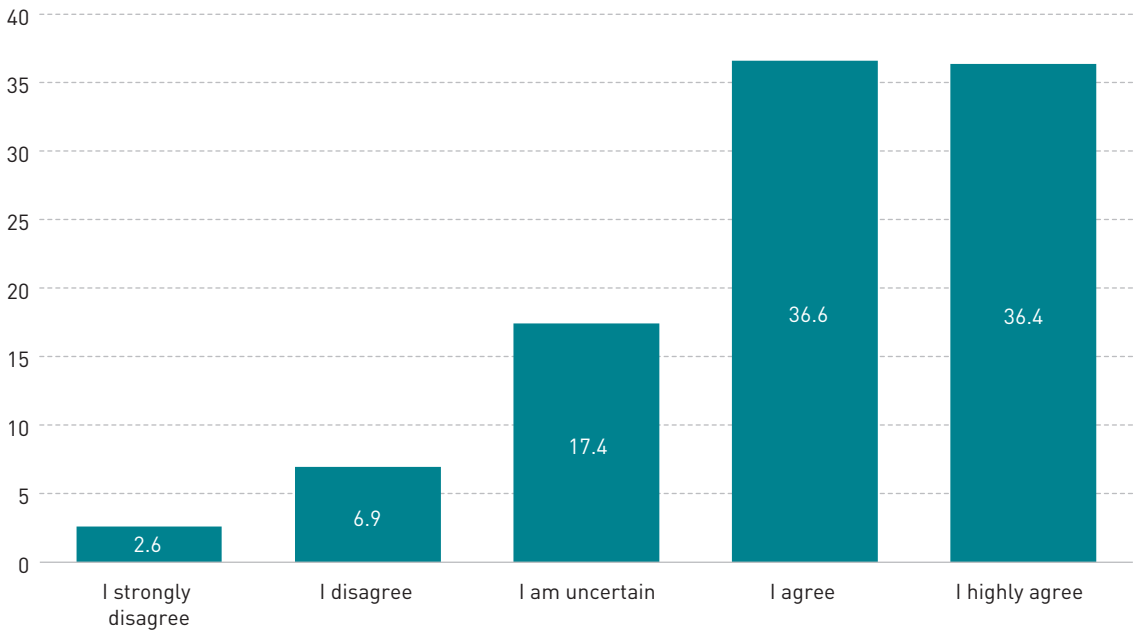
Table 32. *"I think the necessary measures will be taken to prevent the spread of coronavirus when schools are opened to face-to-face education" The distribution of parents' views on the question as per independent variables (%) and chi-square analysis results*

	I think the necessary measures will be taken to prevent the spread of coronavirus when schools are opened to face-to-face education					χ^2	*sd*	*p*
	I strongly disagree	*I disagree*	*I am uncertain*	*I agree*	*I highly agree*			
30 Age and under	22,3	17,9	35,6	16,7	7,4			
31-40 Age	22,3	19,6	33,0	18,5	6,5	66,24	12	,000*
41-50 Age	21,3	19,6	30,8	21,6	6,8			
51 Age and over	20,9	19,1	28,0	25,1	6,8			
1 child	22,8	19,7	32,5	18,8	6,3			
2 child	20,4	19,5	32,0	20,9	7,2	79,38	12	,000*
3 child	19,0	15,8	32,6	21,9	10,6			
4 and above child	14,5	15,2	40,0	26,1	4,2			
Primary school	18,5	15,4	36,7	20,4	9,0			
Secondary school / Primary school	19,8	16,5	35,3	19,8	8,6			
High school	23,2	21,4	32,5	17,5	5,4	364,83	16	,000*
University (BA)	24,9	22,6	27,0	20,4	5,1			
Masters/PhD	25,6	22,4	27,4	20,5	4,1			
I use shuttles/public transportation	20,3	31,8	19,1	5,8	20,3	29,13	4	,000*
I don't use shuttles/public transportation	18,9	32,8	19,8	7,3	18,9			
Primary school	25,0	20,3	32,2	16,9	5,5			
Secondary school	21,8	19,5	33,0	18,8	6,9	115,19	8	,000*
Middle School	19,0	18,8	31,8	22,8	7,6			
Istanbul	22,1	19,8	34,6	16,7	6,8			
West Marmara	21,0	22,1	33,6	18,4	4,9			
Aegean	25,8	20,7	32,2	16,7	4,6			
East Marmara	23,6	19,1	33,9	17,6	5,7			
West Anatolia	23,6	20,1	35,4	16,1	4,9			
Mediterranean	18,7	18,7	31,8	22,9	7,8	240,36	44	,000*
Central Anatolia	19,7	18,4	33,9	20,5	7,4			
West Black Sea	18,5	16,6	35,6	22,2	7,1			
East Black Sea	16,3	18,3	34,6	24,4	6,5			
Northeast Anatolia	20,4	16,2	31,9	24,3	7,2			
Central East Anatolia	25,5	19,1	28,0	19,1	8,4			
South East Anatolia	22,2	20,0	28,1	21,7	8,0			

**p<0,05.*

Figure 24 shows the rate of parents participating in the study who worrying about the increase in the number of coronavirus cases when schools are opened. Looking at the figure, 73% of the parents stated that they were worried that the number of cases would increase with the opening of the schools, while 9.5% of them stated that they were not worried about the opening of the schools and 17.4% were undecided about this issue. This data clearly show us that the parents participating in the research are worried that the number of coronavirus cases will increase with the opening of schools.

Figure 24. *"I worry that when schools open, the number of coronavirus cases will increase." What is your opinion about the statement?*



In Table 33, the situation of parents worrying about the increase in the number of coronavirus cases when schools open is examined according to different variables. Responses vary according to gender, age, number of children, graduation status, grade and region. Female parents (74.8%) compared to male parents, 31-40 years old (73.6%) parents compared to other age groups, parents with one child (73.8%) compared to parents with other children, graduate parents / PhD graduate parents (77.6%) compared to parents with other graduation status, parents with a child / children at the primary school level (75.2%) compared to parents with children / children at the other level, Aegean Region (76.7%) and West Anatolia (75.9%) expressed their concern that the number of coronavirus cases will increase when schools are opened compared to other regions.

