



Learning Losses During The Pandemic “The Example of Istanbul Ataşehir Çağrıbey Primary School”

Pandemi Sırasında Öğrenme Kayıpları “İstanbul Ataşehir Çağrıbey İlkokulu Örneği”

ÖZET

Problem Amacı: Bu çalışmanın amacı, pandemi döneminde görülen öğrenme kayıplarını Ataşehir Çağrıbey ilkokulu örneği üzerinden incelemektir. Araştırmada; öğrencilerin ve ebeveynlerin sosyodemografik özellikleri, yapılandırılmış görüşme soruları ve öğrencilerin not ortalamaları da incelenerek öğrenme kaybının nedenleri araştırılmak istenmiştir.

Yöntem: İstanbul Ataşehir Çağrıbey İlkokulu 2019 ve 2022 yılında mezun olan öğrencilerden veri toplanmıştır. 2019’da mezun olan 15 öğrenci; 2022’de mezun olan 15 öğrenci bu araştırmanın örneklemini oluşturmaktadırlar. Bu çalışma kapsamında toplamda 30 öğrenci mezuniyet ortalamaları, ebeveynlere uygulanan demografik bilgili formu ve yapılandırılmış görüşme sorularından faydalanılmıştır.

Bulgular: Mevcut veriler kullanılarak shapiro-wilk testi, dağılım ölçüleri, mann-whitney u, kruskal-wallish testi kullanılmıştır. Öğrenci puanları ile çalışmada kullanılan sürekli değişkenler arasındaki ilişki spearman korelasyon Katsayısı ile verilmiştir. Analizler sonucu öğrenme kayıpları açısından istatistiksel olarak anlamlı bir farklılık bulunmamıştır.

Sonuç: Bu çalışmada öğrenme kaybı açısından istatistiksel olarak anlamlı bir farklılık bulunmamıştır. Bu araştırma örneklemini genişletilerek farklı tasarımlarla çalışmalara devam edilmelidir.

Anahtar Kelimeler: Pandemi, Öğrenme Kaybı, Kaygı, Covid-19, Uzaktan Eğitim

ABSTRACT

Problem Objective: The aim of this study is to examine the learning losses seen during the pandemic period through the example of Ataşehir Çağrıbey primary school. In the research, The sociodemographic characteristics of students and parents, structured interview questions, and student's grade point averages were also examined to investigate the causes of learning loss.

Method: Data were collected from students who graduated from Istanbul Ataşehir Çağrı Bey Primary School in 2019 and 2022. Fifteen students who graduated in 2019; 15 students who graduated in 2022 constitute the sample of this research. Within the scope of this study, a total of 30 student graduation averages, demographic information forms applied to parents, and structured interview questions were used.

Results: Using the available data, shapiro-wilk test, distribution measures, mann-whitney u, kruskal wallis h tests were used. The relationship between student scores and the continuous variables used in the study was given by the coefficient of the ratio of spearman k. As a result of the analyzes, there was no statistically significant difference in terms of learning losses.

Conclusion: There was no statistically significant difference in terms of learning loss in this study. This research sample should be expanded, and studies should be continued with different designs.

Keywords: Pandemic, Learning Loss, Anxiety, Covid-19, Distance Learning

INTRODUCTION

The world is facing the biggest education crisis ever. To combat the virus, more than 180 countries have compulsorily closed their schools, and as of April 2020, nearly 1.6 billion students have dropped out. As of December 2020, 65 school systems remained permanently closed, while 129 school systems were reopened to hybrid or fully face-to-face instruction. Parents and school systems have been affected by the global economic recession during the Pandemic (Azevedo et al., 2021). The Covid-19 Pandemic has affected the education systems of most countries. In many countries, educational opportunities for students at all levels, especially poor and children with special needs, have been restricted. The Pandemic has affected more than 1.7 billion low- and middle-income students, with decreasing family income, insecurity from indirect ripple effects such as food, increasing domestic violence, and other societal impacts (Remies, 2022). According to UNICEF's report, the common policy of countries towards education in the face of the epidemic was to close schools. This has disrupted the education of 1.5 billion students (UNICEF, 2021a).

"The Covid-19 crisis has brought education systems around the world to a standstill," said Jaime Saavedra, global education director at the World Bank. For millions of children, schools are still closed, and some students may never return to school after 21 months. Simulations predicting that school closures will result in significant learning losses are supported by real data. For example, evidence from Brazil, Pakistan, the rural regions of India, South Africa, and

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How to Cite This Article

Çınar, Z., Çınaroğlu, M. & Ülker, V. (2023). “Learning Losses During The Pandemic “The Example of Istanbul Ataşehir Çağrıbey Primary School””, Journal of Social, Humanities and Administrative Sciences, 9(65):2919-2930. DOI: <http://dx.doi.org/10.29228/JOSH.AS.70150>

Arrival: 18 March 2023

Published: 30 June 2023

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This journal is an open access, peer-reviewed international journal.

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Mexico suggests significant losses in mathematics and reading. Analyses show us that average learning losses are directly proportional to the length of closures. However, among the countries, the demographic characteristics of the students are heterogeneous. Data for two states in Mexico, for example, show that learning losses in math are greater in students aged 10-15 than in reading performance and disproportionately affect younger students and girls (UNICEF, 2021).

