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EVALUATION OF PRIMARY SCHOOL STUDENTS' RESPONSE TO THE PANDEMIC BY THEIR PARENTS

Abstract: This study aims to evaluate the responses of primary school children to the pandemic, based on the statements of their parents. In the study, the descriptive survey model was used. The study group consists of parents whose children attend a private primary school in the province of Manisa, Turkey. The 'General Information Form' and the 'Children's Response to the Pandemic Scale' were used for data collection in the study. In the data analysis, the t-test was used. As a result of the study, it was found that responses of the children whose parents aged 36 and over, who had an undergraduate degree and above, and whose families had three or more children were perceived as riskier according to their fathers. It was found that the presence of a COVID-19 history in the family and the presence of individuals who have died due to COVID-19 negatively affect the behavior of children during the pandemic. The male children were found to be more affected by the pandemic than female children. In this context, in order to support the healthy development of children, training programs can be planned and implemented to inform families about the disease and bereavement process in order to be able to support the healthy development of children.

Keywords: COVID-19, Child Development, Primary School Students.

1. Introduction

A pandemic refers to the spread of a severe disease outside a certain area, affecting a large population and even the entire population. Epidemics can cause widespread damage, causing millions of lives to be lost as well as negatively affecting daily life. Considering the historical process, the plague disease, which appeared in the 14th century with the name of 'Black Death', is the most well-known of the epidemic diseases. Half of the European population died during this epidemic (DeWitte, 2014, Ross, Olveda, & Yuesheng, 2014). Today, COVID-19, which originated in Wuhan province of China, is referred to as one of the epidemic diseases that adversely affect millions of people around the world (Yilmaz, 2020). According to World Health Organization data, the number of COVID-19 cases was 412,351,279 worldwide, while 5,821,004 people died due to this disease (WHO, 2022). As of February 16th, 2022, the number of cases in Turkey was 12,910,321 and the number of those who died due to the virus was 90,542 (TUBITAK, 2022).

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Due to the pandemic, the economies, social life, education systems, and especially health systems of the countries have been negatively affected. Due to the deadly nature of the disease, some restrictions have been imposed worldwide to reduce the rate of spread of the virus. In this context, as part of the fight against COVID-19 in Turkey, lockdown measures, quarantine practices, and restrictions on educational activities in schools have been introduced (Kavuk and Demirtas, 2021). As of April 7th, 2020, schools have been closed in 192 countries (Yilmaz, 2020) due to COVID-19, according to the data of the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2020). About 92% of the children attending schools (1,576,021,818 students) was affected by this condition. With the interruption of face-to-face education, a distance education system has been adopted in the countries (Gilani, 2020). On March 23rd, 2020, about 20 million students continued their courses through distance education in Turkey (MEB, 2020).

In Turkey, EBA TV and EBA live course infrastructures have been developed and implemented in a short time by the Ministry of National Education to enable students and teachers to access the course materials they will use with the transition to distance education at all levels (Duban and Sen, 2020). EBA TV started broadcasting for distance education from 3 different channels including Primary School, Secondary School, and High School on March 23rd, 2020 (Basaran, Dogan, Karaoglu, & Sahin, 2020). In addition, EBA live course system was used extensively by students and teachers as well as the Zoom system during the COVID-19 pandemic (Arslan, Gorgulu Ari, & Hayir Kanat, 2021).

The fact that children continued their education with the help of distance education during the COVID-pandemic process also brought about adverse conditions. According to UNESCO, the use of distance education in schools due to COVID-19 has especially negatively affected the development of children. The proportion of children who experienced learning deprivation in low- and middle-income countries, which was 53% before the pandemic, has been shown to reach 70% due to prolonged distance learning during the school closures, and due to failure to make an adequate impact to provide continuity of education during the school closures (UNESCO, 2020). In particular, studies conducted in rural areas of Brazil, India, Pakistan, as well as in Mexico and South Africa, have shown that children experience significant losses in learning to read and mathematics. In a study conducted in Mexico, it was found that low-income families, children with special needs, and girls have more difficulties in accessing distance education compared to their peers. The reason for this is explained by the lack of Internet access, the inability to procure technological devices, and gender roles. In addition, social isolation has caused a negative impact on children's development by restricting children's creativity, socialization, and active participation in the learning process (UNICEF, 2022).

