

Effect of the Covid-19 pandemic on language development of preschool children

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This study aimed at investigating the impacts of the Covid-19 pandemic period on the language development of preschool children according to the opinions of teachers. A qualitative case study design was adopted, with data obtained from preschool teachers (N=21) working in independent kindergartens, kindergartens within primary schools, and private kindergartens affiliated with the Ministry of National Education, Turkey. Owing to the difficulties of reaching teachers and conducting face-to-face interviews during the pandemic, an easily accessible online sampling and data collection method was adopted. A personal information form and open-ended question form developed by the researchers were used to obtain the research data for a content analysis technique. Teachers stated that the language development of children was adversely affected during the pandemic period, and they observed developmental delays in verbal language and social communication skills.

Introduction

Covid-19, first observed in Wuhan, China, in December 2019, spread rapidly, becoming declared a pandemic by the World Health Organization on 11 March 2020. Many activities in health, education, entertainment, and trade were interrupted (Ari-Arat & Gülay-Ogelman, 2021; Wang et al., 2020; WHO, n.d.). Working conditions in educational institutions were restructured by compulsory measures taken to prevent the spread of the pandemic. There were also changes in family lifestyles, as these measures also prevented children from accessing programs and services that promoted their care and development. All these changes reflected on children's lives in different ways, affected their developmental processes, and sometimes had negative consequences on children's psychological well-being as well as changes in anxiety and stress levels (Di Giuseppe et al., 2020; Şahin-İnan, 2020; Tohidast et al., 2020; UNICEF, 2021). Children do not have the independent power to direct their development and meet their social, emotional, mental, and behavioural needs. In addition, during the pandemic period, it became necessary to comply with the rules about hygiene, eating healthy food, maintaining social distance, etc. Due to their limited experience and lack of skills in situations such as epidemics and natural disasters, children are in the first place of the fragile link that can be affected by traumatic events (Lieberman et al., 2011; Ok, Torun, & Yazıcı, 2021; Schonfeld & Demaria, 2015). In this regard, Charnery et al. (2021) reported that the language development of children can be negatively affected and there may be language developmental delays due to the pandemic period.

Language is the first step in acquiring knowledge and one of the communication tools used to think. Language itself is a means of communication between individuals in the form of symbols and sounds produced by speech tools to communicate with other people (Indrayani, 2016; Putri & Eliza, 2021). Language development for early childhood is an

important aspect of supporting children's own lives (Yafie, Giavarini & Maulidia, 2020). The process of listening, recording words, understanding the meaning of words, speaking, and making the right word choice in a given social situation are among the skills within the scope of language development (Erbay, 2020; Yafie, Giavarini & Maulidia, 2020). These skills relate to how a person can interact and communicate with other people. Through language, a child can convey ideas and opinions (Yafie, Giavarini & Maulidia, 2020). Therefore, social interaction is also necessary for language development (Astuti, 2015). During the pandemic, preschools remained open for limited periods, and social distancing measures and restrictions on large group gatherings during these times prevented children from engaging in meaningful, face-to-face interactions with their peers. "Peer talk" is a very important component of language development and includes speaking skills such as taking turns and understanding the implied meaning behind the speaker's words (Bruce & Hansson, 2011; Charney, Camarata & Chern, 2021). Masks can also hide social cues provided by facial expressions (Charney, Camarata, & Chern, 2021). In addition, different measures have been taken in many countries, including Turkey, in order to slow and prevent the spread of Covid-19. Within the scope of these measures, face-to-face education was suspended in Turkey on 16 March 2020, and educational institutions switched to distance education as of 23 March 2020. As of 3 April 2020, closure measures were implemented (Arı-Arat & Gülay-Ogelman, 2021; Republic of Turkey Ministry of Health, 2020). With the closure of the schools, online courses for students at all levels, broadcasts such as the Turkish Radio and Television Corporation, TRT Primary School, TRT Middle School, and TRT High School were started by the Ministry of National Education (Özyürek & Çetinkaya, 2021). In this period, although it was attempted to be conducted face-to-face for a limited time in the beginning, it was carried out with distance education throughout the country with the measures introduced (Aktan-Acar, Erbaş, & Eryaman, 2021). The emergence of virtual and hybrid schools has ultimately resulted in fewer opportunities to practise speaking and social skills in person (Charney, Camarata & Chern, 2021).

Children began to spend a long time alone with their families during the lockdown and when institutions were closed. Parents should expose children to language in order to optimise all aspects of child development, especially some parts of children's language (Al-Harbi, 2020; Erbay, 2020; Topping, Dekhinet & Zeedyk, 2011). Exposure means that children are continually physically immersed in a particular linguistic environment in which they can hear, interact, and communicate in a given language (Al-Harbi, 2020). According to Montessori (1982), 3 to 6-year old children are in a sensitive period when it is necessary to stimulate and direct some functions such as speaking, listening, daydreaming, and expose to the social environment, so that they do not encounter development obstacles (Yafie, Giavarini & Maulidia, 2020). According to Lightbown and Spada (2004), in the language acquisition process, children are not given any instruction on how to speak the language, but instead they construct possible ways to use the language they are actively exposed to, and test these ways to see whether they work or not. With this active process, children create their language, which is suitable for the language used by the adults around them (as cited in Al-Harbi, 2020). The Covid-19 pandemic has required families to cope with different problems, and during the pandemic, there has been an increase in parents' physical and psychological problems (Altena et al., 2020;

Fardin, 2020; Özyürek & Çetinkaya, 2021; Savi-Çakar, 2021). This may adversely affect the quality of parental care and speech-language exercises. As parents have to deal with factors such as parenting patterns, parental preoccupation, and lack of stimulation from adults around children, children may suffer language delays (Yafie, Giavarini & Maulidia, 2020). These delays and deficiencies make it difficult for the child to socialise and adapt to their environment (Lee, Matthews & Park, 2019; Metcalfe, Harvey & Laws, 2013; Tohidast et al., 2020).

