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The Effects of COVID-19 Pandemic on Preschool Education

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Abstract: In this study in which case study – one of the qualitative research methods - was used, it was aimed to assess the effects of coronavirus disease (COVID-19) pandemic on preschool education by teachers. Preschool teachers working in 14 provinces where the number of cases is high form the universe of the study. Sample group is 140 teachers in total. So as to get data for the study, survey questions prepared by the researcher and submitted to expert opinion and structured interview forms were used. The findings of the study are as follows: preschool children had feelings of anxiety, fear and longing all together during this process and they wanted to return to their schools as soon as possible. Similarly, most of the teachers were highly concerned and worried. The teachers attended online educations related to their professional development during the process of staying home. Before COVID-19 came to Turkey, the schools did not take any measures; then, when distance education started, all schools were disinfected, the materials and toys in the classrooms were put aside after disinfection. Distance education process was quite difficult in preschool education; all the teachers taught in line with their own initiatives. During this process, while the activities most preferred by the teachers were games and art activities, the activities having pandemic theme were experiments and dramas about hygiene. Distance education increased parent participation to preschool education and this had a positive effect on parent-child interaction. In the distance education process, by establishing platforms intended for preschools, suggestions to make more and professional activities, to have common actions in cooperation with schools and to train parents were made.

Keywords: Pre-school education, COVID-19 pandemic, online education, formal education.

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Introduction

Coronavirus disease (COVID-19) pandemic is an epidemic disease spreading rapidly over the last year and affecting all over the world. In world history, epidemic diseases had impacts on almost all societies and changed the course of lives. COVID-19 considered to have emerged from Huanan Seafood and Livestock Wholesale Market described as a livestock market in Wuhan in Hubei province of China in December 2019 spread very fast and cases began to be seen all over the world.

COVID-19 that spread quite fast changed living conditions effectively in all areas of life. Education, economics, social life and notably health had a new form during this process. The fact that the pandemic spread rapidly and caused loss of lives had a negative effect on people and made them have fear and anxiety. In this case, it was required to take measures against its spread and for prevention of the disease.

On March 13, 2020, Director-General Dr. Tedros Adhanom Ghebreyesus used those remarks at WHO media briefing about limiting the spread of COVID-19 pandemic: “*You can’t fight a virus if you don’t know where it is. Find, isolate, test and treat every case, to break the chains of transmission. Every case we find and treat limits the expansion of the disease.*” (Çevik, 2020). This statement showed what kind of a method should be followed to take the pandemic under control.

According to the Ministry of Health (2020a), the date of COVID-19 case first encountered in Turkey was put on the record as March 11, 2020. During the process following the diagnosis of the first case, various measures were taken and the spread of the virus was tried to be taken under control. These measures were quarantine and isolation at home, social distance, wearing masks outside, using disinfectant after contact, washing hands frequently, and avoiding contact. In addition, starting distance education by suspending face-to-face education activities is among the measures

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taken. Schools were closed in 191 countries around the world and distance education started. In this period, United Nations Educational, Scientific and Cultural Organization (UNESCO), Organisation for Economic Co-operation and Development (OECD) shared current information and data they obtained from all over the world and served as a model for other countries. The number of all the students influenced by the pandemic around the world is 1.725.082.528; this number is 91% of all the students in the world (United Nations Educational, Scientific and Cultural Organization, [UNESCO], 2020). In Turkey, 18 million students and 1 million teachers were affected by the situation. The measures taken for education varied from country to country. Some countries gave initiative of distance education process to the school administrations and some others carried out distance education over the Internet, radio and TV as video records or online. The teachers created online classrooms by using some Internet networks and continued their lessons and communication with the students. While many countries announced they would close the schools without specifying a certain time, some countries announced that the schools would be closed for the rest of 2019-2020 school year. China, Denmark, Norway, France, Germany and Australia prepared to reopen or gradually reopen the schools. However, the issue of opening the schools brought along the discussions about keeping social distance and the potential effects of reopening of the schools on the spread of the pandemic. For instance, in Spain, when World Health Organization declared the situation about COVID-19 coronavirus as a pandemic on March 11, 2020, several measures began to be taken (World Health Organization [WHO], 2020). These measures were announced by the government as a state of alert in the national territory by Royal Decree dated March 14 and numbered 463/2020 (State Official Newsletter, 2020).

The government carried out some activities in coordination with the Ministry of Health and all education administrations through The Ministry of Education and Vocational Training. At first, education platforms were formed to make the access to online education materials easier with the suspension of face-to-face education, an educational television program broadcasting 5 hours a day with RTVE was put in to service and it was aimed to provide access to the devices donated by the companies. In this context, a learning platform (EduClan) prepared in cooperation with the Ministry of Education and broadcasting organisations was put into practice. Downloadable digital learning resources (videos, games and e-materials) were arranged according to the ages of the children aged between 3 and 10 are available on this platform (Ministry of Education and Vocational Training, 2020).