The lifelong education process positively supports the healthy development of children as well as learning (Aral, Aysu, & Kadan, 2020). Considering the studies conducted so far, it is revealed that the closure of schools for the long-term has negative effects on the physical, social, and emotional development of children (Brazendale et al., 2017, Brooks et al., 2020). Restricting children's access to enriching and entertaining activities in the school environment may have a negative impact on their psychology (Stewart Watson and Campbell, 2018). It has been found that the interruption of schools due to COVID-19 may adversely affect the psychological well-being of the child, expressed as the psychological resilience (Stewart, Reid, & Mangham, 1997) that indicates the ability of children in overcoming undesirable circumstances (Wang, Zhang, Zhao, Zhang, & Jiang, 2020), it has also been found that being lockdown at home for a long time can lead to sleep disturbance (Sprang and Silman, 2013) by restricting mobility. Looking at the research related to COVID-19, it is seen that most of the studies have been carried out in the field of medicine (Chinazzi et al., 2020, Hopman, Allegranzi, & Mehtar, 2020, Kraemer et al., 2020, Wu and McGoogan, 2020, Zu et al., 2020, Ozdemir, 2020, Bulut and Kato, 2020). Since the studies investigating the conditions of primary school children during the epidemic are limited in the literature, it is believed that

identification of the problems experienced by children during the pandemic is important for the support services prepared for the healthy development of children. Based on this idea, the study aims to reveal the responses of children attending primary school to the pandemic through the statements of their parents, to determine whether the reactions of the children differ depending on parenting, parental age, education level, number of children, gender of the children, the presence of individuals who had COVID-19 or who died due to COVID 19 in the family.

2. Method

2.1.1. Model

In this study, in which it was aimed to evaluate the responses of primary school children to the pandemic based on the statements of their parents, a descriptive research design and a screening model were used. The screening model is a research design that aims to identify an individual participating in the study as is (Buyukozturk, 2012).

2.1.2. Population and Sample

The study group consists of 208 parents whose children attend a private primary school in the province of Manisa, Turkey. No sample selection was performed in the study, and one school was included that allowed data collection for the study. The families of children studying at this school were informed, and parents who voluntarily agreed to participate in the study were included in the research. Of the parents participating in the study, 59.1% was a mother, 40.9% was a father, 35.1% was 35 years old or younger, 64.9% was 36 years old and older, 21.6% had a high school degree or lower, 78.4% had an undergraduate degree or above, 79.8% had one or two children, 20.2% had three or more children, 42.8% had a female child, 57.2% had a male child, 62.5% had not had COVID-19 in the family, 37.5% had COVID-19 in the family, 81.3% had no COVID-19-related death in their family, and 18.8% had a family member who died due to COVID-19.

2.1.3. Data Collection Tools

Data were collected using "Personal Information Form", "Children's Response to the Pandemic Scale".

Personal Information Form. This form was developed by the researchers to collect information about the parents' gender, age, educational level, number of children, gender of the children, presence/absence of individuals with COVID-19 in the family, presence/absence of individuals who have died due to COVID-19 in the family.

Children's Response to the Pandemic Scale. The 5-point Likert-type scale has been developed by Ocal, Halmatov, and Ata (2021) and consists of a total of 9 items. The dimensions of the two-factor scale include the Psychological sub-scale (1st, 2nd, 3rd, 4th, and 5th items), and the Pandemic sub-scale (6th, 7th, 8th, and 9th items). The Cronbach's alpha coefficient of the scale was 0.73 for the "Psychological" sub-scale, 0.69 for the "Pandemic" sub-scale, and 0.79 for the total score of the scale.

2.1.4. Statistical Analysis

In the analysis of the data, the SPSS data analysis program was used. As a result of the Kolmogorov-Smirnov test, the data were analyzed using parametric methods since the scores taken in the scale were found to have a normal distribution according to the variables (gender, $p<0.05$; age, $p<0.05$; education level, $p<0.05$; gender of the child, $p<0.05$; the number of children,

p<0.05; absence/presence of individuals who had COVID-19 in the family; absence/presence of individuals who died due to COVID-19 in the family, p<0.05). In this regard, t-test was used in the analysis of the data in order to determine the difference depending on the independent variables (Buyukozturk, 2012). In the evaluations, the statistical significance level of p<0.05 was used.

3. Results

In the present study, which aims to investigate the reactions of primary school children towards the pandemic based on the statements of their parents, parenting status of the parents, parental age, education level, number of children, gender of the children, the presence of individuals who had COVID-19 or who died due to COVID 19 in the family were evaluated for the correlations with the reactions of the children, the findings of the study are presented in the following tables.

Table 1. *The mean scores and t-test results of the reactions of the children to the pandemic according to the parenting status of the parents (n=208)*

	Parenting Status	n	Avg.	SD	sd	T	p
Psychological	Mother	123	13.7886	2.17381	206	-1.658	.9
	Father	85	14.3294	2.49947			
Pandemic	Mother	123	11.3659	2.41671	206	-2.216	.2
	Father	85	12.0824	2.09995			
Total	Mother	123	25.1545	4.00212	206	-2.269	.1
	Father	85	26.4118	3.81817			

As shown in Table 1, as a result of the analysis conducted on the reactions of children towards the pandemic according to the parenting status of the parents, no significant difference was found in the Psychological sub-scale (p>0.05), whereas significant differences were found in the Pandemic sub-scale and total scale scores (p≤0.05) When the arithmetic mean scores regarding the significant difference were examined, it was found that the scores of the fathers were higher. In this context, fathers have stated that children are more affected by the pandemic.