There are estimates of the impact of the Pandemic, mostly extrapolations and simulations (Hallgarten, 2020; Azevedo et al., 2021). For example, an analysis of the educational impact of previous Ebola outbreaks. According to Hallgarten, dropping out of school during Covid-19 is current; (1) availability of educational services, (2) reduced access to educational services, (3) reduction in the use of schools, and (4) lack of quality education. The main reasons for dropping out of school are (a) school closures, (b) lack of school homeschool materials, (c) fear of returning to school and emotional stress experienced by children due to the Pandemic, (d) financial difficulties leading to difficulties in paying fees or starting work, (e) lack of knowledge about the Pandemic and the reopening of schools, and (f) the crisis of teacher shortages during the Pandemic (Hallgarten, 2020:3). Azevedo et al.'s simulation analyzed four scenarios that differed both in terms of school closure time frame and strategy effectiveness implemented by governments. The closure of schools may result in an annual loss of education of 0.3 to 1.1 percent, depending on the nature. And it can reduce the length of basic education that students achieve during their lifetime from 7.8 years to 6.7 or 7.5 years. About 11 million students, from primary to secondary education, may drop out of school due to income losses during the Pandemic. If disadvantaged groups are adversely affected by school closures, the exclusion and inequality they experience may increase even more. Students from the current group are expected to see a decline in average annual earnings between \$366 and \$1,776. In terms of value today, this is between \$6,680 and \$32,397 during a student's lifetime. The cost of 5-month school closure could cost US\$10 trillion. With the measure of school closures, the states of the world may lose 16% of their investments in education. In very pessimistic scenarios, cumulative losses are in the range of 16 and 20 trillion dollars. In addition, without radical measures, we could face a significant decline in the face of a halving of the percentage of the poor in the learning system by 2030 (Azevedo et al., 2021). Studies on previous epidemic periods (Spanish flu, Ebola, etc.) have shown that such a crisis has had a significant impact not only on children's educational lives but also on learning achievement and school-age children's dropout (Amorim et al., 2020; Elston et al., 2017; Fischer et al., 2018, Percoco, 2016, Smith, 2020; Saavedra, 2020).

In a study conducted by EBSAM Strategic Research Center in Turkey, the highest learning loss was primary school 1st grade (69.1%), high school 4. Classroom (43.9%) and middle school 4th grade (43%) were expressed by the participating teachers. The grade levels with minimal learning loss were defined as 3rd grade (15.8%), 6th grade (18.5%), 10th grade (20.2%), and 7th-grade level (EBSAM, 2021). According to the sixth-month report of the Turkish Medical Association under the Covid-19 Pandemic; children of low-lying families who do not have internet access and devices for access have not benefited sufficiently from distance education; these students have either not been able to follow the content offered on EBA TV or these contents are not suitable for the student. Learning losses have occurred in students because children who follow the contents offered on EBA TV with their own means do not have supportive written materials (reading books, worksheets, test books, etc.) that they can use at home. Other variables affecting this process are; the way parents manage the process and their competencies, children with chronic illnesses who need special education, who are homeschooled, and migrant children whose mother tongue is not scary have not benefited from education. The curriculum used in distance education, the course contents, the lecture speed of the courses, and the restitutory materials are suitable for the target group that is assumed to have a certain level of readiness, language proficiency, self-regulation, cognitive awareness, learner autonomy, and psycho-motor competence and skills. For this reason, there has been an intense lack of access to education for learners with academic, social, and emotional disabilities in terms of introductory characteristics. (Yıldız&Vural, 2020).

Analysis of data from 157 countries in a report published by the World Bank shows that there will be a global decline in the level of education. The impact of these decreases on the quality of education is estimated to vary between 0.3 and 0.9. A report published by the European Commission examined data on the education systems of France, Germany, and Italy and showed that even the transition from face-to-face education to online education causes learning loss. Although it is foreseen that online education will cause learning losses at long intervals, it is expected that it will increase even more (Baz, 2021). Three different studies on free schools in South Africa found short-term learning losses at the reading level in 2nd and 4th graders with limited resources. In 2020, 2nd graders experienced 57% and 70% losses against 2nd graders before the Pandemic. In a sample of 4th-grade students, annual learning losses are thought to be between 62% and 81%. 56-60% of the 2020 sample in the hybrid implementation process refers to the loss of regions of schooling compared to the previous year of pa-n demi importance. Based on the 4th-grade example, there is evidence that girls attending pre-pandemic school and students with stronger first-reading proficiency are more negatively impacted (Ardington et al., 2021). With the closure of schools, schools that will increase the diversity associated with the learning crisis in schools, improve it effectively and transform it into more

targeted individualized learning will be in a better position to reduce the impact. Differences in all these dimensions; it is expected to increase learning disparities between high- and low-income countries (Jones et al., 2021; Azavedo et al., 2020). Within the scope of the fight against Covid-19, some restrictions and the closure of schools have tried to control the epidemic disease. The reflections of this situation on us are not fully known. While the lack of reliable assessments for learning loss to date prevents predicting the full impact of the Pandemic for most countries around the world, the limited studies available suggest the existence of profound impacts, especially for disadvantaged students. However, with the physical separation of students from the school environment, there were declines in peer-based social learning and communication skills. In the same way, learning losses occurred in the academic field because they could not be educated in a structured classroom environment. In the process, children put their emotional needs ahead of their academic needs in times of uncertainty and crisis because children will remember what they felt, not what they learned, in crisis situations. All these things can be understood that learning loss occurs both from the results of the research in the literature and from the statements of the educators. There is also research in the literature on how children experience learning loss, even during summer vacations or semester breaks. With the 2020 Covid-19 pandemic, the transition from classroom education to online education had a negative impact on students' learning (Skar et al., 2021). The level of knowledge about the real educational consequences of the crisis is scarce at the national level. Given the risks posed by the Covid-19 Pandemic to children's learning outcomes and later in life, we cannot wait for optimal data to arrive. Instead, it is necessary to make the most of the available data sources to help inform about the extent of the problem. For this reason, we benefit from the data of the students who graduated from Ataşehir Çağrıbey primary school in 2019. According to Bielinski et al., learning loss is most likely to occur in elementary school students (Bielinski et al., 2020). It is based on the views of parents who can directly experience this process and its effects in the home environment. With this research, it is considered important to examine the learning losses of Ataşehir Çağrıbey Primary School in the distance education process with the graduation averages of the 4th-grade students who graduated in 2019 and 2022 and the opinions of the students' parents and to put the pandemic period into the middle holistically. In this direction, the aim of the study is to examine the learning losses experienced by the students and other parameters affecting the process by taking parental opinions. For this purpose, the following questions will be answered.

How do parents describe the Pandemic and its impact?