In Turkey, distance education is conducted as follows; one day after the diagnosis of the first COVID-19 case on March 11, 2020 in Turkey, it was stated, in the declaration made by the Ministry of National Education, that schools were temporarily closed between March 16 and March 30, 2020 for two weeks. The Ministry announced that one-week midterm-break planned to be in April was moved to an earlier date and distance education would start on March 23 on Monday. With the ongoing increase in the number of the cases, the Ministry of National Education made a new decision on the suggestions of the science board formed within the Ministry of Health about COVID-19 pandemic. According to this new decision, it was announced that the schools would be closed until April 30, 2020 and during this time distance education would continue. Towards the end of this period, the Ministry of National Education again decided to extend distance education process until May 31 in accordance with the suggestions of the science board. In the statement of Minister of National Education on May 18, he said: "*Within the scope of pandemic measures, the distance education process we started on March 23 on Monday over TRT EBA TV will continue until June 19 on Friday when is the last day of 2019 - 2020 school year*" (Turkish Radio and Television Corporation News, 2020).

During distance education process in Turkey, TV channels were determined in relation to education grades of video lessons broadcast in line with the program arranged according to Education Information Network (EIN) that is a distance education platform and class levels, and programs for the classes were prepared. The students, if they want to, could both review the lessons at specified time and could use EIN according to their grades if they have missing subjects or questions. For preschool education, there are activity pools established by directorate general for basic education. There are 400 activities and hand in hand preschool books here. These activities were designed as integrated large group activities. In addition, there were not any applications for preschool education.

Experts, politicians and researchers have been talking about the new world order after COVID-19 pandemic. They state that nothing will be the same as before later on and a new world order will be established. This has also brought up the questions like how the model and method of education will be in this new world order; whether the applied distance education method is sufficient to reach the intended targets; how education and training activities are designed; whether teachers could efficiently use distance education systems or not; whether permanent learning and behavioural changes come true as desired or not; how measurement and assessment methods work; on what levels and lessons distance education is appropriate and on which grades and lessons it has problems.

Preschool period is known as the period in which the children's development is fast and important. Getting over this period healthfully forms the basis for the child to become a healthy individual. Therefore; in preschool period, it is quite significant for the children to have early experiences, to learn through experiences and plan their learning systematically. Preschool education process is carried out within the scope of the program targeting the children's cognitive, language and motor and social-emotional support and development integrally (Gürkan, 2000).

Early childhood education and care are also quite important in terms of economic potential. All over the world, the people's need for the fact that their children are looked after and trained in a safe place is indispensable. In many countries, early childhood education and care centres were closed because of COVID-19 pandemic. In this case, a highly difficult period started for the parents and most of them lost their jobs. In a survey conducted by Northeastern University, it was stated that 13% of working parents quit because of their little children or reduced their working hours (Long, 2020). This situation leads the families to financial trouble and it also becomes a loss of business production.

With this study in which the answers to the questions such as how the preschool children and teachers are affected by the process during preschool period which has such an important place in human life, how they feel and how they lead the education process are looked for, it was intended the study will light the way for educationists, programmers and administrators it is considered it will contribute to international literature by being compared to the situations in other countries.

Research Goal

In this study, the evaluation of the effects of COVID-19 pandemic on preschool education by the teachers was aimed. Therefore; answers to the following questions were required;

Aim 1. What are the effects of COVID-19 on children?

Aim 2. What are the effects of COVID-19 on preschool teachers?

Aim 3. What are the effects of COVID-19 on preschool education?

Aim 4. How is distance education carried out in preschool?

Methodology

The design of this study is case study that is one of qualitative research designs. Qualitative research is defined as the research following a qualitative process so as to present perceptions and events in natural environment as realistic and integrated; it includes natural environment, direct data collection, rich descriptions and the participants' points of view; it is process oriented and uses inductive data analysis; it also make use of qualitative data collection methods like observation, interview and document analysis which reflect the qualities that ensures the flexibility in research designs (McMillan, 2000; Frankel & Wallen, 2006; Yıldırım & Şimşek, 2018). Case study is a method of gathering systematic information to enlighten and explain a social situation or event, or the situation and functioning belonging to a particular group (Berg, 1989; Bogdan & Biklen, 1992). According to another view, it is the detailed analysis of an event or a few events, social events in a particular time period (Ilgar & Ilgar, 2013). Therefore, the techniques such as the review of written texts by the researcher, interview and observation are used (Baker et al., 1992).