When the literature is examined, it is noteworthy that there are different studies on families and young children during the pandemic period. Studies on families have explored the views and beliefs of families regarding online education in early childhood during the pandemic (Donga, Caob & Lia, 2020), the views of parents regarding playing games at home with their children during the pandemic (Mart & Kesicioğlu, 2020), the feelings of parents in this period (Arslan-Dikme & Gültekin, 2021), and parent-child relationships in the pandemic (Özyürek & Çetinkaya, 2021). In the studies where the pandemic is associated with the early childhood period, the psychological resilience of children and how to strengthen them in the pandemic (Çaykuş & Mutlu-Çaykuş, 2020; Gülay-Ogelman, Güngör & Gökteş, 2021), home and daily lives of preschool children (Arı-Arat & Gülay-Ogelman, 2021; Döğër & Kılınç, 2021), and the views of children on the effects of the pandemic (Gökçe et al., 2021) have been examined. Studies covering this age period include the general effects of the pandemic on early childhood, children's development, and educational processes, and its effects on mental health, including emotional and behavioural problems experienced by children in this period (Akgül & Özenç-İra, 2021; Akoğlu & Karaaslan, 2020; Jiao et al., 2020; Ok, Torun & Yazıcı, 2021; Şentürk-Pılan et al., 2021).

In the literature, there is a limited number of studies addressing the language development of children during pandemics. There are some studies discussing the potential impacts of the Covid-19 pandemic on children's language and communication skills (Charney, Camarata & Chern, 2021) and identifying strategies to support the child's language development during the pandemic period (Yafie, Giavarini & Maulidia, 2020). Although the aims of some studies do not directly include the relationship between the pandemic and language development in children, it is noteworthy that the effects of the pandemic on language development are incidentally mentioned in the results (Yafie, Giavarini & Maulidia, 2020; Ok, Torun, & Yazıcı, 2021). Language development is an important developmental area for children in the early years. When children have difficulty understanding others and expressing themselves, the risk of experiencing social, emotional, and behavioural problems increases (Topping, Dekhinet & Zeedyk, 2013). Covid-19 is not the first virus to threaten humanity, nor will it be the last (Clark et al., 2020). Therefore, studying and investigating different subjects related to language development will contribute to supporting children, and to filling a gap in the literature. In addition, the results of this research will shed light on the prevention or improvement studies for possible problems related to language development that may be encountered by children in a similar situation in the future.

In this regard, this study aimed at investigating the impacts of the pandemic period on the language development of children according to the opinions of teachers. The following questions were adopted:

During the Covid-19 pandemic period, what are the opinions of preschool teachers about:

- language development problems of children they observed/identified in their classrooms;
- causes of language development problems that they identified in children in their classrooms;
- preschool teachers' classroom practices and other practices for eliminating the negative impacts of the Covid-19 pandemic on children's language development; and
- the duties and responsibilities of families in supporting children's language development?

Method

Research design

A qualitative case study design was used to investigate the opinions of preschool teachers about the impact of the Covid-19 pandemic on the language development of preschool children. A case study is a qualitative approach in which researchers collect detailed and in-depth information about real life, a current situation, or situations (Creswell, 2013). The case study aims to reveal the results related to a certain situation (Yıldırım & Şimşek, 2018).

Participants

This study was carried out with 21 preschool teachers (who teach 4-6-year-old children) from various regions of Turkey. As this study was conducted during the Covid-19 pandemic period, a convenience sampling method was preferred considering the difficulty of reaching the participants (Büyüköztürk et al., 2013). Considering the priority of easy access within the scope of pandemic measures, participants were reached through the Internet. The 21 teachers who volunteered to participate in this study were coded as T1, T2, T3, ... T21 instead of using real names. Demographic information of participants is presented in Table 1.

As seen in Table 1, 20 (95.2%) of the participating preschool teachers were female and only one of the teachers (4.8%) was male. Considering the professional seniority of the teachers, the highest participation was among the preschool teachers working in the range of 1-5 years (n=8, 38.1%), while the preschool teachers with 16-20 years of seniority (n=1, 4.8%) had the lowest participation. The number of preschool teachers working in public institutions (n=17, 81%) was more than the number of preschool teachers working in private institutions (n=4, 19%). Considering the educational background of the participants, it was determined that the number of preschool teachers with an

undergraduate degree (n=18, 85.7%) was more than the number of teachers with higher degrees (n=3, 14.3%).

Table 1: Participants' demographic information (N=21)

Characteristics		N	%
Age	25-30 years	7	33.3
	31-35 years	6	28.6
	36-40 years	4	19.0
	41-45 years	3	14.3
	46 years and over	1	4.8
Gender	Female	20	95.2
	Male	1	4.8
Seniority	1-5 years	8	38.1
	6-10 years	4	19.0
	11-15 years	6	28.6
	16-20 years	1	4.8
	21 years and over	2	9.5
Institution type	Official	17	81.0
	Private	4	19.0
Educational background	Bachelor degree	18	85.7
	Masters degree	2	9.5
	PhD	1	4.8

Data collection tools

A personal information form and open-ended question form developed by the researchers were used in this study. Seven questions were prepared to determine the impact of the Covid-19 pandemic period on the language development of children. The draft questions were presented to three faculty members with expertise in the field of preschool education. After their feedback, two questions were deleted, and the final version of the form comprised five questions and a personal information form. The form was piloted with three preschool teachers not within the final sample, and it was concluded that the questionnaire was understandable to the teachers whose participation was sought.

Data collection and analysis

The open-ended question form was submitted to the participants via the Internet, and their responses were collected online. The data were analysed by content analysis, "a systematic and repeatable technique in which some words of a text are summarised with smaller content categories with coding based on certain rules" (Büyüköztürk et al., 2013, p. 240). According to Yıldırım and Şimşek (2018), similar data are brought together in content analysis within the framework of certain concepts and themes, and these are organised and interpreted in a way that the reader can understand. The analysed data were read by both researchers and the codes were determined. The themes were obtained by bringing together the related codes. The data were arranged according to codes and themes, tables were created to explain the codes, and the findings were interpreted. To

determine the consistency of the codes determined by both researchers, the percentage of consensus was calculated. Miles and Huberman's (1994) reliability formula was used to determine the percentage of consensus: $\text{consensus}/(\text{consensus} + \text{division})$. According to Miles and Huberman (1994), the reliability is expected to be over 80%. It was determined that the percentage of consensus was over 90% for all questions.