What kind of measures have parents taken during the distance education process?

Have parents been able to provide appropriate conditions for students during the distance learning process?

How have parents and students managed anxiety, which is effective in learning and teaching?

Are there learning losses in students?

METHOD

Mining Model

In the study, the "single screening model," which is one of the general screening models, will be used. In this type of approach, the variables of the units and situations of interest, such as events, substances, individuals, groups, topics, etc., are tried to be described separately. (Karasar,2017) . The research will be carried out with the approach of taking sections from individual screening methods. In the cross-sectional approach, development is tried to be determined by observations to be made on separate groups that are accepted to represent various stages of development and at once. The data received are interpreted as if they were taken from the same group and are assumed to reflect the continuity of development (Karasar, 2017). In addition, in this study, a relational and descriptive screening model was used from qualitative and quantitative research design. The descriptive survey model is a research model that aims to reflect a situation that continues to exist in the past or in the current period. The relational survey model is a research model that aims to determine the existence or degree of change between two or more variables (Karasar, 2017).

Universe

Grade Point Average of 4th-grade students who graduated in 2019 and 4th-grade students who graduated in 2022. Structured interviews will be conducted by applying a demographic information form to the parents of these students. Our sample group consists of 30 randomly selected students and their parents.

DATA COLLECTION TOOLS

Sociodemographic Information Form and Its Characteristics

The sociodemographic form consists of 15 items in order to measure n sociodemographic characteristics by the researchers; age, gender, educational status of parents, working status of parents, income level, child's home environment, and child's access to technological devices.

Table 1: Demographic Information of Students Participating in the Research

Age (Children)		
<i>1</i>	15	50
	15	50
Gender (Children)		
<i>Girl</i>	12	40
<i>Boy</i>	18	60

Looking at Table 1, 50% of the children are in the 1st group and 50% in the 2nd group. Among the children, 40% of the participants are girls, while 60% are boys.

Table 2: Demographic Data of Parents Participating in the Study

Variables	n	%
Age		
<i>31-36</i>	6	20
<i>37-42</i>	9	30
<i>≥43</i>	15	50
Gender		
<i>Female</i>	28	93.3
<i>Male</i>	2	6.7
Education Level		
<i>Primary</i>	15	50.0
<i>High</i>	5	16.7
<i>undergraduate/Gradute</i>	10	33.3
Working Situation		
<i>Yes</i>	10	33.3
<i>No</i>	20	66.7
Profession		
<i>Housewife</i>	21	70.0
<i>Civil workers</i>	4	13.3
<i>Private sector workers</i>	5	16.7
Income Level		
<i>Low</i>	4	13.3
<i>Middle</i>	26	86.7
Monthly Income (TL)		
<i>4000-5000</i>	9	30.0
<i>5001-6000</i>	11	36.7
<i>6001-7000</i>	6	20.0
<i>>7000</i>	4	13.3
Marital status		
<i>Married</i>	27	90
<i>Widowed</i>	3	10
Number of Child's		
<i>1</i>	3	10.0
<i>2</i>	16	53.3
<i>3</i>	8	26.7
<i>≥4</i>	3	10.0
Room count in the house		
<i>2</i>	4	13.3
<i>3</i>	20	66.7
<i>≥4</i>	6	20.0

Looking at Table 2, 20% of the parents participating in the study are in the 31-36 age range, 30% are in the 37-42 age range, and 50% are 43 years and older. 93.3% of the participants were female, and 6.7% were male. Fifteen (50%) people with primary education level, 5 (16.7%) people with high school education, and 10 (33.3%) people with associate/bachelor degrees are included in the study. 66.7% of the participants do not have a working life. In the study in which women participated more, 70% of the participants were housewives. 86.7% of them have a middle-income level. Those with a monthly income of 4000-6000 TL constitute 66.7% of the participants. Those who are married make up 90% of the participants in the study. 53.3% of the participants in the study have two children. Those who have three rooms in the house they live in are 66.7% of the participants

Structured Interview Questions

The interview questions were prepared by the researchers in a semi-structured manner, during the pandemic period, the focus was on the learning losses of the participants and what they were trying.

Grade point averages of 4th-year students who graduated in 2019 and 2022

In order to compare the learning losses of students before and after the pandemic period, the grade point averages of the 4th grade students who graduated in 2019 and 2022 will be taken as a basis.

FINDINGS AND INTERPRETATION

The main purpose of the research is to examine the learning losses during the pandemic period through the "Istanbul Ataşehir Primary School Example" and to analyze whether there is a significant difference between the groups and to make suggestions in the light of the findings to be obtained. In this research, students who graduated in 2019, that is before the Pandemic, and 4th-grade students who will graduate in the pandemic process, that is, in 2022; The reasons for learning during the pandemic period were analyzed by comparing their sociodemographic characteristics and grade point averages and interviewing the parents of the students. The conformity of the variables to the normal distribution was examined with the Shapiro-Wilk test. In the definition of continuous variables, mean \pm standard deviation and median (minimum: maximum) values are given. In the comparisons made between two independent groups, the Mann-Whitney U test was used in case of non-conformity to the normal distribution, and the Kruskal Wallis H test was used in the comparisons made more than twice. The relationship between student scores and the continuous variables used in the study is given by the Spearman Correlation Coefficient.

SPSS (IBM Corp. Released 2017. IBM SPSS Statistics for Windows, Version 25.0) program was used for statistical analysis, and the statistical significance level was accepted as $p < 0.05$.