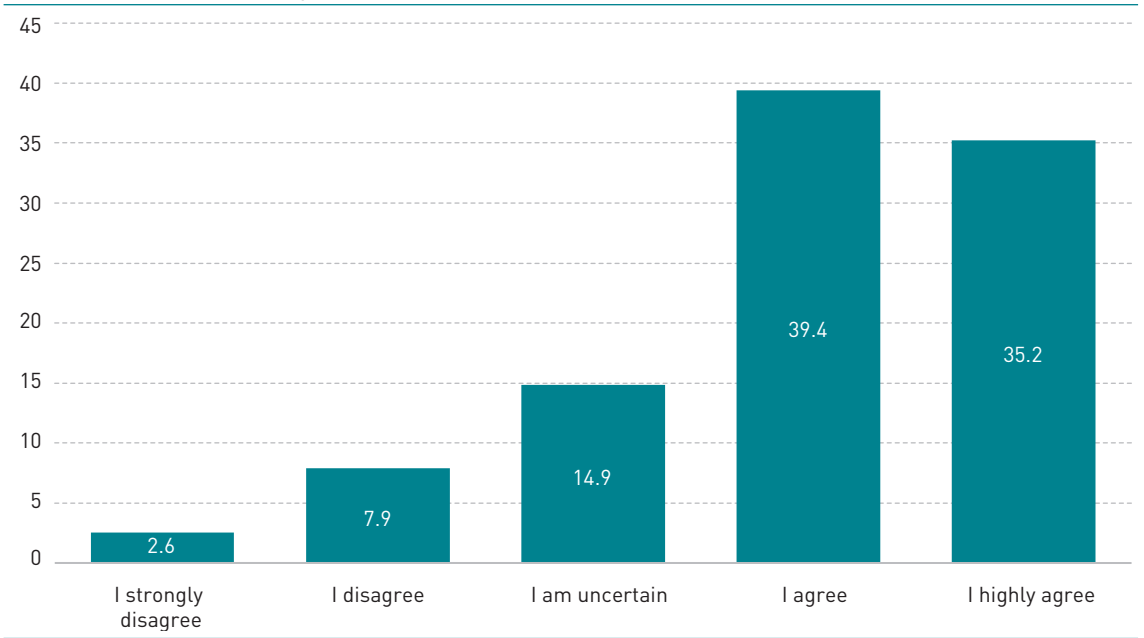
Table 33. *"When schools are opened, I worry that the number of coronavirus cases will increase" The distribution of parents' views on the question as per independent variables (%) and chi-square analysis results*

	When schools are opened, I worry that the number of coronavirus cases will increase					χ^2	sd	p
	I strongly disagree	I disagree	I am uncertain	I agree	I highly agree			
Female	1,8	5,5	17,8	36,9	37,9	245,74	4	,000*
Male	4,2	9,8	16,8	36,0	33,2			
30 Age and under	2,2	5,7	21,5	35,2	35,4	86,61	12	,000*
31-40 Age	2,3	6,6	17,5	36,0	37,6			
41-50 Age	3,3	7,4	16,3	38,4	34,6			
51 Age and over	2,9	10,8	15,1	35,6	35,6			
1 child	2,4	6,8	17,0	36,5	37,3	74,21	12	,000*
2 child	3,0	7,1	17,7	37,5	34,7			
3 child	4,2	8,4	21,0	35,7	30,7			
4 and above child	1,8	1,8	28,9	25,3	42,2			
Primary school	2,3	5,9	20,7	36,8	34,3	186,92	16	,000*
Secondary school / Primary school	2,6	7,0	20,6	35,5	34,2			
High school	2,4	6,2	17,3	37,5	36,6			
University (BA)	3,1	8,5	13,0	36,6	38,8			
Masters/PhD	2,6	6,9	12,9	35,6	42,0			
Primary school	1,8	6,4	16,5	36,0	39,2	46,43	8	,000*
Secondary school	2,6	7,2	17,4	37,2	35,6			
Middle School	3,2	7,2	18,0	36,8	34,7			
Istanbul	2,1	6,0	16,8	36,5	38,7	222,35	44	,000*
West Marmara	1,3	7,6	16,9	38,1	36,1			
Aegean	1,5	5,6	16,2	35,4	41,3			
East Marmara	2,2	5,5	16,9	36,2	39,2			
West Anatolia	1,3	6,3	16,4	36,2	39,7			
Mediterranean	2,8	7,6	17,3	39,4	32,9			
Central Anatolia	3,5	6,3	17,8	38,3	34,2			
West Black Sea	2,7	7,8	20,2	37,8	31,5			
East Black Sea	2,7	7,0	18,1	40,0	32,3			
Northeast Anatolia	2,8	7,6	22,4	36,4	30,7			
Central East Anatolia	2,3	7,6	20,2	32,9	37,0			
South East Anatolia	4,7	8,7	17,1	35,2	34,2			

*P<,05.

In Figure 25, the opinions of parents participating in the research regarding the concern of children with coronavirus infecting their household when schools are opened are shown. 74.6% of the parents participating in the study stated that when schools are opened, students will carry coronavirus to their households, and 9.5% of the students will not carry coronavirus to their household when schools are opened. This data show that parents are clearly worried about transmitting coronavirus to their household when schools are opened.

Figure 25. *"When schools open, I worry that children will carry coronavirus to their household." What is your opinion about the statement?*



In Table 34 the opinions of the parents regarding the concern of children to infect their household with coronavirus is discussed according to different variables. According to the table, the proportion of parents who are worried about the transmission of the virus to their household varies according to gender, age, number of children, graduation status, grade and regions. Female parents (76.3%) according to male parents, 31-40 years old (75.1%) parents compared to other age groups, parents with four or more children (80%) compared to parents with other children, graduate / doctorate Graduated parents (77.6%) compared to parents with other graduation status, parents with children / children at primary school level (77.5%) compared to parents with children / children at the other level, Western Anatolia (79%) and Aegean (77%, 6), when schools are opened compared to other regions, parents in the region are most concerned that children will infect their household with coronavirus.