Findings

1. Problems in the language development of children during the Covid-19 pandemic

Themes and codes related to the language development problems of the children observed/identified by the preschool teachers in their classrooms during the Covid-19 pandemic period are presented in Table 2.

Table 2: Problems regarding language development of children

Theme	Codes
Problems regarding verbal language skills	Vocabulary insufficiency, inability to pronounce words exactly, using short sentences and single words, speech disorder, speech difficulty, using facial expressions and body language instead of speaking, problems in expressing oneself, voice disorders, inability to make some sounds, changing the places of sounds, difficulty in perceiving and forgetting words
Problems regarding social communication skills	Difficulty in playmaking, difficulty in communicating

Most of the preschool teachers (n=15) who participated in this study expressed that they identified problems in their classrooms, especially in verbal language skills, during the pandemic period. It was noteworthy that the most common problems in children were speech disorders and difficulties (n=8) and using short sentences and single words (n=6). These problems were followed by vocabulary insufficiency (n=4), problems in self-expression (n=4), and using body language and facial expressions instead of expressing themselves verbally (n=4). Teachers also reported problems such as sound disorders, inability to pronounce some sounds and changing the place of sounds (n=3), not being able to pronounce words exactly (n=2), and difficulty in perceiving what was being said and forgetting words (n=1).

Some of the opinions of preschool teachers regarding the problems related to verbal language skills that they observed/identified in children in their classrooms during the pandemic period are illustrated below (translations from Turkish to English are by the authors).

- T4 They cannot speak in accordance with their age and developmental characteristics. They cannot express themselves with enough words. In other words, they attempt to keep the conversation going by using single words and short sentences.

- T5 I observed that they provided shorter responses. In fact, I recognised an increase in nodding, winking, and responses such as uh, etc., instead of making sentences or using words. There were also quite a lot of children with speech disorders considering their ages. Finally, some children emulated the *YouTube* channels they watched and attempted to talk like the content creators
- T20 I observed that most children in my class had problems expressing themselves. In Turkish language activities, they had problems such as giving short answers such as 'yes' or 'no' to questions, not being able to give satisfactory answers even though they perceive the questions, not being able to form sentences, not being able to use words properly, and not being able to speak with a rich vocabulary.

Some of the teachers reported that children had difficulties in social communication skills, especially in communicating with their peers (n=6) and playmaking (n=1), due to the inability of the children to express themselves correctly.

- T13 In children's free time activities, I encountered behavioural problems such as communicating with each other, hitting instead of asking for permission, pushing, and pulling an object they want from their friend's hand.
- T9 I observed that children had difficulties in playmaking compared to the period before the pandemic. Children were left alone with their mothers at home for a long time due to the pandemic. When the school was first opened full-time, we were able to start the game with the help and guidance of teachers. After half a term, they were able to establish and maintain play with their friends.

2. Possible reasons for language development problems that teachers identified in children

The findings on the themes and codes related to the possible reasons for language development problems that teachers identified in children during the Covid-19 pandemic period are presented in Table 3.

Table 3: Possible reasons for language development problems

Theme	Codes
Staying away from social environments	Inability to socialise, communicate with others, meet with peers, play with peers
Excessive screen time	Spending more time with TV, tablet, and computer
Family interaction	Lack of communication and interaction within the family, negative psychology caused by the pandemic and work stress
Distance education	Decreased school attendance time, distance education

All preschool teachers participating in this study (n=21) expressed that the Covid-19 pandemic negatively affected the language development of children. Most of the teachers (n=14) reported that the reason for the language development problems they observed/identified during the pandemic period was that children were away from social environments. In this context, teachers reported that the inability of children to come

together with their peers (n=7), socialise (n=7), communicate with each other (n=5), and play with their peers (n=2) negatively affected their language development. Some of the teachers (n=13) reported that the increase in children's use of technological tools such as television, tablets, and computers during the pandemic period and the fact that they spent more time in front of the screen negatively affected their language development. Some of the opinions of the preschool teachers in this regard are illustrated as follows.

- T1 In this process, children who cannot socialise with their age groups and whose screen time increases have problems in their speaking and self-expression skills.
- T3 When children were away from their most effective social environments, such as school, where they developed their communication skills, they experienced a decline in expression, as the number of people they interacted with decreased, and their common experiences became lesser.
- T10 I think the pandemic period negatively affected the language development of children. Less socialisation, being away from peers, and less interaction with games affected preschool children more than other age groups.
- T15 Children confined to homes were often deprived of a social environment, especially if they had no siblings. They did not have the chance to make friends, they became interested in digital devices, and they did not have the chance to develop their language skills enough.
- T21 The pandemic generally affects the language development of children negatively. The reason for this is that the addiction of children who spend more time at home to digital tools (TV, tablet, phone, computer, etc.) is observed to increase. It is considered that this negatively affects their language development processes due to the lack of communication.

Some of the preschool teachers (n=3) reported that children's language development problems resulted from distance education and the decrease in school attendance, the decrease in family communication and interaction (n=2), and the negative psychology caused by the pandemic and work stress (n=1).

- T11 Inadequacy in self-expression and vocabulary, lack of communication. Their social development processes were damaged. The failure of families to take care of their children in a healthy way due to the pandemic triggered these situations.
- T20 They received distance education or school training for limited hours two days a week. There was a one-sided communication in distance education. Although a one-sided communication may have affected the recipient languages, it was obvious that the children did not improve their expressive language skills.

3. Practices to counter negative impacts of Covid-19 on children's language development

The findings on the themes and codes related to the practices of preschool teachers to eliminate the negative impacts of the Covid-19 pandemic on children's language development are presented in Table 4.