Table 3: Evaluation of whether the student groups participating in the research experience learning loss in the academic field and their degree

	n	Mean \pm SS	Median(Min.:Maks.)	Test value	p*
Years					
2019	15	93.04 \pm 6.16	94.56(80.94:99.01)	U:76.0	0.137
2022	15	87.40 \pm 10.24	88.12(70.0:99.0)		
Time spent on-line (Child')				H:1.049	0.789
1	5	90.67 \pm 7.75	92.12(82.5:98.15)		
2	11	92.10 \pm 6.67	94.80(80.94:99.01)		
3	8	86.95 \pm 11.13	89.98(70.0:98.46)		
4	6	90.78 \pm 10.58	94.75(70.6:99.0)		
al Attitude				H:4.060	0.255
Democratic	20	92.35 \pm 6.56	95.11(80.94:99.01)		
Authoritative	5	86.35 \pm 10.16	87.99(70.60:96.91)		
Permissible	3	88.59 \pm 14.54	94.80(71.98:99.0)		
Democratic & Authoritative	2	81.06 \pm 15.64	81.06(70.0:92.12)		
On-line education point of view				H:5.736	0.057
Positive					
Notr	14	87.39 \pm 9.12	90.12(70.0:98.46)		
Negativite	3	97.71 \pm 0.53	97.88(97.11:98.15)		
	13	91.54 \pm 8.43	95.66(71.98:99.01)		
Attendance of children to on-line education				U:10.0	0.177
active	27	91.63 \pm 7.31	94.56(71.98:99.01)		
half active	2	81.06 \pm 15.64	81.06(70.0:92.12)		
Passive	1	-	-		
Children's on-line educational activities				U:11.0	0.193
Yes	2	81.06 \pm 15.64	81.06(70.0:92.12)		
No	28	90.88 \pm 94.19	94.21(70.60:99.01)		
Children's learning loss(According to parents)				H:1.354	0.508
Yes	19	88.78 \pm 9.74	93.82(70.0:99.0)		
Notr	2	95.49 \pm 3.75	95.49(92.84:98.15)		
No	9	92.09 \pm 6.99	96.91(80.94:99.01)		

According to table 2, the average score of the students in 2019 was calculated as 93.04 \pm 6.16 and 87.40 \pm 10.24 in 2022. Although there was a decrease in the exam score in 2022 compared to 2019, this difference was not statistically significant (U:76.0; $p=0.137$). It was determined that there was no statistically significant difference in terms of

student scores between the time children spent on the Internet ($H:1.049$; $p=0.789$). It is seen that there are 20 people (66.7%) who have a democratic attitude toward their children among the participants in the study, and it has been determined that there is no statistically significant difference between parental attitudes in terms of student exam scores ($H:4.060$; $p=0.255$). The average student point average of those with a positive perspective on the online education process applied during the pandemic period was calculated as 87.39 ± 9.12 , the student average point average of the neutral students was 97.71 ± 0.53 , and the student point average of the negative ones was 91.54 ± 8.43 . There is no statistically significant difference between the points of view (H): $.5.736$; $p=0.057$). During the pandemic period, no significant difference was found between the participation of children in online education in terms of student scores ($U:10$; $p=0.177$). The referred score of those who participate in online educational activities other than the online education process of children is calculated as 81.06 ± 15.64 , and the referred score of those who do not participate is calculated as 90.88 ± 94.19 , and there is no statistically significant difference between them ($U:11$; $p=0.193$). The referred score of the children of those who said they were undecided was 88.78 ± 9.74 , the referred score of the children of those who said they were undecided was 95.49 ± 3.75 , and the referred score of the children whose parents said they had no learning loss was 92.09 ± 6.99 , and these differences were not statistically significant ($H:1.354$; $p=0.508$).

Table 4. Examining the relationship between the students' exam scores and the variables of level measurements

Student Points	n	r_s	p^*
Parental concern level about the pandemic	30	-0.082	0.668
Children concern level about the pandemic	30	0.037	0.848
Parental effort level in coping with the pandemic	30	0.104	0.585
Child effort level in coping with the pandemic	30	-0.128	0.502
Ability to maintain remote social contact and emotional connection (parent)	30	-0.099	0.604
Ability to maintain remote social contact and emotional connection (child)	30	0.090	0.638

* $p<0.05$, r_s : Spearman Correlation Parameter

In Table 4, the relationship between the variables related to the level measurements used in the study and the student scores are examined, and the results are given. It was determined that there was no statistically significant relationship between all measured levels and student scores ($p>0.05$).

DISCUSSION

In line with the opinions of the parents, learning losses during the pandemic period were investigated. In the interviews, it is seen that the problems experienced by parents and children during the Pandemic; restrictions, anxiety, grief and its effects, emotional, social, and academic problems; technological problems, disruptions in the education and training process; and recovery as gains come to the forefront.

The participants were asked what is a pandemic, and in general, they defined the Pandemic as an epidemic that affects humanity through the troubles they have experienced and as a frightening period in which they are very difficult.

According to Shanafelt and others, "The coronavirus disease 2019 (Covid-19) pandemic has become the most important disease of our generation. This epidemic we are experiencing has affected people from almost all nations, continents, races, and socioeconomic groups. Daily life has suddenly changed due to measures such as the quarantine of entire communities, the closure of schools, social isolation, and on-site housing orders (Shanafelt et al., 2020). Participants also stated that the fact that people are confined to their homes due to the Pandemic causes anxiety and stress in them and that one of the biggest reasons for the stress is that their children are behind in education, and one of the reasons for falling behind in education is the lack of technological devices, and the internet does not work, another reason is the loss of work during the Pandemic.

Covid-19 causes anxiety because it adversely affects the normal lives of many people at the same time and contains many uncertainties. The speed of the spread of the virus and the speed of human-to-human transmission also put pressure on individual relationships. The uncertainty that arises because there is not enough information about how long the epidemic will last and worsen increases anxiety. Feeling stressed and anxious every day during the pandemic period may also have negative effects on psychological well-being (Çiçek, B., & Almalı, V., 2020). It was stated that the participants had experienced losses related to the Pandemic and that their anxiety levels were quite high due to the fact that there were too many people around them who caught many diseases. They stated that they cleaned every product they brought home from outside and themselves with disinfectant. It was stated that their anxiety levels were also quite high in their children due to their high anxiety levels.