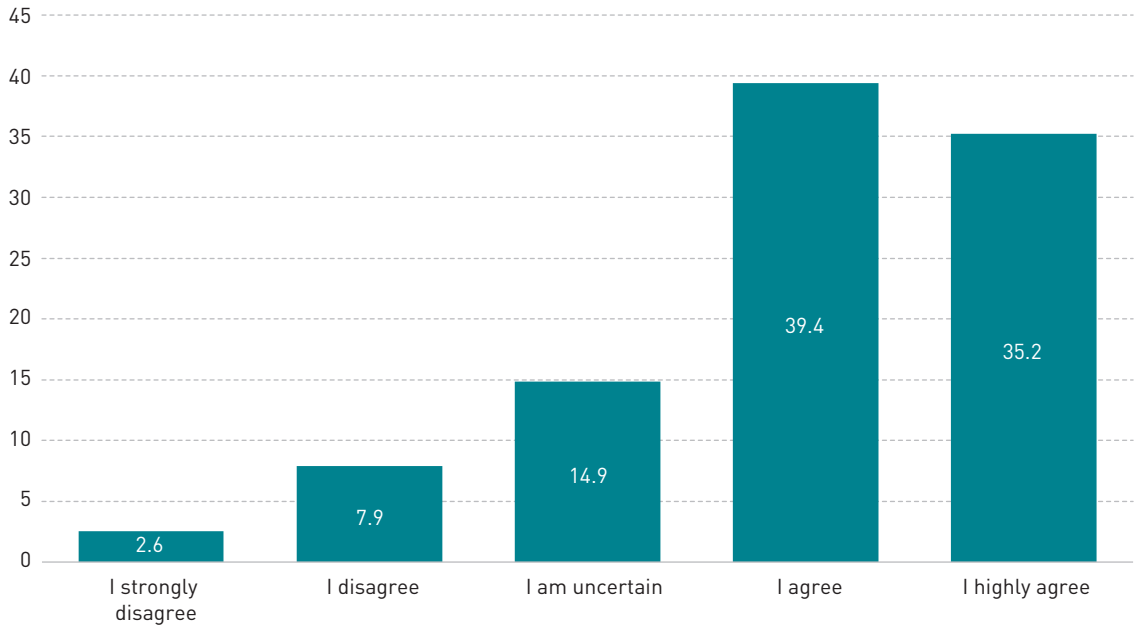
Table 34. *"When schools open, I worry that children will carry coronavirus to their households" The distribution of parents' views on the question as per independent variables (%) and chi-square analysis results*

	When schools open, I worry that children will carry coronavirus to their households					χ^2	*sd*	*p*
	I strongly disagree	*I disagree*	*I am uncertain*	*I agree*	*I highly agree*			
Female	1,9	6,6	15,2	39,9	36,4	173,36	4	,000*
Male	3,9	10,6	14,3	38,6	32,7			
30 Age and under	2,2	7,1	16,0	41,0	33,8	55,18	12	,000*
31-40 Age	2,5	7,2	15,3	38,8	36,3			
41-50 Age	2,9	9,2	14,0	40,2	33,7			
51 Age and over	1,9	10,7	13,5	37,9	36,0			
1 Child	2,4	7,8	14,3	39,2	36,2	61,51	12	,000*
2 Child	2,5	8,0	15,7	40,3	33,6			
3 Child	4,7	9,3	17,7	37,5	30,7			
4 And above child	3,0	2,4	14,5	48,5	31,5			
Primary school	2,7	7,2	16,2	41,0	33,0	118,95	16	,000*
Secondary school / primary school	2,4	8,3	17,2	39,1	33,0			
High school	2,4	7,2	15,2	40,5	34,6			
University (ba)	2,7	8,8	12,2	37,6	38,7			
Masters/phd	2,8	9,0	10,6	35,8	41,8			
Primary school	2,0	7,0	13,6	40,0	37,5	40,42	8	,000*
Secondary school	2,6	8,3	15,2	39,1	34,8			
Middle school	2,9	8,2	15,9	39,1	33,9			
Istanbul	2,2	6,5	15,4	38,4	37,6	262,75	44	,000*
West Marmara	1,6	8,8	14,7	38,9	36,1			
Aegean	1,8	6,4	14,3	38,6	38,9			
East Marmara	2,0	7,1	14,4	39,5	37,0			
West Anatolia	1,2	6,0	13,8	39,4	39,6			
Mediterranean	2,7	8,2	15,0	43,4	30,7			
Central Anatolia	2,6	7,5	17,4	38,1	34,4			
West Black Sea	2,3	9,2	17,9	41,0	29,6			
East Black Sea	2,2	5,0	16,5	44,3	32,1			
Northeast Anatolia	2,6	9,5	17,4	40,4	30,0			
Central East Anatolia	2,7	9,3	13,5	38,3	36,2			
South East Anatolia	4,8	10,8	13,4	37,0	34,0			

**Pp<0,05.*

In Figure 26, the expressions of the parents participating in the research about the failure of the children in their education are given if the schools are not opened and distance education is continued. 70.6% of parents stated that when the schools are not opened and distance education is continued, the students will be withdrawn from their education, while 13.8% of them do not agree with the statement that students will fall behind from their education.

Figure 26. *"If schools are not opened and distance education (EBA TV) is done, I think my child / children will fall behind their education." What is your opinion about the statement?*



In Table 35, the opinions of the parents about the failure of the children from their education if the schools are not opened and if the distance education continued is examined according to different variables. Parents who are worried about children infecting their households differ according to the number of children, their graduation status, grade and regions. Parents with four or more children (83.8%) compared to parents with other children, primary school graduates (72.7%) parents with other graduates, secondary education parents with children / children (72.3%) at the other level According to the parents who have children / children, parents in the Middle East Anatolia (75%) and Southeast Anatolia (74.2%) regions are the most concerned about their children falling behind their education if schools are not opened and distance education is provided.