Table 2. *The mean scores and t-test results of the reactions of the children to the pandemic according to the age of the parents (n=208)*

	Age	n	Avg.	SD	sd	T	p
Psychological	35 years and under,	73	13.2329	2.19545	206	-3.652	.0
	36 years and over,	135	14.4296	2.28735			
Pandemic	35 years and under,	73	10.9589	2.53003	206	-3.281	.0
	36 years and over,	135	12.0370	2.10333			
Total	35 years and under,	73	24.1918	3.99186	206	-4.094	.0
	36 years and over,	135	26.4667	3.73127			

As shown in Table 2, as a result of the analysis conducted on the reactions of children towards the pandemic according to the ages of the parents, significant differences were found in Psychological and Pandemic sub-scale scores and the total score (p<0.05). Considering the arithmetic mean scores regarding the significant difference, the parents in the ≥36 age group stated that their children were more affected by the pandemic than the parents in the ≤35 age group.

Table 3. *The mean scores and t-test results of the reactions of the children to the pandemic according to the education levels of the parents (n=208)*

	Education Level	n	Avg.	SD	sd	T	p
Psychological	High School and below	45	13.2667	2.43460	206	-2.454	.1
	Undergraduate and above	163	14.2147	2.25460			
Pandemic	High School and below	45	11.4000	3.29876	206	-.46	.9
	Undergraduate and above	163	11.7301	1.96595			
Total	High School and below	45	24.6667	5.13898	206	-1.926	.5
	Undergraduate and above	163	25.9448	3.54730			

As shown in Table 3, as a result of the analysis conducted on the reactions of children towards the pandemic according to the educational levels of the parents, no significant difference was found in the Pandemic sub-scale ($p>0.05$), whereas significant differences were found in the Psychological sub-scale and total scale scores ($p<0.05$). Looking at the arithmetic mean scores regarding the significant difference, parents with an undergraduate degree and above were found to have higher mean scores. Accordingly, parents with an undergraduate degree and above stated that their children were more affected by the pandemic than parents with a high school degree and lower.

Table 4. *The mean scores and t-test results of the reactions of the children to the pandemic according to the number of children of the parents (n=208)*

	Number of children	n	Avg.	SD	sd	T	p
Psychological	1-2 children	166	13.8313	2.42122	206	-2.222	.2
	3 children and above	42	14.7143	1.72903			
Pandemic	1-2 children	166	11.8253	2.14890	206	2.081	.3
	3 children and above	42	11.0000	2.81113			
Total	1-2 children	166	25.6566	3.94771	206	-.84	.3
	3 children and above	42	25.7143	4.09214			

As shown in Table 4, as a result of the analysis conducted on the reactions of children towards the pandemic according to the number of children of the parents, it was found that there were significant differences between Psychological and Pandemic sub-scale scores ($p<0.05$). In contrast, there was no significant difference in the total scores of the scale ($p>0.05$). Looking at the arithmetic mean scores regarding the significant difference, the parents who had three or more children stated that their children were more affected by the pandemic than the parents who had one or two children.

Table 5. *The mean scores and t-test results of the reactions of the children to the pandemic according to the gender of the children of the parents (n=208)*

	Gender of children	n	Avg.	SD	sd	T	p
Psychological	Female	89	12.8539	2.50250	206	-6.865	.0
	Male	119	14.8739	1.73964			
Pandemic	Female	89	11.1685	2.89685	206	-2.680	.0

	Male	119	12.0252	1.67970			
Total	Female	89	24.0225	4.85465	206	-5.532	.0
	Male	119	26.8992	2.54250			

As shown in Table 5, as a result of the analysis conducted on the reactions of children towards the pandemic according to the gender of the children, it was found that there were significant differences in Psychological and Pandemic sub-scale scores and the total score ($p<0.05$). Looking at the arithmetic mean scores regarding the significant difference, male children were found to be more affected by the pandemic.

Table 6. *The mean scores and t-test results of the reactions of the children to the pandemic according to the presence of individuals who have had COVID-19 in the family (n=208)*

	Status of having an individual who had COVID-19 in the family	n	Avg.	SD	sd	T	p
Psychological	No	130	13.3077	2.20937	206	-6.101	.0
	Yes	78	15.1795	2.02416			
Pandemic	No	130	11.0154	2.23428	206	-5.533	.0
	Yes	78	12.7308	2.04287			
Total	No	130	24.3231	3.78740	206	-7.009	.0
	Yes	78	27.9103	3.18350			

As shown in Table 6, as a result of the analysis conducted on the responses of children towards the pandemic according to the presence of individuals who had COVID-19 in the family, significant differences were found in Psychological and Pandemic sub-scale scores and the total score ($p<0.05$). Looking at the arithmetic mean scores regarding the significant difference, it was found that the presence of individuals who had COVID-19 in the family caused the children to be more affected by the pandemic.