During the Pandemic, they were informed by the participants that their and their children's coping methods and their children's methods of making efforts were equivalent. For example, at the beginning of the pandemic period, due to their own concerns, they almost never went out of the house, they did not use any mass vehicles, and some participants even stated that they did not send their children to optional face-to-face education and that they ensured that their

child continued online at home and supported them in the home environment. It is stated that parents and children receive online psychological support in the processes they are unresolved by focusing on the activities they will do at home as coping methods. The vast majority of respondents stated that they are making a high level of effort to cope with the Pandemic.

Children react by observing the reactions of the adults around them. In times of infectious disease-related epidemics, especially when the reactions of adults give the message that they can cope calmly and safely, this is something that provides significant support for children. Since children's reactions to stressful life events will differ from each other, there are some common changes that should be followed in children (Aktürk, H., 2020).

With the Covid-19 Pandemic, social life has been affected by urgent measures such as physical distancing, isolation, working from home, and interruption of formal education, some of which are temporary and some of which are permanent. These measures have changed the normal flow of daily life and caused transformations in social interaction patterns, especially on the basis of physical distancing warnings (Öztürk, Y., Üstünelan, D., & Metin, B., 2020). The consequences of restrictions and restrictive political arrangements and measures, the situation in children, are determined by science; the emotions and emotions of children, especially wearing masks, prevent children from being culturally alphabetized. The decrease in contact and the mask have made it difficult to develop a sense of unity and characteristics such as empathy, sensitivity, and solidarity appropriate to the mood. Children during the Pandemic; The development of fears such as fear of death and infecting someone else with disease affects children's personality traits and negatively affects their self-confidence and well-intentioned behavior patterns in the social field (Bernard, 2021). Participants reported that they were adversely affected by the restrictions with covid-19 and had to struggle with the problems caused by them for about a year.

During the pandemic period, the sense of responsibility for learning and education is more in the parents, which sometimes causes parents to develop oppressive and authoritarian parental attitudes in themselves.

They stated that they carried out many activities to do at home during the pandemic period. For example, brainteasers, cookie making, kick-offs, painting artworks, online workshops.

Participants reported that their perspective on the distance education process was generally positive, that their teachers worked very selflessly, and that there were problems with technological devices and internet access in the early days of the pandemic period. According to Winthrop, increased use of blended learning approaches (digital and face-to-face), recognition of the important role of teachers and schools in society and greater opportunities for respect and support, more widespread use of quality teaching and learning materials, and increased collaboration among teachers can be shown (Winthrop, 2020). Participants stated that students could not make their own individual planning as a negative factor arising from the student in the distance education process. One of the biggest problems in distance education is the problem of making individual planning of students. In students who are accustomed to the structured classroom environment, it is a problem that they are not motivated enough to participate in the lesson interactively and to do homework and repetition after the lesson. According to the results of the survey conducted in 98 countries on 18-27 March 2020; The weakness of students in terms of individual working abilities, their support in terms of their individual working abilities, and the continuity of academic learning are among the first two criteria that challenge countries in this process (Eken et al., 2020).

Participants generally expressed negative opinions about the pandemic period. In this process, they have been affected quite negatively because they have experienced a lot of restriction, loss, fear, feelings of loneliness, and uncertainty. In UNICEF's published report; the reactions of people affected both directly and indirectly by this epidemic during any epidemic may include: fear of losing their livelihoods, fear of not being able to work during isolation, fear of being dismissed, fear that quarantine for being associated with the disease will lead to social exclusion (ethnic discrimination against people who are or are considered to be from the area affected by the disease), helplessness due to isolation, unaccompanied children due to the fear of being bored, lonely and depressed, fear of contracting and dying from the disease, avoiding approaching health facilities due to fear of being infected during care, feeling powerless to protect loved ones, fear of losing loved ones due to the virus, fear of being separated from caregivers and loved ones due to quarantine practice, fear of being infected due to the quarantine of their parents or caregivers and the refusal to care for elderly or disabled people and the feeling of reliving the previous pandemic experience (UNICEF, 2020).

Past research on school closures is not an ideal example for COVID-19 because distance learning has been implemented in schools since the spring of 2020. Many states in America have switched to education at length. According to the results of a Gallup poll conducted in early April, 83% of parents said that their children were involved in the online learning program. This can reduce the learning losses experienced by children during the pandemic period (Brenan, 2020). According to the World Bank report, four factors are at the root of learning losses

during the Covid-19 Pandemic. These are; students' low time spent learning, stress, changes in the way of interaction (remote-online), and decrease or disappearance of motivation to learn (Baz, 2021). Participants stated that they did not have problems with their children's participation in distance education in the early days of the pandemic period, but only technological devices, problems with infrastructure, motivation problems in students, and the lack of sufficient space at home adversely affected participation in education. Participants reported that they observed that although they solved their problems with the infrastructure, their children's classmates could not participate in distance education.

A survey of 1,099 parents in Germany found that students' average learning time of 7.4 hours was almost halved, with a reduction greater in low-achieving students. Low-achieving students spend the time they devote to learning; It has been disproportionately replaced by activities such as TV or computer games (Grewening et al., 2021). The participants stated that apart from distance education activities, the children participated in online project studies and online educational workshops organized by Ataşehir Municipality.

When asked about themselves and their children's ability to maintain their social relationships and emotional bonds remotely, They said they were restricted, but they tried to prevent their social and emotional ties from being severed through phone and online conversations.

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unaccompanied children due to the fear of being bored, lonely, and depressed, fear of contracting and dying from the disease, avoiding approaching health facilities due to fear of being infected during care, feeling powerless to protect loved ones, fear of losing loved ones due to the virus, fear of being separated from caregivers and loved ones due to quarantine practice, fear of being infected due to the quarantine of their parents or caregivers and the refusal to care for elderly or disabled people and the feeling of reliving the previous pandemic experience (UNICEF, 2020).