Table 35. *"If schools are not opened and distance education (EBA TV) is done, I think my child / children will fail their education" The distribution of parents' views on the question as per independent variables (%) and chi-square analysis results*

	If schools are not opened and distance education (EBA TV) is done, I think my child / children will fail their education					χ^2	*sd*	*p*
	I strongly disagree	*I disagree*	*I am uncertain*	*I agree*	*I highly agree*			
1 Child	4,4	10,7	15,9	35,6	33,4			
2 Child	3,6	8,0	14,8	39,4	34,2	91,14	12	,000*
3 Child	2,2	7,8	13,7	40,1	36,2			
4 And above child	1,2	3,6	11,4	40,4	43,4			
Primary school	3,5	8,1	15,7	35,6	37,1			
Secondary school / primary school	3,8	8,4	16,9	37,0	33,8			
High school	3,3	8,9	15,3	36,8	35,6	201,57	16	,000*
University (ba)	5,0	12,7	14,5	37,3	30,4			
Masters/phd	7,1	14,9	15,0	39,7	23,3			
Primary school	4,6	11,5	16,7	34,9	32,3			
Secondary school	3,8	9,5	14,8	37,6	34,3	52,45	8	,000*
Middle school	3,6	8,7	15,5	37,6	34,7			
Istanbul	3,7	10,2	17,5	34,7	33,8			
West Marmara	5,8	10,5	15,0	33,3	35,4			
Aegean	4,9	11,0	17,0	35,0	32,1			
East Marmara	3,6	9,5	17,5	36,4	32,9			
West Anatolia	4,7	11,0	18,8	34,7	30,8			
Mediterranean	3,5	9,9	13,1	38,0	35,5	137,69	44	,000*
Central Anatolia	3,9	9,0	14,7	35,8	36,6			
West Black Sea	4,0	10,5	16,5	38,6	30,4			
East Black Sea	3,2	11,6	12,9	40,7	31,5			
Northeast Anatolia	3,3	8,6	15,9	37,7	34,6			
Central East Anatolia	4,3	8,7	12,0	39,3	35,7			
South East Anatolia	3,9	8,5	13,3	39,0	35,2			

**P<,05.*

Figure 27 examines the opinions of the parents participating in the research about the negative emotional impact on children if the schools are not opened and the distance education (EBA TV) is continued. 59.2% of the parents stated that children would be negatively emotionally affected during the period when schools were not opened and distance education was carried out, while 21.8% of parents did not agree with the idea that children would be affected emotionally and 19% of the parents stated that they were indecisive.

Figure 27. *"If schools are not opened and distance education (EBA TV) is done, I think my child / children will be affected emotionally." What is your opinion about the statement?*

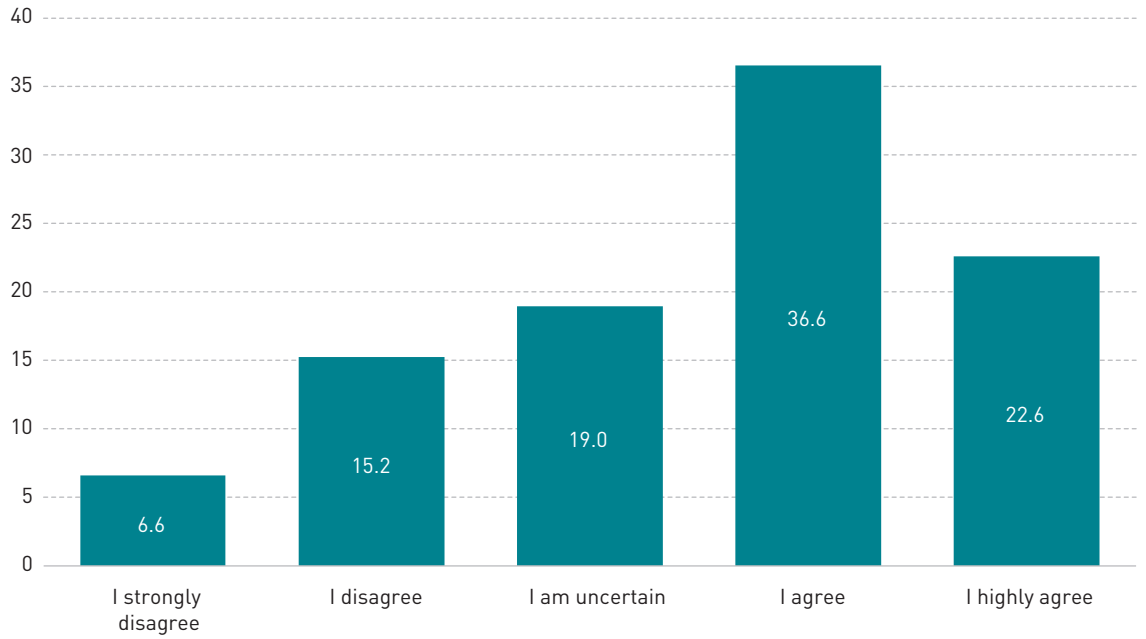


Table 36 examines the opinions of parents on if the schools are not opened and distance education (EBA TV) is carried out and the negative emotional impact on their child / children according to the number of children and the variables of the region. According to parents with four or more children (77.1%), according to parents with other children, Northeast Anatolia (66.4%) and Southeast Anatolia (65.2%) regions do not open schools and distance education (EBA TV), his child / children will be negatively emotionally impacted.

Table 36. *"If schools are not opened and distance education (EBA TV) is done, I think my child / children will be affected emotionally." The distribution of parents' views on the question as per independent variables (%) and chi-square analysis results*

	If schools are not opened and distance education (EBA TV) is done, I think my child / children will be affected emotionally.					χ^2	*sd*	*p*
	I strongly disagree	*I disagree*	*I am uncertain*	*I agree*	*I highly agree*			
1 child	7,0	15,7	19,1	36,0	22,2	66,33	12	,000*
2 child	5,9	15,4	18,3	36,9	23,4			
3 child	5,2	10,3	21,5	40,1	22,9			
4 and above child	5,4	4,2	13,3	47,0	30,1			
Istanbul	6,8	17,0	22,0	33,5	20,7	183,41	44	,000*
West Marmara	8,3	18,2	16,3	34,1	23,0			
Aegean	8,0	16,2	19,8	34,7	21,4			
East Marmara	6,8	16,0	20,8	35,0	21,5			
West Anatolia	7,0	18,2	20,3	33,0	21,5			
Mediterranean	6,0	12,9	18,8	38,0	24,3			
Central Anatolia	6,5	14,0	18,4	37,8	23,3			
West Black Sea	6,8	13,8	19,8	39,5	20,1			
East Black Sea	6,1	16,5	15,1	40,3	22,0			
Northeast Anatolia	5,3	11,7	16,6	41,2	25,2			
Central East Anatolia	6,3	16,3	17,1	37,6	22,7			
South East Anatolia	5,6	13,1	16,1	39,8	25,4			

**P<,05.*

Anxiety Score

Anxiety scores were formed based on the analysis of the research questions expressing the anxiety of parents. Table 37 shows the anxiety score averages of the parents participating in the research according to the variables of gender and using shuttles / public transportation while going to school. Considering the anxiety levels of the parents participating in the research according to the gender variable, anxiety scores of female parents are higher than that of male parents. The anxiety level of the parents whose child/children use shuttles / public transportation while going to school is higher than that of the parents of students who do not use the shuttles / public transportation.