Study Group

The universe of the study is preschool teachers working in 14 provinces where the cases are intense. Sample group is criterion sampling which is one of the purposeful sampling methods. 14 provinces in which the case numbers are the highest (Ankara, Antalya, Aydın, Bursa, Diyarbakır, Eskişehir, İstanbul, İzmir, Malatya, Mersin, Şırnak, Trabzon, Van, Zonguldak,) were determined and the nursery classes and 140 preschool teachers working in kindergartens in these provinces formed the study group.

The demographic information about the teachers participating the study is as follows; n: 94 of the volunteer teachers who participated to the study were females and n: 46 were males. The number of the teachers working in independent kindergartens is 68 and the number of the teachers working in kindergartens connected to primary education is 72. 17 teachers have associate's degree, 91 have bachelor's degree and 32 teachers have master's degree. The number of the teachers working in villages, districts and city centres is 30, 47 and 63, respectively. Most of the teachers (105) have 6 to 20 years of seniority in average.

Data Collection Tools

An open-ended questionnaire that was prepared by the researcher and was finalised after being presented to 4 academicians who are expert in preschool education (2), curriculum and instruction (1) and assessment and evaluation (1) was used to collect data for the study. The form has two parts. The first part includes the demographic information of the teachers. The second part suggests the opinions about education before and during COVID-19 pandemic process. The teachers were online supplied with the link created over Google form and they were requested to answer and fill the form in a time period when they felt themselves ready. Therefore, at first Inonu University ethics committee was consulted and after necessary permissions were taken (with the number of 11 session number and 2020/6 decision number dated 02-07-2020), application to the Ministry of National Education Directorate General for Basic Education (Number: 70297673-605.01-E.13412629) was made and required permissions for the research were taken.

Data Analysis

Descriptive analysis was used for the analysis of the data obtained. The process for descriptive analysis is as follows;

Forming conceptual framework; At this stage, a thematic framework was created to be used in the analysis of the data obtained. The researcher formed themes by categorising the questions he asked to the teachers. The themes formed and questions asked in this context are as follows;

1. Theme: The effects of COVID-19 on children

* What are the questions asked to you (to their teachers) about the pandemic by the children?

* What do you think about what the children felt during this ongoing process (in the event of pandemic)?

2. Theme: The effects of COVID-19 on preschool teachers

* How did this process (the event of pandemic) affect you?

* Could you meet with your colleagues at your school during this process?

* Were you informed about the developments related to your profession during this process?

* Was your attitude towards your profession influenced by this process?

3. Theme: The effects of COVID-19 on preschool education

* Did you tell the children about COVID-19 before it came to Turkey?

* Were any measures taken in your school before COVID-19 came to Turkey?

* Were any measures taken about preschool education in Turkey and if so, what are they?

* Were any measures taken in your school and if so, what are they?

4. Theme: The effects of distance education on preschool education

* How did you communicate with the children and their parents?

* What kind of activities did you share during distance education?

* Did your school determine a common program?

* Did you carry out any activities about COVID-19?

* How will you evaluate the children?

* What should be done about preschool education during distance learning?

Data processing according to thematic framework; at this stage, the researcher formed sub-themes by categorising each question under main themes and coded the answers given. The activities shared by the teachers which is sub-theme of the theme called the effect of distance education process on preschool education are games, art activities, reading and writing activities and mathematics activities. The data were coded at two different times by the researcher to ensure internal consistency of coding and the consistency between coding was found to be 100%. To ensure the reliability, the data were presented to two experts (preschool education (1), assessment and evaluation (1)) whose opinions were taken during preparing the questions to be asked while collecting data and they were requested to assess the coding. To calculate the coding coming from the experts, Miles and Huberman' formula (1994) (reliability = consensus / consensus + disagreement X 100) was used and the reliability between codes was found to be 95%.

Description of findings; the data obtained according to research questions were described. At this stage, the researcher gave place to direct quotations to support his findings. Therefore, each teacher in the interview was given a code number (T.1) and his opinions were given as *T.1: in italics in inverted commas*.

Interpretation of the findings; at this stage, the findings obtained at the end of the research were discussed by being correlated with other researches or other situations.

Findings

There are findings obtained within the framework of themes formed.