The suspension of face-to-face instruction in schools during the Covid-19 Pandemic has raised concerns about the consequences of student learning. In the Netherlands, extremely rich data examined the impact of school closures on the performance of 350,000 primary school students on national exams before and after lockdown. The Netherlands reveals a learning loss of about three percentage points, or 0.08 percent, despite representing the best-case scenario with a relatively short 8-week quarantine and a high degree of technological access. The results in the Netherlands are up to 55% higher in children with less educated parents. When investigating mechanisms, there is a cumulative effect of learned knowledge rather than most of the effect. The average learning loss is one-fifth of a school year. These results show that students may make little or no progress when learning from home and that there are far greater losses in countries less prepared for distance learning. The longer schools remain closed during the Pandemic and the longer the distance education process is prolonged, the higher the learning loss will be in direct proportion (Engzell et al., 2020). In some of Europe's highest-income countries, findings have begun to emerge about learning losses caused by school breaks during the Pandemic (Maldonado and De Witte, 2020). When learning outcomes are compared during the eight-week school closure in Switzerland, for primary school students, learning outcomes decline significantly and significant increases in learning loss heterogeneity during school closures (Shult et al., 2021). In Belgium, schools were closed for nine weeks, and then more than 1/3 of the school year was affected due to the continuation of some restrictions following the transition of schools to face-to-face education (Azevedo et al., 2021).

In the research, some of the participants stated that the pandemic period affected them negatively in general and that their children during the pandemic process; they reported that they observed that they experienced academic and emotional losses. In the analyzes, the graduation averages of two different student groups who graduated in 2019 and 2022 were compared, and no significant difference was found in terms of whether there was learning loss in the academic field. It was stated that in the early stages of the Pandemic, there were problems in the access of the participants to education and training related to technological and internet infrastructure, but with the start of the normalization process and distance education was managed successfully by the teachers in general and the learning losses were compensated over time. Another reason why learning loss is not meaningful is that it is an important factor that students have easy access to technological facilities and are supported at home. In the study conducted with parents who agreed to participate in the study and accidental situation, no significant result was found in terms

of learning loss since the students did not have a significant disadvantage. As a result of the researches conducted in Turkey, when we look at the challenging situations of online education during the pandemic period, 3/4 of the teachers participating in the research stated that the difficulty experienced by the students in accessing technology was the most basic problem, and 2/5 stated that the digital literacy of the students was weak. When asked about the reasons why students cannot follow live lessons regularly, 3/4 of the teachers stated that the lack of tools such as computers/tablets and the internet of the students was the most important factor. In addition, 1/2 of the teachers stated that parents remained passive about structuring the digital learning environment for their children as another important problem. Especially considering that young children need the support of families, 2/5 of the teachers are; the fact that parents have to work is defined by 1/3 of the teachers as the issues that prevent the students from continuing the lessons actively. In addition, the fact that children do not have a quiet learning environment in distance education has been reported as a problem by 1/4 of teachers. Already in the 2018 PISA surveys on households, it was stated that in a significant part of the houses, access to technological devices and the internet was not sufficient, there were a large proportion of students who had difficulty accessing computers, and there were a significant number of children who did not have a quiet learning environment (Çelik, 2020; Steel and Falcon 2020; Ozer et al., 2020).

In a study on learning losses during the summer holidays, it was documented that learning losses were most common in disadvantaged students. The differences between low-income and middle-to-high-income children during the summer holidays are quite high (Cooper et al., 1996; Allington et al., 2010). A meta-analysis by Cooper et al. reviewed 39 studies showing that achievement test scores dropped during the summer holidays. The meta-analysis examined the results of the 13 most recent studies. The meta-analysis found that summer vacation losses were equal to 1/10th of the standard deviation relative to a month or spring test scores. During the summer holidays, the losses in mathematics were higher than in reading. The gender and racial characteristics of the students did not make any difference in learning losses, but the negative impact of summer increased due to the increase in the grade levels of the students (Cooper et al., 1996). In a prominent study of learning loss during the summer holidays, students reported approximately one month of learning loss during this period (Alexander et al., 2001; Cooper et al., 1996). According to Kunfhed et al., it is difficult to predict the outcomes of distance learning, even given the evidence. In a UK study on pandemic-era learning losses, there were significant declines in all subjects and group achievements between 2019 and 2020 by comparing summer assignments given to primary school students in public schools and outcomes received in the summer of 2019. Major decreases were especially seen in the mathematics class of 3rd and 4th-grade students. However, scores from GPS (grammar, punctuation, markers, and spelling) have declined drastically each year (Cohen, 2020). According to data from the CurricUlum Associates i-Ready Platform (USA), the students in the sample group learned arithmetic and 87% reading from their classmates at the grade level by fall. Students experienced an average loss of 33% in arithmetic over a 3-month period and 13% in reading in a 1.5-month period (Dorn et al., 2020).

In a study on the effect of school closures on standardized test achievement, the effect of school closures in the Dutch-speaking Flaman region in Belgium was examined on the basis of standardized tests in recent years. A standard deviation of 17 and a decrease in Dutch scores (reading, writing, language), and a standard deviation of 0.19 compared to previous cohorts were found. These findings are relevant when considering school structure, standardized tests, and school impacts. Given the magnitude of the impact, the combination of the loss process of school closures and learning loss is observed. In addition, inequality is observed in schools by both 8% for Dutch and 7% in mathematics (Maldonado & Witte, 2021).

Research on Pakistani children has found that it negatively affects students' learning and school attendance. The study found that there was a significant decline in learning-adjusted school years (LAYS) and that there were worse outcomes in girls than boys. 50% drop out of school because 2 million households are affected economically, which is more pronounced at the elementary level (Khan & Ahmed, 2021). In the study conducted in Norway, the writing quality, handwriting fluency, and attitudes towards the writing of the students (421 girls, 396 boys) in distance education conducted for almost 7 weeks were compared with the first-year students (835 girls, 801 boys) in the same school before the Pandemic. The group of students who took a break from education during the Pandemic had lower scores in terms of writing quality, handwriting fluency, and attitude towards writing than first-year students who were educated in the previous year (Skar et al., 2021). In Australia's New South Wales region, data from more than 4800 3rd and 4th graders from public schools were encountered. In the analysis, no significant difference was found in student achievements in 2019 and 2020. When the sample group is examined in terms of disadvantage and advantage (ICSEA), if the 3rd year group in the least advantaged subschools achieved two months less progress in mathematics, 3rd grade students in ICSEA intermediate schools made two months more progress (Gore et al., 2021).