Table 37. *Independent samples t test results related to the variables of parents' anxiety score regarding gender and using service / public transportation while going to school*

Parents	*n*	*Mean*	*S.D*	*t*	*sd*	*p*
Female	13.445	3,7997	,56510	11,936	11967,1	,000*
Male	6.607	3,6906	,62862			
I use shuttles/public transportation	7510	3,7798	,58181	2,981	20.050	,003*
I don't use shuttles/ public transportation	12542	3,7541	,59309			

**p<0,05.*

In Table 38, it is seen that the anxiety score averages of the parents according to the education level of the parents, the number of children and the grade differs significantly in at least one or more groups. Here, the Scheffe Test was used to reveal in which group or groups the average anxiety score differed. As a result of the analysis, it is seen that parents differ according to the educational level variable. Secondary / primary school graduate parents' anxiety levels are lower than high school and university (associate / undergraduate) graduates. The anxiety level of high school graduate parents is higher than primary school, secondary school / primary school and university (associate / undergraduate) graduates. According to the number of children variable, the anxiety level of parents with three children participating in the study is lower than the anxiety level of parents with other children. Looking at the education level variable of the students, the anxiety levels of parents differ from each other at all three levels of primary, secondary and secondary education.

Table 38. *One-way analysis of variance (ANOVA) results of parents' anxiety score related to age, total working time and school type*

Parents	*n*	*Mean*	*S.D*	*C.V*	*KT*	*sd*	*KO*	*F*	*p*
Primary school	4846	3,7391	,58602	G.rası	20,415	4	5,104		
Secondary school / Primary school	3822	3,7251	,58898	G.İçi	6935,904	20047	,346		
High school	5362	3,8104	,57628		6956,319	20051		14,752	,000*
University (BA)	5370	3,7673	,59836	Total					
Masters/PhD	652	3,7608	,61199						
Total	20052	3,7637	,58901						
1 child	13854	3,7719	,58546	G.Arası	10,698	3	3,566		
2 child	4936	3,7567	,58962	G.İçi	6945,622	20048	,346		
3 child	1095	3,6779	,62266	Total	6956,319	20051		10,293	,000*
4 and above child	166	3,8578	,58844						
Total	20052	3,7637	,58901						
Primary school	5495	3,8165	,57076	G.rası	24,994	2	12,497		
Secondary school	8507	3,7615	,59150	G.İçi	6615,761	19182	,345	36,235	,000*
Middle School	5183	3,7204	,59745	Total	6640,755	19184			
Total	19186	3,7662	,58834						

**p<0,05.*

In Figure 28, parents' opinions are given about when schools should be opened so that children can go to schools safely. Looking at the figure, half of the parents participating in the study (50.2%) stated that schools should be opened on January 2021 or later in order for their children to go to schools more safely, 29.8% of the parents stated that on 21 September 2020 13.1% stated that schools should be opened in November 2020 and 6.9% in early December 2020.

Figure 28. *When do you think schools should be opened so that children can go to schools safely?*