1. Theme: Findings about the effects of COVID-19 on children

The questions and the data obtained in this context are as follows;

When the answers to the question “What are the questions asked to you (to their teachers) about the pandemic by the children?” were analysed, the children asked mostly about when the schools would reopen (30 teachers answered), when the pandemic would be over (40 teachers answered) and if they could see their friends and teachers again (70 teachers answered). One of the answers given to this question is:

T.20 said that *“They are asking us when they will come to school again, if the virus hurt them or not and they state that they missed their friends.”*

When the answers to the question “What do you think about what the children felt during this ongoing process (in the event of pandemic)?” were analyzed, it was seen that the children felt anxiety and fear, they tried to adopt themselves to the process, they were adversely affected socially, they were ill-tempered, they were unhappy and missed their friends.

T. 70: *“In preschool education, as the children participate in activities like playing games, socialising and gaining different experiences, the fact that they had to stay at home during this process caused them to be deprived of these kinds of activities. This naturally affected them in a negative way. Moreover, because of their locations, they had difficulties in accessing education and enough activities.”*

T. 42. *“Of course, they, very much, longed for ... their friends, teachers, relatives, playgrounds, schools. Unfortunately, they had a great experience that was engraved in their lives. However, I believe that I collaterally supported this process with distance education activities I sent to parents.”*

2. Theme: Findings about the effects of COVID-19 on preschool teachers

The questions and the data obtained in this context are as follows;

According to the answers given to the question “How did this process (the event of pandemic) affect you?” 102 of the teachers were negatively affected by the situation, and 38 teachers were positively affected by the situation. The negatively affected teachers were adversely affected, had anxiety, fear, worry and sadness most and they had financial problems; in addition, they missed the school and their students. The teachers who were positively affected by the process considered that making time for their families was an advantage. The followings are the answers given to this question;

T. 30: *“It was OK. It was very good for me to look after myself and my home, and giving a break to the rush of life.”*

T.50: *“It is possible for me to say that it quite adversely affected. There were times when I was nervous and had negative feelings. However, even if it is not the same as in the classroom environment, preparing something and sharing them with my students, hoping that these days will pass made me feel OK.”*

T.60: *“As I have chronic disease (breast cancer), it quite affected me. You are being constantly uneasy.”*

When the answers given to the question “Could you meet with your colleagues at your school during this process?” were analysed, the teachers stated that they met with their colleagues every day (30 teachers), twice (40 teachers) or three times a week (40 teachers) or at least once (30 teachers). A teacher’s opinion in this context is as follows;

T.22: *“We communicated over WhatsApp group formed by our school almost every day.”*

According to the answers given to the question “Were you informed about the developments related to your profession during this process?”, while ten teachers said they could not be informed about professional developments because of network problems or pandemic, sixty teachers then stated that they could know about their friends, seventy teachers, group meetings and news over various social media groups (WhatsApp, Instagram, twitter, Facebook). There are answers given to this question below:

T. 14: *“Yes, I was. I joined some preschool WhatsApp groups, I did research on the Internet.”*

T.45: *“No, unfortunately I was not. Pandemic entered so rapidly into our lives that I spent my time with at first searching for protection ways from the disease and listening to the experts’ opinions about the process.”*

According to the answers given to the question “Was your attitude towards your profession influenced by this process?”, the teachers, stated this process positively affected them in terms of their profession by indicating that they understood the value of their profession, they missed their jobs, parents understood the value of schools and teachers and they participated and improved themselves in various activities. There are answers given to this question below:

T. 10. *“When the schools reopen, I want to teach more enthusiastically than before. I feel sorry for every information I could not teach.”*

T. 82. *“I love my job and students very much, but under these pandemic conditions, I do not know how we will communicate with the children as before along with the measures to be taken. We, preschool teachers, and children understand each other by touching, loving and looking into our eyes. I have no idea about what kind of an educational*

environment we will arrange without contact and with masks behind which our facial expressions are not understood and how we will communicate the timid children just starting school."

T. 91. *"Conducting the process from home and being at home when I was very anxious made me have a positive attitude towards my profession. I understood how valuable my job is. I took part in educations to improve myself."*

3. Theme: Findings about the effects of COVID-19 on preschool education

The questions and the data obtained in this context are as follows;

According to the answers given to the question "Did you tell the children about COVID-19 before it came to Turkey?", 105 of the teachers told the children about the situation. 35 of the teachers mentioned it after it came to Turkey. The teachers' answers stating this situation are as follows;

T. 101. *"We reported news. They watched informative videos. Hygiene rules were repeated. We had activities like 'Let's make the germs go away'. I presented activities about hygiene such as hand-wash techniques."*

T.120. *"Mainly, drama and art activities about hygiene were done. We talked and told stories about how to protect from the diseases."*

T. 133. *"We did not. The second term had already started late because of the earthquake and the children were affected by the situation very much; therefore, before we could talk about the virus, schools were closed."*

According to the answers given to the question "Were any measures taken in your school before COVID-19 came to Turkey?", any measures were not taken at schools earlier. There are answers given below:

T. 140. *"Any measures were not taken. The cases were announced and after a while schools were closed. Then the schools were cleaned."*

When the answers given to the question "What kind of measures about preschool education were taken in Turkey?" were analysed, starting distance education (not obligatory), disinfecting schools and curfew for the children were among the measures taken. There are answers given below:

T. 129. *"As the age group is younger, most importantly hygiene was paid attention, but more attention began to be paid. I think closing the schools was the best measure to take. Because it was going to be difficult to expect these small children to keep social distance. Our school was disinfected. Hygiene was told more and then schools were closed again."*

T. 5. *"As in all educational levels, education continued from home. However, the care taken for other levels was not taken for preschool education. Distance education continued, entry permit was given to EYN application that did not at first have an entry permit, kindergarten application was formed."*

According to the answers given to the question "Were any measures taken in your school?", the measures taken are as follows; disinfecting schools (classrooms, toys and materials), forming groups over Internet platforms to keep the communication at school and maintaining the communication with parents.

T. 17. *"Mainly hygiene was given importance. The school was disinfected. The children were told about why hygiene like washing hands is so much important. We conveyed the briefing of school administration to the parents and they were informed that the number of the students in each class is reduced for the next term. Moreover, cafeteria order was also rearranged."*

T. 88. *"We formed a WhatsApp group at school and kept communication. We shared every useful information and convey them to the children. On special occasions, we made them happy by preparing videos for them."*

T. 67. *"We determined daily educational activities and educational briefing for the parents with the cooperation of counselling service."*

4. Theme: The effects of distance education on preschool education

The questions and the data obtained in this context are as follows;

When the answers given to the question "How did you communicate with the children and their parents?" were analysed, while communicating with both the children and their parents, the teachers preferred Internet platforms (WhatsApp, zoom, skype) or telephone calls. Most of the teachers made contacts by sending activities every day or at least twice or three times a week. 72 of the teachers communicated by sending activities every day of the week, 29 of the teachers 3 times a week on Monday, Wednesday, Friday, and 25 of the teachers twice a week and 14 of the their once a week. The answers given in this context are as follows;

T. 54. *"I, myself, prepared games that they could play with their parents at home and I made videos of them and sent to the parents. Thus, while telling the mother, I communicated with both the mother and the children."*

T. 109. *"I had all the activities during the normal flow of education at school every day done. Differently, we had various seed germination. I gave more place to parent participation activities to make them have qualified time with their families."*

When the answers given to the question "What kind of activities did you share during distance education?" were analysed, it was seen that while games, art and reading and writing activities took more place, there were other kinds of activities even a little.

T. 37. *"I sent them art, music and game activities that they could do without having difficulty with the materials available at home."*

When the answers given to the question "Did your school determine a common program?" were analysed, in most of the schools, a common decision and planning were made, while in some schools there was not a consensus. Each teacher acted individually. There are some answers about this below;

T. 78. *"The children were communicated through arranged activities in accordance with the common decision and group teachers at school took their own age group into consideration."*

T. 43. *"We had meetings about what we could do during this process. Then everybody formed his program for his own classes and sent it to the administrators."*

T. 99. *"No, each teacher carried out a program appropriate for the age group and developmental level of his own class."*

When the answers given to the question "Did you carry out any activities about COVID-19?" were analysed, it was seen that story, experiment, drama and art activities in which hygiene (hand wash) themes dominate were done. The answers given to this question are as follows;

T. 66. *"We did experiments about washing hands in a correct way and we read stories about germs."*

T. 25. *"We often had experiment activities about hand wash and hygiene and we applied them sometimes with animations."*

T. 88. *"I have them to watch animations about the importance of health. By sending them various germ experiment examples, I aimed at materializing what is experienced during the process. We sang about health and I ensured they learned finger games."*

When the answers given to the question "How will you evaluate the children during this process?" were analysed, it was determined that the teachers would make evaluation according to first term (48 teachers), the part of second term until pandemic period (22 teachers) and feedbacks from the parents (57 teachers). 13 of the teachers stated that they would not make any evaluations during the process. There are some answers given about this below;

T. 102. *"Without observing the children's last conditions and levels and experiencing the second term, it will be very difficult. In kindergarten, unfortunately the children spend only 1 year with us and it is the second term which is the most productive term and when they spend their childhood nicer. We were evaluating if they were ready for the first grade or not according to their levels at the end of the second term. I obviously do not know... how it will be now, without seeing and observing them..."*

T. 112. *"I do not believe we could objectively evaluate the situations that we could not realistically observe from a distance."*