In a study conducted with classroom teachers, there is a learning loss in the mathematics lesson of the area where the students lose in the first place and then in the Turkish lesson. According to classroom teachers, the lesson with the lowest level of learning loss is life science (Sulak&Çapanoğlu, 2022).

CONCLUSION AND RECOMMENDATION

In any case, where education and training are interrupted, it is seen that there is a learning loss. It has been found that there are learning losses in the majority of the researches conducted in the world and in Turkey. Since there was no significant disadvantage in the random group selected in this research on learning loss, no meaningful finding could be reached about learning loss as a result of the analyzes. Since the grades will not always give us accurate results in the measurement of learning losses and the learning losses will be understood in a longer process, it will be possible to reach different results with learning losses in a study that will be more comprehensive of the sample group and its stakeholders.

REFERENCES

- Aktürk, H. (2020). Online life and psychological effects during the new coronavirus disease pandemic period. *Ankara University Institute of Health Sciences*, Ankara,1(25).
- Amorim, V., Piza, C.,& Lautharte Junior,I. J. (2020). The effect of the H1N1 Pandemic on learning: What to expect with COVID-19, World Bank
- Alexander, K. L., Entwisle, D. R., Olson, L. S. (2001). Schools, achievement, and inequality: A seasonal perspective. *educational evaluation and policy analysis*, 23(2), 171–191. <https://doi.org/10.3102/01623737023002171>
- Allington, A. McGill-Franzen, G. Camilli, L. Williams, J.Graff, J.Zeig, C.Zmach&R.Nowak (2010). Addersing summer reading setback among economically disadvantaged elementary students, *Reading Psychology*,31(5), pp. 411-427
- Ardington, C., Wills, G.&Kotze, J.(2021). COVID-19 learning losses: Early grade reading in South Africa, *Elsevier*, volume,86 October 2021,102480. <https://doi.org/10.1016/j.ijedudev.2021.102480>
- Azvedo, J. P., Hasan, A., Goldemberg, D., Lqbal, S.A.& Geven, K. (2020). Simulating the potential impacts of COVID-19 school closures on schooling and learning outcomes: A set of global estimates. *Policy Research Working Paper*, Paper no. 9284. World Bank, Washington, DC (2020), p. 2020. <http://hdl.handle.net/10986/33945>
- Baz B.(2021), An evaluation on possible learning loss of students during the Covid-19 Pandemic,*Journal of Basic Education(Journal of Primary Education)*, Retrieved 06 March 2022
- Bielinski, J., Brown, R., & Wagner, K. (2020). COVID Slide: Research on Learning Loss & R-Recommendations to close the gap. *Illuminate Education*. <https://f.hubspotusercontent20.net/hubfs/5196620/covid-19-slide-whitepaper.pdf>
- Budak, F. & Korkmaz, Ş. (2020). A general assessment of the COVID-19 pandemic process: The case of Turkey. *Journal of Social Studies and Management*, (1) , 62-79. doi:10.35375/sayod.738657
- Burç, G.,& Karakuyu, A. (2020). The opinions of the class teachers about the midterm holiday practice applied for the first time during the semester.*International Journal of Social Studies*, 13(70), 745-752. doi: [10.17719/jisr.2020.4132](https://doi.org/10.17719/jisr.2020.4132)
- Brenan, M. (2020, April 8). Over 8 in 10 parents now say child is learning remotely. Gallup. <https://news.gallup.com/poll/307754/parents-say-child-learning-remotely.aspx>
- Çelik, Z. (2020a, 24 December). The difficult dilemma of education: The future? Corona? perspective. online. <https://www.perspektif.online/egitim-zor-ikilemi-gelecek-mi-koronami/>
- Çelik Z. & Şahin, S.A. (2020). Reproduction of educational inequalities in the pandemic period distance education process. Fatih Kaleci ve Emrah Başaran (Ed.), *Socioeconomic changes and transformations in the pandemic process: Opportunities, threats and recommendations*, Necmettin Erbakan University Publishing Bookstore. 587-623.
- Çiçek, B.,& Almalı, V. (2020). The relationship between anxiety, self-efficacy and psychological well-being during the COVID-19 Pandemic: Comparison of private sector and public employees.*Electronic Turkish Studies*, 15(4).
- Cohen, D. (2020). The impact of lockdown on children: Attachment, mental health, and resilience. In D. Cohen (Ed.), *Surviving lockdown: Human nature in social isolation*. Routledge. <https://doi.org/10.4324/9781003105091-8>