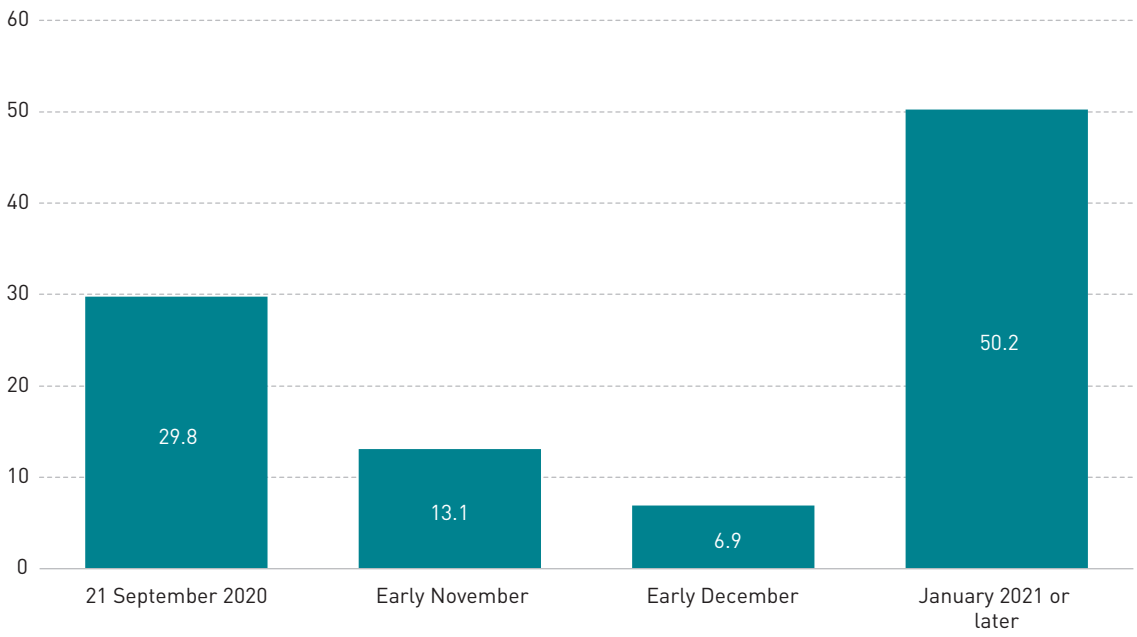


Table 39 examines how parents' views on when schools should be opened so that children can safely go to schools vary according to different variables. 28.5% of parents with one child, 31.3% of parents with two children, 37.4% of parents with three children and 40.7% of parents with four or more children They stated September 21 as the date that it will open safely. 37.7% of parents with four or more children, 41.6% of parents with three children, 47.8% of parents with two children and 51.9% of parents with one child stated that it would be safe to open schools in 2021 or later. Parents who are primary school graduates (33.9%) according to their graduation status, parents whose children / children are in secondary education (32.5%) compared to parents who have children / children at other levels, parents who do not have a computer at home (33%, 7) according to parents who have a computer at home, parents who do not have internet at home (34.5%) compared to parents who have internet at home, parents in Southeastern Anatolia Region (35.5%) are much higher than parents in other regions. While expressing that it is safe to open schools, parents with master's / doctorate degrees (59%), parents whose children / children are in primary school (56.9%) compared to parents who have children / children at other levels, parents who have a computer at home (59%) according to parents who do not have a computer at home (53.2%), parents who have internet at home (52.4%) compared to parents who do not have internet, parents in West Anatolia Region (58%) send to parents in other regions stated at higher rates that it is safe to open schools in January 2021 and beyond.

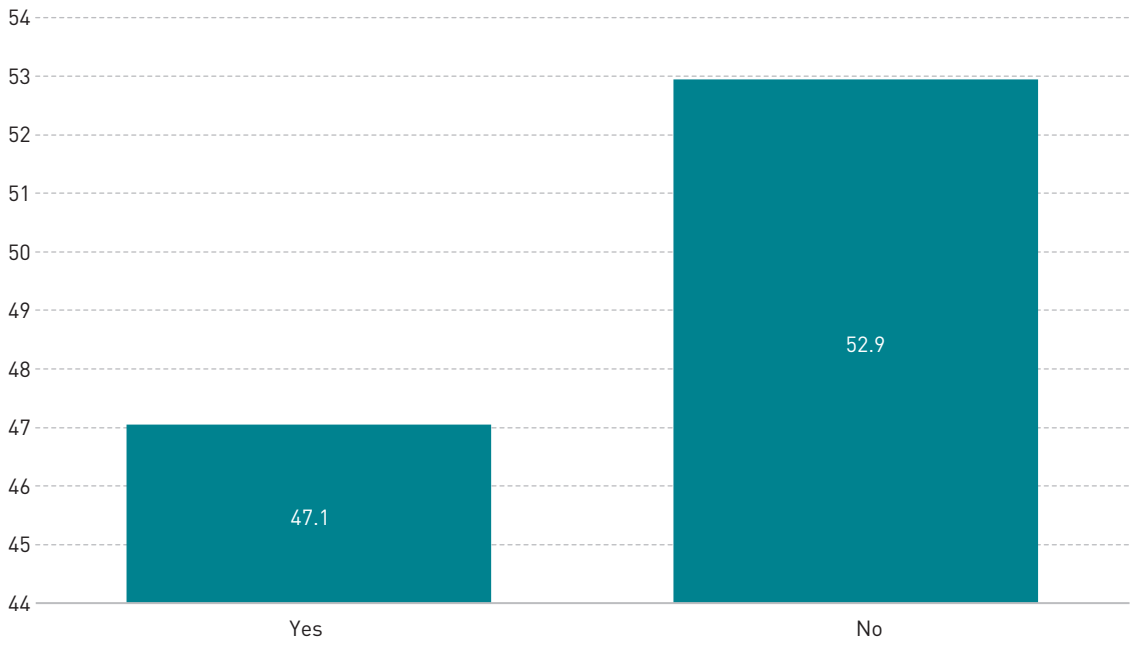
Table 39. *"When do you think schools should be opened so that children can go to schools safely?" The distribution of parents' views on the question as per independent variables (%) and chi-square analysis results*

	When do you think schools should be opened so that children can go to schools safely?				χ^2	sd	p
	21 September 2020	Early November (2020)	Early December (2020)	January 2021 or later			
1 Child	28,5	12,8	6,8	51,9	97,07	9	,000*
2 Child	31,3	13,7	7,2	47,8			
3 Child	37,4	14,2	6,7	41,6			
4 And above child	40,7	7,2	14,4	37,7			
Primary school	33,9	13,9	8,1	44,1	200,87	12	,000*
Secondary school / primary school	32,0	13,2	8,2	46,6			
High school	27,5	13,6	6,6	52,2			
University (ba)	27,7	11,6	5,5	55,2			
Masters/phd	22,5	13,2	5,4	59,0			
Primary school	25,0	12,0	6,0	56,9	162,08	6	,000*
Secondary school	30,6	13,0	7,3	49,2			
Middle school	32,5	14,7	7,6	45,1			
There is a computer	26,8	13,3	6,6	53,2	131,83	3	,000*
Computer none	33,7	12,7	7,4	46,2			
Internet none	34,5	11,1	6,6	47,8	132,66	6	,000*
There is	27,9	13,1	6,6	52,4			
Only mobile phone	34,0	14,2	8,4	43,4			
Istanbul	27,5	13,3	7,5	51,7	265,55	33	,000*
West Marmara	30,1	11,9	5,8	52,2			
Aegean	23,8	12,6	5,8	57,8			
East Marmara	25,7	12,7	7,2	54,4			
West Anatolia	23,5	10,5	8,0	58,0			
Mediterranean	33,8	13,3	7,0	46,0			
Central Anatolia	31,1	14,5	6,6	47,9			
West Black Sea	31,5	14,0	6,7	47,9			
East Black Sea	28,7	15,6	7,2	48,6			
Northeast Anatolia	33,2	18,4	6,2	42,2			
Central East Anatolia	33,6	13,5	5,9	47,0			
South East Anatolia	35,5	12,4	7,3	44,8			

*P<,05.

In Figure 29, in line with the recommendation of the Scientific Committee, the opinions of the parents are given that the MEB will offer face-to-face education in public schools as of September 21, 2020 in a gradual and progressive manner. Accordingly, 52.9% of the parents participating in the study think that the Ministry of Education will not offer face-to-face education in a gradual and progressive form as of September 21, 2020, in line with the recommendation of the Scientific Committee of the Ministry, while 47.1% of the parents think MEB will offer such education.