Table 4: Teachers' practices to eliminate the negative impacts of the pandemic

Theme	Codes
Turkish language activities	Saying rhymes, chatting, playing finger games, reading stories, creating and completing stories, making presentations, sharing books, asking riddles
Play activities	Games supporting peer communication
Drama activity	Dramatisation, imitation
Music and movement activity	Singing songs, plays with songs
Science activity	Experiments, trip observation, projects
Preparation for literacy activity	Sound studies, concept studies
Family-based activities	Family education and participation activities, interactive book reading, limiting the use of digital tools

All of the preschool teachers (n=21) who participated in this study reported that they included practices in their classrooms to counter the negative impacts of the pandemic on children's language development. Almost all of the teachers (n=20) reported that they mostly included practices for Turkish language activities in their classrooms. These practices were story reading-telling-creation and completion exercises (n=11), saying nursery rhymes (n=4), making presentations (n=4), playing finger games (n=3), chatting (n=3), sharing books (n=2), and asking riddles (n=1).

In addition to Turkish language activities, preschool teachers used drama (n=8), rules and free games to support peer communication (n=4), experiments, trip observation, and project studies within the scope of science activities (n=4), music and movement activities (n=3), and sound and concept studies within the scope of preparation for literacy activities (n=3).

- T7 We usually chat with the kids for a few minutes before starting the lesson. We chat about what they go through in their daily life before coming to class or about a topic that interests them. In addition to these, we attach importance to speaking the language (Turkish) by using method techniques such as story creation and story completion.
- T6 I have short conversations with children every day during the 'circle time' activity. I learn their feelings and thoughts and help them where they have difficulty during communication. After doing a story reading activity with children in the Turkish language activity, I try to learn their thoughts about the story read by providing feedback. In addition to these, I attempt to contribute to their language development with rhyme and riddle activities.
- T10 Yes, I include different practices and activities. I include story time and mother tongue activities (rhymes, finger games, etc.) every day, especially in preschool. We spare time for animating the story, drama studies, and pretend play activities. I attempt to help them express themselves by providing them with different responsibilities.

Some of the preschool teachers (n=9) reported that they performed family-based activities as well as in-class practices. Within the scope of these activities, preschool teachers reported that they provided information to parents about interactive book reading (n=3), organised seminars and training for parents (n=3), shared information with families about limiting the use of digital tools (n=3), and attempted to support children’s language development through family participation studies (n=2).

- T21 ... Also, one-on-one interviews were held with families about reading storybooks daily with their children, limiting children’s use of digital tools, and spending more quality time together.
- T5 I inform the parents not to expose their children to technology. I don’t want the parents to let their children watch TV or use technological devices such as tablets for more than 30 minutes a day. I inform parents that children should frequently get together with their peers. I sent the parents a home TV watching chart and requested them to fill in this chart. I wanted parents to paint the chart when their children watch one cartoon.
- T13 I perform in-class practices. I prepare seminars and information notes to inform families about mobile applications for language development. In addition to this, I also make individual interviews with families...

4. Other practices to counter negative impacts of Covid-19 on children’s language development

The findings on the themes and codes related to the suggestions of preschool teachers for other practices that can be performed to eliminate the negative impacts of the Covid-19 pandemic on the language development of children are presented in Table 5.

Table 5: Teachers’ suggestions for other practices

Theme	Codes
In-school and out-of-school practices supporting social development	In-school social environment diversification, communication with peers, group and cooperative games, socialisation
In-class supportive practices	Following the child’s development, in-class activities
Practices supporting family-child interaction	Activities to increase family-child communication, family education, limitation of screen time, controlled use of technological devices

Some of the preschool teachers (n=9) suggested in-school and out-of-school practices that support social development to counter the negative impacts of the pandemic. These practices included encouraging children to be in social environments (n=5), supporting peer communication (n=4), giving more space to the group and cooperative plays (n=3), and in-school social environment variations (n=3). Illustrative examples included:

- T8 Children who spend a certain amount of time with their classmates communicate more easily as they are used to it. I think this situation supports children but does

not take them forward. Therefore, activities can be organised mutually with the classes in kindergartens with more than one classroom. In addition to this, the communication network they established can be expanded, especially by focusing on project works.

- T1 Thanks to the diversification of the social environment in schools, children can find the opportunity to express themselves more.
- T11 The number of social responsibility projects within the school can be increased. Municipalities can put more books at different points (bus stops, stations, etc.) of the city. The number of social areas where children can express themselves can be increased.
- T19 Students should be allowed to be in a variety of social situations frequently. While giving this opportunity, there shouldn't be any intervention and the student should be provided with the urge to communicate by exploring himself/herself and his/her environment.

Some of the teachers (n=9) provided suggestions to support family-child interaction to counter the negative impacts of the pandemic on children's language development. The most frequently expressed suggestions were that families should limit the time their children spend in front of the screen and ensure the controlled use of technological devices (n=7) and perform activities where the family and the child will spend quality time together (n=7) to strengthen family-child communication. In addition to these, preschool teachers reported that families should be informed about supporting children's language development by conducting family education studies (n=3). Suggestions to support family-child interaction included:

- T5 Parent training should be provided. Some parents use *TikTok* and similar applications and give their children the opportunity to watch the content on these applications. Parents should be educated first. I can even say that some parents do not even know what game their child is playing on the phone or what video he/she is watching.
- T20 Screen time can be limited, the programs they watch can be filtered. Questions can be asked about the programs they watch, and a comfortable environment can be provided for them to express themselves.
- T2 Families can set limits for watching TV. They can also set limits for the use of phones and tablets at home. Activities such as reading books, singing rhymes, and singing together can be included.
- T6 Besides the teacher, parents should also contribute to the process by collaborating with the teacher to eliminate these negative impacts. For example, activities such as word-building games, telling rhymes, memorising poems, playing games in front of the mirror, and imitating sounds can be performed to create sound awareness.

Some of the teachers (n=6) reported that children's language development can be supported with various in-class practices. They emphasised the necessity of doing activities to support language development in the classroom (n=4) and monitoring the child's development (n=1). Some of the classroom practices are as follows:

- T9 Different reading techniques can be used. The children can be requested to work with event cards in the classroom. Picture cards can be placed on the table and children can be asked to take turns telling stories. To improve their problem-solving skills, they can form a circle in the classroom and independent questions can be asked to the children. Pretend plays can be included
- T19 Students can be given a word every day to brainstorm and work on the word.
- T10 Family involvement activities can be applied in the classroom. More space can be given to nature and environmental trips. Orff and drama studies can be performed by including the children in certain weekly routines.