Table 7. *The mean scores and t-test results of the reactions of the children to the pandemic according to the presence of having individuals who had lost their lives due to COVID-19 in the family (n=208)*

	Status of having an individual in the family who had died due to COVID-19	n	Avg.	SD	sd	T	p
Psychological	No	169	13.4320	2.13177	206	-8.718	.0
	Yes	39	16.5128	1.16691			
Pandemic	No	169	11.1893	2.14912	206	-6.703	.0
	Yes	39	13.6923	1.88000			
Total	No	169	24.6213	3.55381	206	-9.469	.0
	Yes	39	30.2051	1.97590			

As shown in Table 6, as a result of the analysis conducted on the responses of children to the pandemic according to the presence of individuals who died due to COVID-19 in the family, significant differences were found in Psychological and Pandemic sub-scale scores and the total score ($p<0.05$). Considering the arithmetic mean scores regarding the significant difference, it was found that the children who lost their relatives due to COVID-19 were more affected by the pandemic.

4. Discussion

In the study, according to the statements of the fathers, the children of the parents who are 36 years of age or older, whose education level is undergraduate and above, who have more children, and whose children are male were found to be more affected by the pandemic. In their study, Kocak and Harmanci (2020) reported that women's anxiety levels were higher than men's in cases such as epidemics, which leads to feelings such as uncertainty and emptiness in individuals. In addition, it has been stated that these effects are influenced by variables such as the education level of individuals, their age, and the number of children (de Figueiredo et al., 2021). An increase in the level of education and having a high number of children can lead parents to be more informed about the developmental characteristics of children. In this context, it is believed that these variables help parents to realize that children are more affected by the pandemic. In their study on the communication of families with children aged four to six during the pandemic, Doger and Kilinc (2021) reported that there were differences according to the number of children, while there were no differences according to the level of parental education and gender. The study conducted by Erol and Erol (2020) that investigated the reactions of children during the pandemic reports that the education level and the gender of parents had a significant impact on their perceptions regarding their children's responses. Xiang, Zhang, and Kuwahara (2020) and Demirbas and Kocak (2020) investigated the effects of the COVID-19 pandemic on the children from the perspective of parents and concluded that the gender, age, and educational level of parents is effective in determining their children's responses.

It was found that the presence of a history of COVID-19 and the presence of individuals who have died due to COVID-19 in the family leads to a higher impact on children during the pandemic. Similarly, Figueiredo et al. (2021), and Kocak and Harmanci (2020) have found in their study that having individuals who had COVID-19 or died due to COVID-19 in the family causes depression, self-destruction, and anxiety in individuals, and lack of social support during this process causes more severe traumas. Sarman, Tuncay, and Sarman (2020) stated in their study that situations such as disease and death in the family during the pandemic caused fear and anxiety in children. It was stated that children begin to perceive the event of death from the age of about seven, and it was found that children learn from their families the reactions they show to diseases and losses during the pandemic, indicating that families have an important role in the responses of children. In their research, Phelps and Sperry (2020) and Erol and Erol (2020) stated that events such as getting COVID-19 and loss of life during the COVID-19 pandemic had significant effects on children and that parents' attitudes played a decisive role in this process. It has been stated that it may be useful to organize training programs to reduce fear and anxiety in children. Based on the results obtained from the studies conducted in this context, it is believed that the presence of relatives who have suffered illness or died during the pandemic increases the children's anxiety level.

5. Conclusion and Recommendations

As a result of the study, it was found that fathers evaluate children's reactions to the pandemic process as riskier than mothers. It was found that parents who are 36 years and older, and parents with an undergraduate degree and above perceived their children's responses to the pandemic to be riskier. It was found that parents with three children and above evaluate their children's responses to the pandemic riskier. The male children were found to be more affected by the pandemic than female children. The presence of a COVID-19 history in the family and the presence of individuals who have died due to COVID-19 were found to negatively affect the children's responses to the pandemic. As a result of the research, the following recommendations can be made:

- It was determined that the presence of a COVID-19 history in the family and the presence of individuals who have died due to COVID-19 negatively affect the children's responses to the pandemic. In this context, families can be informed about the disease and bereavement process in order to support the healthy development of the children.
- Face-to-face studies with children can be conducted in studies aimed at determining children's responses to the COVID-19 pandemic.
- Different activities and informational activities can be performed with children to alleviate their responses and help them relax.

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