Figure 29. *In line with the recommendation of the Scientific Committee, do you think that MEB will offer gradual and less frequent faceto-face education in public schools as of September 21, 2020?*



In Table 40, in line with the recommendation of the Scientific Committee, the differentiation of the opinions of the parents on the fact that MEB will offer face-to-face education in state schools as of 21 September 2020 in a gradual and progressive manner, according to the variables of education level, region and school type, is examined. 50.1% of primary school graduate parents, 47.8% of middle school / primary and university graduates, 43.7% of high school graduates and 41.9% of graduate / doctoral graduates; According to education levels, 44.8% of parents with children / children in primary school, 47.4% of parents with children / children in secondary school and 48.3% of parents with children / children in secondary education, think that face-to-face education will begin as of September 21, 2020. Considering regions, the Northeastern Anatolia Region is 54.4%, the Southeastern Anatolia Region is 52.5% and the Mediterranean Region is 50.9%, while the Aegean Region 41.7%, West Anatolian Region with 42% and the Middle East Anatolia Region with 44.6% answered yes to the lowest rate of education.

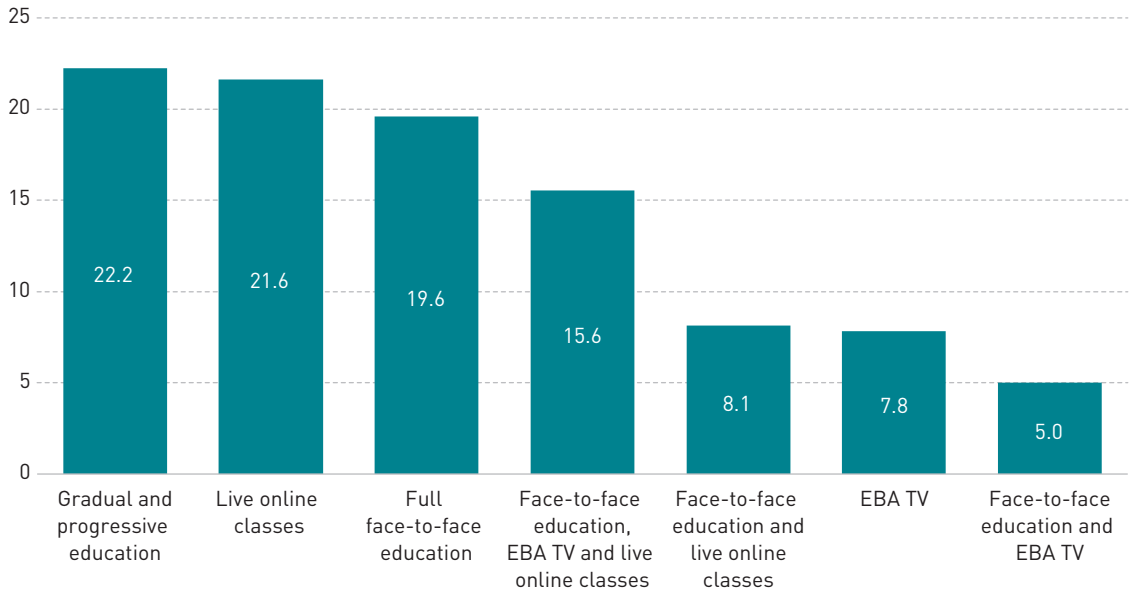
Table 40. *"In line with the recommendation of the Scientific Committee, do you think that MEB will offer gradual and less frequent face-to-face education as of September 21, 2020 in public schools?" The distribution of parents' views on the question as per independent variables (%) and chi-square analysis results*

	In line with the recommendation of the Scientific Committee, do you think that MEB will offer gradual and less frequent face-to-face education as of September 21, 2020 in public schools?		χ^2	*sd*	*p*
	Yes	*No*			
Primary school	50,1	49,9			
Secondary school / primary school	47,8	52,2			
High school	43,7	56,3	50,98	4	,000*
University (ba)	47,8	52,2			
Masters/phd	41,9	58,1			
Primary school	44,8	55,2			
Secondary school	47,4	52,6	14,74	2	,001*
Middle school	48,3	51,7			
Istanbul	44,4	55,6			
West Marmara	44,7	55,3			
Aegean	41,7	58,3			
East Marmara	44,3	55,7			
West Anatolia	42,0	58,0			
Mediterranean	50,9	49,1	136,63	11	,000*
Central Anatolia	50,1	49,9			
West Black Sea	50,1	49,9			
East Black Sea	45,4	54,6			
Northeast Anatolia	54,4	45,6			
Central East Anatolia	44,6	55,4			
South East Anatolia	52,5	47,5			

**P<,05.*

In Figure 30, parents' views are given on what kind of education should be offered to students in state schools affiliated to MEB as of September 21, 2020. 22.2% of the teachers offered students progressive and gradual education, 21.6% online live lessons, 19.6% full face-to-face, 15.6% face-to-face education, EBA TV and online live lectures together, 8.1% face-to-face education and online live lectures, 7.8% EBA TV and 5% face-to-face stated that education and lessons should be given along with EBA TV.

Figure 30. *What kind of education do you think should be offered to students in public schools affiliated to MEB as of September 21, 2020?*



OPENING SCHOOLS SAFELY DURING THE PANDEMIC

Teacher and Parent Research

4

Conclusion and Recommendations

Conclusion and Recommendations

Because of coronavirus outbreak in Turkey since the middle of March, schools have been closed to face to face education and distance learning education has continued. According to the current announcement made by the Ministry of National Education, on September 21st, schools will be opened for only two days for kindergarten and first grade students. According to the evaluation made afterwards, it will be decided that other grades will also start school. Considering this planning, it is seen that most of the children have a long time to go to return to face-to-face education in schools. Therefore, it is necessary to determine how distance education processes are carried out, especially after March, and the level of participation of teachers and students in distance education. With this data, it will be possible to develop suggestions for the deficiencies in the current distance education process. On the other hand, determining the concerns of teachers and parents during the opening of schools is important in terms of defining the measures which need to be taken.