5. Families supporting the language development of children during Covid-19

The findings on the themes and codes regarding the opinions of preschool teachers about the duties and responsibilities of families in supporting children's language development during the Covid-19 pandemic period are presented in Table 6.

Table 6: The duties and responsibilities of families

Theme	Codes
Supporting language development at home	Interactive reading, chatting, limiting the use of digital tools, spending quality time with the child, doing activities that improve language skills, being a model, being good listeners, participating in children's plays
Supporting language development outside the home	Communication with peers, field trips
Ensuring school-family cooperation	Family training and involvement, teacher-family cooperation
Expert support	Getting help from an expert

Most teachers (n=16) reported that parents should support their children's language development at home. In this regard, teachers mostly reported that families should set limits for children's screen time and keep the use of digital tools under control (n=10). In addition, preschool teachers reported that families should perform interactive book reading activities (n=7), spend quality time with their children (n=7), chat with their children (n=6), perform activities that develop language skills (n=6), participate in their children's plays (n=2), be good listeners (n=2), and be role models for their children (n=2). Teachers (n=4) who reported that it was necessary to support language development outside the home, also emphasised that families should prepare an environment for children to be together with their peers and organise field trips together (n=2).

Illustrating the opinions of preschool teachers reporting what kind of duties and responsibilities fall on families to support the language development of children inside and outside the home:

- T13 It will be useful for families to chat with their children, read stories suitable for their age and interests, ask their children to tell them stories, spend quality time together (playing games, saying nursery rhymes, asking riddles, etc.), provide social environments where they can spend time with their friends, give their children age-appropriate responsibilities, reduce the use of television, tablets, and computers, and offer opportunities for them to come together with their peers.
- T11 Families can contribute to their children's language development by including themselves in their speech during play. The children should be asked to narrate their paintings. Families should read books with their children every day and the pictures in the book should be interpreted together. Trips can be organised if possible. Families should contribute to the vocabulary development of their children. They should listen to their children until the end when they are telling a story.
- T1 It should be ensured that children socialise and be in environments where they can express themselves. The screen time should be minimised. Various Turkish language activities can be organised for children within the family.

The preschool teachers who pointed out the necessity of school-family cooperation in supporting children's language development (n=4) emphasised the importance of family education (n=3), family involvement (n=3), and family-teacher cooperation (n=4). Some of the opinions are illustrated as follows:

- T14 The family should receive pedagogical support, plan the activities that they can do for their child together with the teacher, be directed to create environments where the child can interact and communicate, and the families should be informed and guided how important the family's attitudes and behaviours are for the child's language development.
- T21 During the term, families were informed about their language development by communicating with them and, accordingly, the necessary information was provided about reading daily storybooks, limiting their use of digital tools, and spending more quality time together. Parents were also informed about the activity we performed with the children in the classroom and the limited use of digital tools, and they were informed about how these mass media should be used in these age groups.
- T3 The children should work collaboratively with their teachers, be mutually aware of possible problems, and display consistent behaviours in the same direction.

Some of the preschool teachers (n=4) reported that it would be beneficial for families to seek expert help, if necessary, to support the language development of children. In this regard, some of the opinions of teachers are as follows:

- T19 For children who are likely to have difficulties in language development during the pandemic period, families should get rid of devices (such as phones and tablets) that have too many negative impacts. Children should be allowed to be active in various problem situations. Different plans should be made with children, and all the necessary environments should be provided to spend quality time. If families perceive any language problem, they should seek expert help.

- T15 Families should communicate more with their children. They can seek expert help if needed.

Discussion and conclusions

This study aimed at revealing the impacts of the Covid-19 pandemic period on the language development of preschool children according to the opinions of teachers. The results of this study show that children experienced problems in verbal language and social communication skills due to reasons such as being away from social environments, increased screen time, distance education, and family interaction not being at the desired level during the pandemic period. The research literature on this topic contains studies with similar results demonstrating that children had language problems for different reasons during the pandemic period. For example, in the study by Yafie, Giavarini and Maulidia (2020), parents reported that their 3-4-year-old children could understand the commands but still had problems expressing what they wanted during the pandemic period. A study by Ok, Torun and Yazıcı (2021) showed that parents had difficulties in relating to and communicating with their children during this period. It was also emphasised that children shouted, used rude expressions, screamed, and refused to communicate. According to the teachers, the increase in screen time, which was included in the results of this study, was seen as an obstacle to language development.

It was also found that teachers included family participation and education activities as important complements for teachers' support of children's language development with activities such as drama, plays, Turkish language activities, science, literacy preparation, music, and movement. Many research findings in the literature show that these activities support language development. Türkben (2018) reported that preschool teachers viewed drama activities as effective in improving children's vocabulary, speaking, listening, and verbal communication skills. Eti and Aktaş-Arnas (2016) emphasised the importance of story-based drama activities. Lever and Senechal (2011), Levin and Aram (2012), and Yıldız-Bıçakçı, Er and Aral (2018) emphasised the importance of interactive book reading. Kenanoğlu (2021) concluded that play supported language development in children. Holmes et al. (2015) determined that there was a correlation between play and language development at the preschool level. Brandt, Gebrian, and Slevc (2012) emphasised that music had an important role in language acquisition and development.

According to the results of this study, teachers believed that practices such as different reading techniques, activities increasing peer communication, and cooperative plays should be included to support the language development of children. Teachers also believed that in-school social environments should be diversified. In addition to these, teachers suggested that families should limit the time their children spend in front of the screen, include activities that strengthen family-child communication, spend time with their children in different environments, read interactively with their children, set the right role models in using language, act in cooperation with the school and the teacher, and seek expert help when necessary. Santrock (2009) emphasised the impacts of families on children's language development. Topping, Dekhinet, and Zeedyk (2013) reported that

family interaction supported language development in children in the early years. Safwat and Sheikhany (2014) revealed that children's language development attained higher levels as parents' interactions with their children increased. In the study by Arslan-Dikme and Gültekin (2021), parents reported that they had difficulty setting boundaries for their children during the pandemic period. Considering the need for families to set boundaries for their children, this finding aligns with the opinions of the teachers participating in this study.