- Cooper, H., Nye, B., Charlton, K., Lindsay, J. & Greathouse, S. (1996). The effects of summer vacation on achievement test scores: A narrative and meta-analytic review. *Review of Educational Research*, 66(3), 227–268. <https://doi.org/10.3102/00346543066003227>
- Dorn, E., Hancock, B., Sarakatsannis, J., & Viruleg, E. (2020). COVID-19 and learning loss-disparities grow and students need help. *Mckinsey & Company*. <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-learning-loss-disparities-grow-and-students-need-help>
- EBSAM Center for Strategic Studies,(2021)., Retrieved 27 February 2022 from https://www.ebs.org.tr/ebs_files/files/yayinlarimiz2021/Pandemi_Doneminde_Ogrenme_Kaybi.pdf,
- Eken Ö., Tosun N. & Eken, D.T. (2020). Transition to emergency and compulsory distance education with the Covid-19 outbreak: A general assessment, *National Education Special issue*, 49 (1), 113-128, doi: 10.37669/milliegitim.780722
- Elston, J.W.T, Cartwright, C. & Ndumbi, P.(2017). The health impact of the 2014-15 Ebola outbreak, *Public Health*, 143(2017), pp.60-70
- Fischer, H.T., Elliot, L. & Bertand, S.L. (2018) Guidance Note: Protection of children during infectious disease outbreaks, *The Alliance for Child Protection in Humanitarian Action*
- Gore, J., Fray, L., Miller, A., Harris, J. & Taggart, W., 2021. The impact of COVID-19 on student learning in New South Wales primary schools: an empirical study, *The Australian Educational Researcher*, 48, 605-637(2021).
- Grewenig, E., Lergetporer, P., Werner, K., Woessman, L. & Zierow, L.(2021). COVID-19 and educational inequality: How school closures affect low-and high- achieving students, *European Economic Review*, Volume 140, <https://doi.org/10.1016/j.euroecorev.2021.103920>
- Hallgarten, J. (2020, March 31). Evidence on efforts to mitigate the negative educational impact of past disease outbreaks. *Institute of Development Studies*. Reading, UK: Education Development Trus,(Report 793)
- Karahan, S., Yıldırım Parlak, Ş., Demiröz, K., Kaya, M., & Kayhan, N. (2021). Mothers' experiences of coping with the problem behaviors of their children with special needs during the Coronavirus (COVID-19) process. *Journal of Qualitative Research in Education*, 25, 79-105
- Karasar Z.(2018), *Scientific Research Method*, Nobel Publications, 111-114
- Keffenberger, M.(2021). Modelling the long-run learning impact of the Covid-19 learning shock: Actions to (more than) mitigate loss. *Elsevier*, volume:81 <https://doi.org/10.1016/j.ijedudev.2020.102326>
- Kernis, M. H., Cornell, D. P., Sun, C. R., Berry, A., Harlow, T. & Bach, J. S. (1993). There's more to self-esteem than whether it is high or low: The importance of stability of self-esteem. *Journal of Personality and Social Psychology*, 65, 1190-1204.
- Khan A. J. & Ahmed J.(2021) Child education in the time of Pandemic: Learning loss and dropout, *Children and Youth Services Review*, Volume 127, August 2021
- Kuhlfed, M., Soland, J. & Tarasawa, B. (2020). Projecting the potential impact of COVID-19 school closures on academic achievement, *First published*, October 28, 2020, <https://doi.org/10.3102/0013189X20965918>.
- Loftus, E.F. & Loftus, G. R. (1980). On the permance of stored information in the human brain. *American Psychologist*, 35,409-420
- Maldonado, J.E. & Wittei K.D.(2021). The Effect of School Closures on Standardised Student Test Outcomes. *Discussion Paper Series DPS20.17*, Ku Leuven Department of Economics. <https://doi.org/10.1002/berj.3754>
- Remimers F. M.,(2022), *Primary and Secondary Education During Covid-19, Disruptions to Educational Opprtunity During a Pandemic*, Harvard University, e-book
- Saavedra, J. (2020). Educational challenges and opportunities of Smith, W.C. Potential long-term consequences of school closures: Lessons from the 2013-2016 Ebola pandemic, <https://blogs.worldbank.org/education/educational-challenges-and-opportunities-covid-19-pandemic>
- Sarı T. & Nayır F.(2020)., *Pandemic Education: Challenges and Opportunities*, *Turkhis Studies*, Volume 15 issue 4.
- Sulak S. E. & Çapanoğlu A. Ş. (2022). Examining the learning losses experienced in the distance education process in line with the opinions of the classroom teachers. *Gumushane University Journal of Social Sciences*, 13(2), 588-603.

- Schult, J., Mahler, Fauth N., B.&Lindner, M.(2021). Did Students Learn Less During the COVID-19 Pandemic? Reading and Math Competencies Before and After the First Pandemic Wave, 10.31234/osf.io/pqtgf
- Skar, G.B. U., Graham, S., & Huebner, A. (2021). Learning loss during the Covid-19 Pandemic and the impact of emergency remote instruction on first-grade students writing: A natural experiment. *Journal of Educational Psychology*. Advance online publication.
- Smith, E. E., Hoeksema, S. N., Fredrickson B.&Loftus, G. R., (2016). *Introduction to Psychology* .(Öncül Ö. ve Ferhatoğlu D. translator.),Ankara, Arkadaş Bookstore. 267-268.
- Squire, L. R.,& Fox, M. M.(1980). Assessment of remote memory: Validation of the television test by repeated testing during a seven-day period. *Behavioral Research Methods and Instrumentation*,12, 583-586
- Şahin A. (2004). Post-holiday learning losses in primary education. Retrieved from <http://acikerisim.aku.edu.tr/xmlui/handle/11630/3363>
- Öztürk, Y., Üstünelan, D., & Metin, B. (2020). During the pandemic, women's experiences at home and the feelings of staying at home. *Feminist Tahayyül*, 1(2), 185-225.
- Özer, M., Suna, H. E., Çelik, Z.& Aşkar, P. (2020). The impact of school closures on inequalities in education due to the Covid-19 pandemic. *Human and Society*, 10 (4), 217-246. [dx.doi.org/10.12658/M0611](https://doi.org/10.12658/M0611)
- UNICEF (2020a), COVID-19: As restrictions increase, so does the risk of abuse, neglect, exploitation and violence against children., 20 March 2020, UNESCO (2020).
- UNESCO COVID-19 education response: how many students are at risk of not returning to school? Advocacy paper. July 2020
- UNICEF (2021), Learning losses from COVID-19 could cost the current generation of students close to \$17 trillion in lifetime earnings, Washington, DC, 6 December 2021.
- Yıldız A. &Vural R. A.(2020), Covid-19 Pandemisi ve Derinleşen Eğitim Eşitsizlikleri, Retrieved 04 March 2022, from https://www.ttb.org.tr/yayin_goster.php?Guid=42ee49a2-fb2d-11ea-abf2-539a0e741e38
- Jones, N., Tapia, I.S., Baird S., Guglielmi, S., Oakley, E., Yadete, W.A., Sultan, M.& Pincock, K.(2021). Intersecting barriers to adolescents' educational access during COVID-19: exploring the role of gender, disability, and poverty. *Int. J. Educ. Dev.*, 85 (2021), 10.1016/j.ijedudev.2021.102428