With the closure of schools and the start of distance education due to the pandemic, organizations such as UNESCO and the World Bank consider the distance education process as an opportunity for children to continue their education. On the other hand, these institutions have emphasized that distance education risks further exacerbating and deepening the current inequalities in education. The main reason for this is the physical and technological circumstance of households during the distance education process, the education level of the parents, and the time they spend for their children's education (Saavedra, 2020a, 2020b, UNESCO, 2020b; World Bank, 2020a). The concerns of organizations such as UNESCO and the World Bank about children facing a significant loss of learning and the growth of educational inequality are clearly seen in this research for teachers and parents. The study encompasses what distance learning means for students and teachers, how often teachers undertake live lessons, what learning losses come about as a result of distance education, and the increase in education inequality in Turkey.

Approximately one-third of the parents who participated in the study stated that their children continued their education by doing live lessons with EBA TV, EBA and their teachers, and 19% of their children continued their education with EBA TV and their teachers. Almost half of the parents stated that their children did not attend live lessons with their teachers, and that they continued their education either only on EBA TV and EBA or by using both. The issue expressed by parents can also be found in the answers given by the teachers.

Moreover, three-quarters of the teachers who teach live lessons in the distance education process stated that less than half of the children attend the live lessons, and that only 1% of the children attend all the live lessons. 40% of the parents stated that their children fully attended the live lessons and 20% attended less than half of the live lessons.

Considering the size of the proportion of students not attending classes, it is seen that a significant number of students have not established a connection with their schools for months. Moreover, 3% of the teachers who were already teaching live lessons stated that they held additional live lessons for students who could not attend the live lessons, and nearly 80% of them stated that they sent homework or documents related to the lesson to the students. This data illustrates two main issues. First of all, a noteworthy portion of the students experience a significant loss of learning since they have not been connected with the school for months. Another point is that while a certain section of the students attended the classes regularly, a certain section did not attend the classes or attended the classes at a low rate. This shows the situation of the inequality between students in the distance education process. In terms of inequality, children who have a computer and internet at home have attended live lessons at a much higher rate than those who did not. In addition, when Turkey's regional live attendance is examined, the proportion of students in the western regions is much higher than the eastern region. While they are already disadvantaged, their lower rates of attending live lessons and higher rates of not attending classes will further deepen existing inequalities.

Considering the problems experienced by the parents in terms of the technological tools they use in accessing distance education, 28% stated that they had problems with television, 50% about mobile phones, 56% about the internet, and 59% about computers, partially or completely. Two thirds of the teachers stated that they had problems using EBA, which is the platform where live lessons are given, and again two thirds of the teachers stated that they did not receive any support from the Ministry of Education for distance education. This data indicates that there are important problems in accessing live lessons or using other distance education tools in the distance education process.

It was observed that parents and teachers had high levels of anxiety about opening schools during the period when the spread rate of the epidemic was high. When it comes to sending children to school face-to-face education in fall, 71% of parents and 79% of teachers stated that schools are not safe. Parents (40%) and teachers (42%) think that when schools are opened to face-to-face education, adequate measures will not be taken to prevent the spread of the virus. Moreover, 73% of parents and 81% of teachers are concerned about the increase in the number of coronavirus cases when schools are opened. In addition, 75% of parents and 76% of teachers are concerned about the transmission of viruses to their households after

face-to-face education starts in schools. The concerns of parents and teachers that adequate health and safety measures will not be taken after the schools are opened and the concerns that the school will be infected with the virus are seen to affect their thoughts about when the schools will open. Half of the parents and 57% of the teachers stated that the schools should be opened in January 2021 and after, while 30% of the parents and 21% of the teachers stated that the schools should be opened on September 21st. More than half of the parents and a little less than half of the teachers are of the opinion that the schools will not open on September 21, and that education will be realized with different types of distance education. Parents' and teachers' concerns that the virus will spread with the opening of schools are realistic concerns. These concerns need to be managed. In fact, organizations such as UNESCO, UNICEF and the World Bank emphasize in their reports that health and safety measures must be taken when schools are opened. Schools should be opened after necessary health and safety measures (UNESCO, 2020b, 2020e; UNESCO, UNICEF, World Bank, WFP, 2020; World Bank, 2020a). Taking into account the concerns of teachers and parents in the process of opening schools, the Ministry of Education should share their work and regulations with society more effectively.

Loss of learning emerges as the most important problem if schools remain closed and distance education continues (Reimers & Schleicher, 2020; UNESCO, 2020b, 2020e; World Bank, 2020a). Another important concern of parents and teachers is the learning losses that children will experience. Approximately three-quarters of the parents and two-thirds of the teachers stated that the children would fall behind their education if the schools were not opened and education was carried out. In addition, three-fifths of parents and teachers stated that their children will be affected emotionally in the distance education process.

Suggestions

- Learning losses should be determined and a make-up education program should be implemented in accordance with the knowledge and skills of students. Considering that a significant portion of the students do not attend the live lessons, learning losses differ both according to the schools and within the same school. Considering that some students attend the distance classes at all and some students very little, the knowledge and skill level of the students should be determined first. A make-up training program should be prepared in accordance with the knowledge and skill level of the students. School-based compensatory education programs that take into account the student level should be prepared instead of a common remedial education program that will be followed by everyone across the country.

- Teachers should be motivated and supported to conduct live lessons with their students. Considering that distance education will continue for a while, supportive studies should be carried out for teachers to provide effective distance education. In addition, live lessons with teachers' students should be encouraged and supported.

- Students should be motivated and supported to attend live classes. Considering that most of the students do not attend the live lessons in distance education and the distance education will continue for a while, families should motivate and encourage their children to participate in live lessons. For this, an effective communication should be established between teachers and families, and they should be supported in guiding their children to lessons.

- In order to enable students to participate in distance education more effectively, necessary digital tools such as tablets and computers should be provided with internet connection. Considering that a significant proportion of students do not have a computer at home and the low participation rate of children who do not have a computer and internet connection, tablets, computers and internet connection should be provided to families in need.

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- The distance education process should be ended as soon as possible and face-to-face education should be started. Parents and teachers stated that children will experience a significant learning loss in the distance education process and will be negatively affected emotionally. Therefore, the face-to-face training process should be initiated as soon as possible, by taking the necessary health and safety measures.

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> The fact that schools have been closed since mid-March and distance / online education has been continued requires that this teaching process be examined. It is especially important to determine how education was carried out after March and the level of participation of teachers and students in distance education. With this research, recommendations for the deficiencies of online / distance education during the pandemic and the determinations of the measures to be taken for the concerns of teachers and parents will be presented.

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