Recommendations

According to the results of this study, teachers believed that the language development of children was adversely affected for various reasons during the Covid-19 pandemic period. It is necessary to increase the awareness of teachers and families on this issue to address these negative impacts and enable children to reach an expected level of language development. The results of the research revealed that the negative impacts on the language development of children were mostly effected by lack of communication within the family, inability to spend time with their peers in social environments, and exposure to technological tools. It was emphasised that the key role of parents was to provide support for their children's language development inside or outside of school, to pay attention to the language they spoke in accordance with the rules, to encourage their children to speak in different ways, and to cooperate with experts on their children's language development (as cited in Yafie, Giavarini & Maulidia, 2020). In this regard, training can be provided for families to maintain healthy communication and interaction in special situations such as natural disasters and pandemics. This training may include subjects such as setting boundaries for children, correct use of technology, and the importance of spending time with peers. In addition to these, families can be informed about the development process of language in children. Families can be also informed about which practices and methods they can use to support children's language development.

One of the limitations of this research was that the language development of children during the pandemic was investigated only with data obtained from opinions of teachers. In future studies, the opinions of parents can also be included. Data obtained from the experiences of speech and language therapists during the pandemic could be very helpful. Identifying children with problems in language development during the Covid-19 pandemic period and investigating the longer term impacts upon these children's language and other developmental areas may reveal important results.

References

- Akgül, E. & Özenç-İra, G. (2021). Ebeveyn ve öğretmen algılarına göre Covid-19 pandemisinin erken çocukluk dönemine yansımaları: Bir meta-sentez çalışması. *Batı Anadolu Eğitim Bilimleri Dergisi*, 12(2), 536-557.
<https://dergipark.org.tr/tr/pub/baebd/issue/67050/960458>

- Akoğlu, G. & Karaaslan, B. T. (2020). COVID-19 ve izolasyon sürecinin çocuklar üzerindeki olası psikososyal etkileri [Possible psychosocial effects of the COVID-19 and isolation process on children]. *İzmir Kâtip Çelebi Üniversitesi Sağlık Bilimleri Fakültesi Dergisi*, 5(2), 99-103. <https://dergipark.org.tr/en/download/article-file/1196425>
- Aktan Acar, E., Erbaş, Y. H. & Eryaman, M. Y. (2021). Okul öncesi öğretmenlerinin Covid-19 pandemi sürecinde uzaktan eğitime ilişkin görüşlerinin incelenmesi [An examination of preschool teachers' opinions towards the Covid-19 pandemic process]. *Açıköğretim Uygulamaları ve Araştırmaları Dergisi-AUA*, 7(4), 31-54. <https://dergipark.org.tr/tr/download/article-file/1912521>
- Al-Harbi, S. S. (2020). Language development and acquisition in early childhood. *Journal of Education and Learning*, 14(1), 69-73. <https://eric.ed.gov/?id=EJ1270791>
- Altena, E., Baglioni, C., Espie, C. A., Ellis, J., Gavriloff, D., Holzinger, B., Schlarb, A., Frase, L., Jernelöv, S. & Riemann, D. (2020). Dealing with sleep problems during home confinement due to the COVID-19 outbreak: Practical recommendations from a task force of the European CBT-I Academy. *Journal of Sleep Research*, 29(4), article e13052. <https://doi.org/10.1111/jsr.13052>
- Arı-Arat, C. & Gülay-Ogelman, H. (2021). COVID-19 “Evde Kal” sürecinin anne görüşlerine göre okul öncesi dönem çocuklarının günlük yaşamlarına yansımaları. *Çocuk ve Medeniyet*, 6(11), 31-53. <https://dergipark.org.tr/tr/pub/cm/issue/67034/1047428>
- Arslan Dikme, Ş. & Gültekin, B. K. (2021). Covid-19 pandemi sürecinin evden çalışan ebeveynler ve çocuklarına etkileri [Effects of Covid19 pandemic process on parents working from home and their children]. *Education & Youth Research*, 1(1), 31-48. <https://dergipark.org.tr/en/pub/eyor/issue/68034/1056407>
- Astuti, S. (2015). Method of language development early childhood. In *Proceedings 1st International Seminar of Early Childhood Care and Education*. Jakarta, 10-11 June. https://www.researchgate.net/publication/326670958_Method_of_Language_Development_Early_Childhood
- Brandt, A., Gebrian, M. & Slevc, L. R. (2012). Music and early language acquisition. *Frontiers in Psychology*, 3, article 00327. <https://doi.org/10.3389/fpsyg.2012.00327>
- Bruce, B. & Hansson, K. (2011). Promoting peer interaction. In T. Williams (Ed.), *Autism spectrum disorders - From genes to environment* (pp. 313-328). IntechOpen. <https://www.intechopen.com/books/223>
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş. & Demirel, F. (2013). *Bilimsel araştırma yöntemleri*. Pegem Akademi.
- Charney, S. A., Camarata, S. M. & Chern, A. (2021). Potential impact of the COVID-19 pandemic on communication and language skills in children. *Otolaryngology-Head and Neck Surgery*, 165(1), 1-2. <https://doi.org/10.1177/0194599820978247>
- Clark, H., Coll-Seck, A. M., Banerjee, A., ... Costello, A. (2020). A future for the world's children? A WHO-UNICEF-Lancet commission. *The Lancet*, 395(10224), 605-658. [https://doi.org/10.1016/S0140-6736\(19\)32540-1](https://doi.org/10.1016/S0140-6736(19)32540-1)
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*, 4th ed. SAGE Publications.