T. 49. *"As they did not have to during this process, most of our students attended on different levels. While most of them participated, the others never attended. I will evaluate the ones participating as individual feedbacks."*

When the answers given to the question "How did distance education process affect preschool education?" were analysed, 125 teachers stated that distance education was not appropriate for preschool period, it did not contribute to the children's development; 15 teachers said that education could be done even remotely. Besides its negative effects, its positive influence on the communication of families with their children or on the participation of parents in the children's educational activities were mentioned. The answers given about this are as follows;

T. 133. *"It was a bit difficult, at first participation was good, but then it began to decrease, follow-up became difficult; however, we tried to do whatever should be done. We tried to maintain communication over social media but as they are too young, it was difficult also for them even if something is told. Every teacher, my colleagues, was in touch with their students, but as there was not a common language, we proceeded in a disorderly plan and this suggested that we should improve ourselves."*

T. 124. *"By doing more activities and playing more games with the children and their parents, the parents' attitude towards the teacher and school and their feeling of empathy developed in a positive way. The part of parents that is one of the most important pieces of education was understood, and the communication between parents-children and the teacher strengthened more. The parents had more responsibilities during distance education. The children's dependence on technology increased. The children staying away from their schools and friends were also away from their social*

environment. It was negative for the groups preparing for the primary school and coming to school for the first time to benefit little from the school."

T. 1. *"In fact it was compelling because activities were given shape in line with the possibilities at home as much as sufficient since almost everything is told by applying with visual aids and a concept is told in many different aspects and with various activities. Therefore, many choices were presented in terms of the materials. Even so, education was tried to be continued in the direction of parents' interests in and knowledge about the activity taught."*

When the answers given to the question "What should be done about preschool education during distance learning?" were analysed, they were about online or simultaneous activity times and activity pools over platforms or media or eliminating physical problems like internet connectivity. Some answers given to this question are as follows;

T. 16. *"By continuing online education, cooperation between parents-students and teachers should be maintained. Development areas should be supported according to the needs of the parents and children. At first, psychological education (behaviour, attitude) should be supplied for the families. It is enough for the children who live in the villages and are not well off to have sufficient Internet access. There are no activities done without materials in preschool education. Broadcasts should be arranged and without ignoring the children's personal characteristics, repetition of broadcasts should be cared more, and it should be remembered that there is only telecast in villages in which there is no Internet."*

T. 28. *"Live broadcasts that could also work in connection with EİN and is safer and similar to "zoom" should be developed for all education levels. In the existing system, preschool students could get access to EİN at first only on Sundays and then for two hours a day. During this time, they often faced systemic problems (like freeze, break, not opening the page). In the application prepared for preschool education, there should be live broadcast rooms ensuring to have live broadcasts and content which will make doing interactive activities with students possible. The studies that the teachers will do should be reported to the schools within the plan and schedule of the ministry."*

Discussion

According to the findings from the research;

The effects of COVID-19 on the children are as follows;

The children asked their teachers mostly about when the day they would meet their friends and would go to school would come during the period when they stayed away from their schools because of pandemic. In addition, they often felt anxiety, worry and fear. It can be thought that the fact that the parents waited doubtfully for the case numbers every evening, the information about pandemic on news, staying at homes along with the curfew and the attitudes of parents reflected on the children's feeling anxious and scared. The study called COVID-19 through the eyes of mothers by Usta and Gökcan (2020) supports this opinion. According to the study, it was determined that the children and their mothers had negative feelings about the virus, they were affected mostly by social isolation during the process and the children often got information from media besides their parents (Usta & Gökcan, 2020). Similar to this, in the study by Tarkoçin et al., (2020), also Çiçek et al., (2020) it was stated that mothers indicated their children had such behaviours such as "anxiety, fear, aggressive/angry/furious behaviours, excessive mobility, sister-jealousy, parent-dependency" during pandemic process. In addition, the teachers' attitudes towards the situation could have also affected the children. Yet, the teachers themselves were anxious and worried about the situation.

The effects of COVID-19 on the preschool teachers are as follows;

While pandemic process caused the teachers to have negative feelings mostly like fear, anxiety, worry and panic attack, few of them were happy to spend their time with their families during the process. In addition, many of them have chosen to improve themselves by participating in online training seminars related to their professions. Similar to this study, in Jones' study investigating the effects of COVID-19 on little children, teachers and families in the USA, teachers stated that online education provided them benefits about learning technology and making use of technology (Jones, 2020). They often contacted their colleagues at school over social media and were informed about the developments in their profession. In addition, this process made them understand the value and importance of their profession and the teachers longed for their students and profession. Preschool education is a period when the teachers should renew themselves dynamically and continuously. To catch up with the movements of preschool children who are at the play age makes the teachers active. Along with the interruption of such an education process and taking strict measures, the negative situation brought out by the pandemic in the world may have made the teachers be anxious and worried about the process they have never known about. Dayal and Tiko (2020) analysed the teachers' feelings about COVID-19, the strategies and activities of education centre, and the experiences of the teachers during distance learning process in their study conducted with the teachers in two private early childhood education centres in a state in Pacific during COVID-19 pandemic process. The results obtained are similar to the results of this study. The teachers there also felt worried, anxious and fearful about themselves and their families during pandemic process. In addition, they had economic concerns about their jobs (Dayal & Tiko, 2020).