- Çaykuş, E. T. & Mutlu Çaykuş, T. (2020). Covid-19 pandemi sürecinde çocukların psikolojik dayanıklılığını güçlendirme yolları: Ailelere, öğretmenlere ve ruh sağlığı uzmanlarına öneriler [Ways to promote children's resiliency to the COVID-19 pandemic: Suggestions for families, teachers and mental health specialists]. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi*, 7(5), 95-113.
<https://dergipark.org.tr/tr/pub/asead/issue/54658/738573>
- Di Giuseppe, M., Miniati, M., Miccoli, M., Ciacchini, R., Orrù, G., Lo Sterzo, R., Di Silvestre, A. & Conversano, C. (2020). Defensive responses to stressful life events associated with cancer diagnosis. *Mediterranean Journal of Clinical Psychology*, 8(1).
<https://doi.org/10.6092/2282-1619/mjcp-2384>
- Dong, C., Cao, S. & Li, H. (2020). Young children's online learning during COVID-19 pandemic: Chinese parents' beliefs and attitudes. *Children and Youth Services Review*, 118, article 105440. <https://doi.org/10.1016/j.childyouth.2020.105440>
- Döğer, S. S. & Kılınç, F. E. (2021). Okul öncesi dönemdeki çocukların Covid-19 pandemisinde ev karantinası yaşamları [Home quarantine lives of preschool children in the Covid-19 pandemic]. *Türkiye Sağlık Araştırmaları Dergisi*, 2(2), 1-14.
<http://acikerisim.ybu.edu.tr:8080/xmlui/handle/123456789/2487>
- Erbay, F. (2020). Yaşamın ilk yıllarında dil gelişimi. In H. G. Ogelman (Ed.), *Gelişim Bağlamında Yaşamın İlk Yılları - Erken Çocukluk Döneminde Gelişim* (pp. 269-332). Eğitim Kitap. <https://gazikitabevi.com.tr/urun/gelisim-baglaminda-yasamin-ilk-yillari-erken-cocukluk-doneminde-gelisim>
- Eti, İ. & Aktaş-Arnas, Y. (2016). Hikâye temelli yaratıcı drama etkinliklerinin dört yaş grubu çocukların ifade edici dil gelişimine etkisi [The effect of story-based creative drama activities on four-year-old children's expressive language development]. *Yaratıcı Drama Dergisi*, 11(1), 17-32.
<https://dergipark.org.tr/tr/pub/ydrama/issue/34693/383502>
- Fardin, M. A. (2020). COVID-19 and anxiety: A review of psychological impacts of infectious disease outbreaks. *Archives of Clinical Infectious Diseases*, 15, article e102779.
<https://doi.org/10.5812/archid.102779>
- Gökçe, N., Erdoğan, B. M., Yatmaz, A. K., Avaroğlu, N. & Çok, Y. (2021). Okul öncesi dönem çocuklarının Covid-19 salgın süreci ve etkilerine ilişkin görüşleri [Opinions of preschool children on the Covid-19 epidemic process and its effects]. *Eğitim ve Yeni Yaklaşımlar Dergisi*, 4(1), 101-113. <https://doi.org/10.52974/jena.936048>
- Gülay Ogelman, H., Güngör, H. & Göktaş, İ. (2021). Examining the resiliency of preschool children in the COVID-19 pandemic period based on age and gender. *International Journal of Academic Research in Education*, 7(1), 29-37.
<http://doi.org/10.17985/ijare.970400>
- Holmes, R. M., Romeo, L., Ciraola, S. & Grushko, M. (2015). The relationship between creativity, social play, and children's language abilities. *Early Child Development and Care*, 185(7), 1180-1197. <https://doi.org/10.1080/03004430.2014.983916>
- İnan, H. Z. (2020). Covid-19 pandemi sürecinde okul öncesi eğitimin yeniden yapılandırılması [Restructuring early childhood education during the Covid-19 pandemic]. *Millî Eğitim Dergisi*, 49(1), 831-849.
<https://doi.org/10.37669/milliegitim.754307>

- Indrayani, N. (2016). Language development at early childhood. In *International Conference on Education (IECO) Proceedings*, Volume 1, 279-289.
<https://core.ac.uk/download/pdf/229218143.pdf>
- Jiao, W. Y., Wang, L. N., Liu, J., Fang, S. F., Jiao, F. Y., Pettoello-Mantovani, M. & Somekh, E. (2020). Behavioral and emotional disorders in children during the COVID-19 epidemic. *The Journal of Pediatrics*, 221, 264-266.
<https://doi.org/10.1016/j.jpeds.2020.03.013>
- Kenanoğlu, D. (2021). *Okul öncesi eğitimde geleneksel oyunların okul öncesi dönem çocuklarının dil gelişimine etkisi*. Yayınlanmamış Yüksek Lisans Tezi. İnönü Üniversitesi.
- Lee, M. H., Matthews, A. K. & Park, C. (2019). Determinants of health-related quality of life among mothers of children with cerebral palsy. *Journal of Pediatric Nursing*, 44, 1-8.
<https://doi.org/10.1016/j.pedn.2018.10.001>
- Lever, R. & Sénéchal, M. (2011). Discussing stories: On how a dialogic reading intervention improves kindergartners' oral narrative construction. *Journal of Experimental Child Psychology*, 108(1), 1-24. <https://doi.org/10.1016/j.jecp.2010.07.002>
- Levin, I. & Aram, D. (2012). Mother-child joint writing and storybook reading and their effects on kindergartners' literacy: An intervention study. *Reading and Writing*, 25, 217-249. <https://doi.org/10.1007/s11145-010-9254-y>
- Lieberman, A. F., Chu, A., Van Horn, P. & Harris, W. W. (2011). Trauma in early childhood: Empirical evidence and clinical implications. *Development and Psychopathology*, 23(2), 397-410. <https://doi.org/10.1017/S0954579411000137>
- Lightbown, P. M. & Spada, N. (2004). *How languages are learned*. Oxford University Press.
<https://global.oup.com/academic/product/how-languages-are-learned-9780194406291>
- Mart, M. & Kesicioglu, O. S. (2020). COVID-19 pandemi sürecinde ailelerin evde oyun oynamaya ilişkin görüşleri [Parents' opinion to play at home during COVID-19 pandemic]. *Turkish Studies*, 15(4), 945-958.
<https://doi.org/10.7827/TurkishStudies.44381>
- Metcalfé, L. A., Harvey, E. A. & Laws, H. B. (2013). The longitudinal relation between academic/cognitive skills and externalizing behavior problems in preschool children. *Journal of Educational Psychology*, 105, 881-894. <https://doi.org/10.1037/a0032624>
- Miles, M. B. & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- Montessori, M. (1982). *Çocuk eğitimi Montessori metodu*. (Çeviri Güler Yücel) (5. Baskı). Özgür Yayınları.
- Ok, B., Torun, N. & Yazıcı, D. N. (2021). Yeni normalin erken çocukluk dönemi üzerindeki etkilerinin ebeveyn görüşleri alınarak incelenmesi [The effects of the Covid-19 pandemic on children in early childhood based on parental views]. *Yaşadıkça Eğitim*, 35(2), 640-665. <https://doi.org/10.33308/26674874.2021352308>
- Özyürek, A. & Çetinkaya, A. (2021). COVID-19 pandemi döneminde aile ve ebeveyn-çocuk ilişkilerinin incelenmesi [The examination of family and parent-child relationships during COVID-19 pandemic]. *Çağ Üniversitesi Sosyal Bilimler Dergisi*, 18(1), 96-106. <https://dergipark.org.tr/en/download/article-file/1851057>

- Putri, V. M. & Eliza, D. (2021). The impact of negative gadgets on children's language development during the Covid-19 pandemic. *International Journal of Emerging Issues in Early Childhood Education*, 3(1), 1-7.
<https://journals.researchsynergypress.com/index.php/ijeiece/article/view/414/161>
- Republic of Turkey Ministry of Health. (2020). COVID-19 (SARS-CoV-2 Enfeksiyonu) Rehberi. https://hastane.deu.edu.tr/images/hastanemizden-haberler/corona/COVID-19_Rehberi_13_04_2020-min.pdf
- Safwat, R. F. & Sheikhy, A. R. (2014). Effect of parent interaction on language development in children. *The Egyptian Journal of Otolaryngology*, 30, 255-263.
<https://doi.org/10.4103/1012-5574.138488>
- Santrock, J. W. (2009). *Child development*. McGraw Hill. [14 ed.]
<https://www.mheducation.com/highered/product/children-santrock/M9781260073935.html>
- Schonfeld, D. J. & Demaria, T. (2015). Providing psychosocial support to children and families in the aftermath of disasters and crises. *Pediatrics*, 136(4), 1120-1130.
<https://doi.org/10.1542/peds.2015-2861>
- Savi-Çakar, K. U. F. (2021). Covid-19 pandemi sürecinin ergenlerin ve ebeveynlerinin yaşamına yansımaları: Ebeveyn bakış açısından bir değerlendirme [Reflections of the Covid-19 pandemic process on the life of adolescents and their parents: An assessment from a parental perspective]. *Pearson Journal of Social Sciences & Humanities*, 6(12), 161-189. <https://www.pearsonjournal.com/DergiTamDetay.aspx?ID=261&Detay=Ozet>
- Şentürk-Pılan, B. Ş., Özbaran, B., Yüksel, G., Tortop, E., Çalışan, R., Yuluğ, B., Tokmak, S. H., Anılır, G., Köse, S., Eremiş, S., Yüncü, Z. & Bildik, T. (2021). COVID-19 ve okul öncesi yaş grubu ruh sağlığı [COVID-19 and mental health of preschool children]. *Ege Tıp Dergisi*, 60(2), 128-135. <https://doi.org/10.19161/etd.951006>
- Tohidast, S. A., Banafshe, M., Bagheri, R. & Azimi, H. (2020). Provision of speech-language pathology services for the treatment of speech and language disorders in children during the COVID-19 pandemic: Problems, concerns, and solutions. *International Journal of Pediatric Otorhinolaryngology*, 138, article 110262.
<https://doi.org/10.1016/j.ijporl.2020.110262>
- Topping, K., Dekhinet, R. & Zeedyk, S. (2011). Hindrances for parents in enhancing child language. *Educational Psychology Review*, 23, 413-455. <https://doi.org/10.1007/s10648-011-9169-4>
- Topping, K., Dekhinet, R. & Zeedyk, S. (2013). Parent-infant interaction and children's language development, *Educational Psychology*, 33(4), 391-426.
<https://doi.org/10.1080/01443410.2012.744159>
- Türkben, T. (2018). Drama uygulamalarının çocuk gelişimine etkilerinin öğretmen görüşleri açısından incelenmesi. *International Journal of Languages' Education and Teaching*, 6(4), 559-578. https://turkoloji.cu.edu.tr/pdf/drama_uygulamalar%C4%B1nda.pdf
- UNICEF (2021). Young children and the pandemic: *UNICEF early childhood COVID-19 response in East Asia and Pacific*. <https://www.unicef.org/eap/media/8506/file>
- Wang, Y., Wang, Y., Chen, Y. & Qin, Q. (2020). Unique epidemiological and clinical features of the emerging 2019 novel coronavirus pneumonia (COVID-19) implicate special control measures. *Journal of Medical Virology*, 92(6), 568-576.
<https://doi.org/10.1002/jmv.25748>

- World Health Organization (n.d.). *WHO coronavirus (COVID-19) Dashboard*.
<https://covid19.who.int/>
- Yafie, E., Giavarini, I. & Maulidia, L. N. (2020). Stimulating strategy children experiencing late language emergence (LLE) during pandemic Covid-19. In *Proceedings of the 2nd Early Childhood and Primary Childhood Education (ECPE 2020)*, 487, 193-197.
<https://doi.org/10.2991/assehr.k.201112.034>
- Yıldırım, A. & Şimşek, H. (2018). *Sosyal bilimlerde nitel araştırma yöntemleri [Qualitative research methods in social sciences]*.
- Yıldız Bıçakçı, M., Er, S. & Aral, N. (2018). Etkileşimli öykü kitabı okuma sürecinin çocukların dil gelişimi üzerine etkisi [Effects on the language development of children in the interactive storybook reading process. *Kastamonu Eğitim Dergisi*, 26(1), 1-8.
<https://dergipark.org.tr/en/download/article-file/400401>

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