The effects of COVID-19 on preschool education are as follows;

Most teachers gave information to children about COVID-19 before it came to Turkey while few of them talked about the process after it came to Turkey. Any measures were not taken before pandemic. After pandemic process, disinfection of the schools, washing the toys, washing of the toys and removal of most of them, quitting face-to-face education and continuing optional distance education were among the measures taken about preschool education in the country. The measures decided by The Ministry of Health Science Board and put into practice by the Ministry of National Education were grouped under four main topics. According to this, they were grouped as the measures at the entrance, the measures inside the institution (hygiene and disinfection, cleaning the toys, hand hygiene, preparation and service of food), measures for the staff, and measures for the children (The Ministry of Health, 2020).

When face-to-face education was suspended during pandemic, most of the teachers shared activities by contacting parents and children over Internet platforms for at least 2 days a week in the direction of the common plan of the school for distance education process. The activities shared mostly by the teachers are games, activities of art and reading and writing. The activities done about COVID-19 are stories, experiments and dramas having cleaning and hygiene themes. Playing games is among the most important works for preschool children. During this period, game is an indispensable element for them; therefore, the teachers may have given more place to game activities in education to get the children who remained locked at home spend their energy. İnan (2020) in his study emphasized, as a measure which should be taken in preschool education, it should be remembered that the children learn through playing games. According to the result of the study by Dayal and Tiko (2020), by using an online game as an urgent strategy in early childhood education centre, a home-based learning approach about literacy and arithmetic was used and by sending the link of a song to the parents via e-mail, a way of learning vocabulary about the song was used. The teachers also formed their own viber groups (with video call) except e-mails.

Moreover, about the evaluation of preschool students, while most of the teachers made assessment in terms of the first term when face-to-face education went on, most of them stated that they would not evaluate the children. While making assessment in preschool education, different methods are used. Among the sources to be applied are the products that the children made, observations, anecdotes and portfolios. In addition, evaluation is made according to development areas at the end of each term. After face-to-face education was suspended in March, the children spent only one and a half month at school in the second term. The fact that the teachers thought there would not be more different developments in children than the first term may have caused them to take the first term as a criterion in evaluation. Some teachers may have not made assessment as they thought asynchronous education given would not contribute to the children's development. Some of them made a few assessments according to the feedbacks from the parents.

Another result obtained from the study was that for preschool teachers, distance education did not contribute to the children's development and this education model was not appropriate for preschool education in terms of age. Preschool education is a program requiring active and high level of interaction. It is quite important for the children in this period to do active activities in connection with their friends. During distance education process, the fact that the children spend their time in front of the screen cause them to be; therefore, they could get bored or they will not want to participate in education sessions; or, they could be dependent on Internet, cell phones or tablets. By taking these situations into consideration, it is possible for the teachers to state that distance education is not appropriate for preschool education. Thus, Akkaş Baysal et al. in their study (2020), it was indicated that, during education activities carried out on EİN or through other distance education activities, although the preschool teachers sent activities that would not keep the children in front of the screen for a long time, it was seen that the children wanted to stay longer on the contrary. In Jones' study (2020), parents indicated that online learning was not appropriate for their children's age groups, the time the children spent in front of the screen extended, and thus the children got bored and their social participation reduced (Jones, 2020). Szente (2020) analysed the effects of live online education during COVID-19 pandemic in Florida in 2020 on preschool children. It was found in the results of the study that when the number of the students participating the education, the students were distracted and they were less active. Therefore, it was suggested the number of the students joining education sessions should be between 6 and 10 and the sessions should not last more than 20-25 minutes.

However, the participation of the parents to preschool education process is one of the positive effects of distance education. Closing the schools and continuing education online increased the parents' responsibilities. As distance education process works asynchronously, making the children do the activity shared by the teacher is under parents' control. This can lead the parents both to take part in their children's education process and to have opinions about preschool education. In addition, the children spend more efficient and qualified time with their families when they do activities with their parents. Researches has shown that the participation of the family in the educational activities of the child increases the academic success of the child (Sengul et al., 2019). Similar to this work, Dias et al. (2020), determined the problems of 26 early childhood education teachers working in various Latin countries during COVID-19 process. A teacher from Costa Rica mentioned about the children's trouble in accessing the Internet and stated that he could give online education only once in a week. All of the teachers indicated they took part in education by emphasizing the importance of families during this process. A teacher from Dominican Republic mentioned that the

activities of the students should be taped by their families and those should be sent to the teachers via WhatsApp and Facebook as a way of evaluating the students. In this context, in the study by Demirbaş and Koçak (2020), it was found out the fact that families spend time with their children during pandemic process made the children happy.

About what should be done in preschool education, the teachers suggested setting simultaneous activity time online over platforms or media, forming activity pools or eliminating the physical problems like cuts in the internet connectivity during distance education process. In pandemic process we were caught unprepared, the most frequent problem the teachers and children faced has been communication. The reasons for that are poor connection on the Internet or not having a cell phone, tablet or computer. In addition, such factors as the fact that the teachers were not trained about distance education, they did not know how to lead the process and distance education was not obligatory in preschool education prevented the process go on healthily. Therefore, as measures to be taken, the teachers should be given in-service education about the system and method of the process to make them ready for the process. The years spent in early childhood education suggested that the teachers and parents should have chat with the children about the virus and they should try to eliminate the children's worries and anxiety (Jones, 2020). According to Preschool Learning Activities Survey of National Institute for Early Education Research (NIEER) in 2020, while there was a decrease in the attendance to preschool education because of closed schools, 47% of early childhood education institutions continued distance education. It was concluded that learning at home through family-attended activities could not compensate for face-to-face learning duration at school (Ramos et al., 2021) Similarly, about distance education during Coronavirus (COVID-19) pandemic process, Demir and Öztaş (2020) and İnan (2020) stated in their studies that open and distance education system in Turkey should be strengthened in terms of infrastructure, access, preparation, safety, content, design, planning, application, quality, regulation and pedagogically (Demir & Özdaş, 2020; İnan, 2020). Külekçi Akyavuz and Çakın (2020) stated in their study that the teachers had communication problems during distance education process.

Conclusion

1. The pandemic has created anxiety and fear on children.
2. The children missed their school and their friends so much, they waited impatiently for the schools to be reopened.
3. The pandemic process has created situations such as fear, anxiety, anxiety disorder, and panic attack among preschool teachers.
4. Some preschool teachers were happy to be with their families during this process.
5. The process spent at home and distance education made preschool teachers passive.
6. Teachers applied more games, arts and literacy activities in distance education. Activities related to Covid 19 are stories, experiments and dramas with the theme of cleanliness and hygiene.
7. The developmental evaluations of children during the pandemic process could not be fully made.
8. Teachers did not find the distance education system suitable and useful for preschool education.
9. In this process, children were exposed to the negative effects of the tablet computers by sitting at their screens for a long time.
10. Participation of families in children's education is a positive result.
11. Internet and computer problems were experienced during distance education.

Limitations

In this study, it is a qualitative study aimed to determine the effects of the Covid 19 pandemic on preschool education by preschool teachers. The data obtained from the research were analysed in line with the limitations of a qualitative study. The first limitation of the research; the research data were collected with a form consisting of the answers given to the written questions. If individual interviews could be made, more themes could be created. The second limitation is that the data were collected by one hundred forty volunteer preschool teachers in fourteen different provinces. If the opinions of different provinces and more teachers were taken, different results would have occurred.

Suggestions

In the light of the results obtained the research, the following suggestions could be made;

During distance education process, especially as infrastructure, Internet databases should be strengthened and systemic problems that may occur should be minimised. The teachers should arrange their education once or twice a week and not more than 30 minutes to make the children not spend too much time in front of the screen.

While planning activities, it should be ensured that the activities in which social relations are established with more family members by the teachers as far as possible and the students are guided should be designed. The teachers should be in coordination and communication with families during these processes.

The fact that the teachers should guide the children to have outdoor activities under suitable weather conditions will be helpful for them to satisfy their needs for fresh air and going out.

So as to make the teachers design education about information technologies, online education should be arranged and presented; the videos of these education should be uploaded to the web sites of the related schools or related platforms.

Moreover, the teachers should be trained about what could be done in cases like epidemic diseases and one teacher in each school should be charged as the staff who is responsible of the situation.

The school administration should have emergency action plans for such situations and education should continue in coordination with these plans. For further studies, the researchers could repeat the study conducted at the beginning of COVID-19 pandemic according to the time elapsed. In addition, evaluations could be made on distance education in terms of teachers, families and children by using observation method for the distance preschool education going on.

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