

# Behavioural Problems in Preschool Children during the COVID-19 Pandemic in Turkey: The Role of Parental COVID-19 Experiences and Parental Stress, Depression and Anxiety

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## **Abstract**

*The aim of this paper was to examine the relationship between parents' COVID-19 experiences (contact with COVID-19, housing conditions and the quality of life, and difficulties of the pandemic period) and parental stress and their depression, anxiety and stress levels. The study was conducted using a correlational survey model, one of the quantitative research designs. The participants were selected via convenience sampling method, i.e. 307 parents of children four to six years of age from Istanbul voluntarily participated in the study (M=4,94; SD=0,79). The data were collected online using the following instruments: General Information Form; COVID-19 Survey; Parental Stress Scale; Depression, Anxiety and Stress Scale (DASS21); and Strengths and Difficulties Questionnaire (SDQ). The obtained data were analysed using SPSS 25. The research results showed no significant relationship between COVID-19 experiences and parental stress, that is, it was proven that parents' contact with COVID-19 does not affect their depression, anxiety or stress levels. However, housing conditions, the changing quality of life due to COVID-19 and the experienced difficulties during the pandemic have an effect on parents' anxiety and stress levels. With regard to the relationship between the COVID-19 pandemic and children's behavioural problems, contact with COVID-19 and experienced difficulties during the pandemic were not found to be related to children's behavioural problems. On the other hand, the results revealed the joint*

*significant effect of parental experiences with the COVID-19 pandemic and their stress, depression and anxiety levels on children's behavioural problems.*

**Key words:** *children's behavioural problems; COVID-19 pandemic; parental stress; preschool period.*

## Introduction

COVID-19 is a respiratory disease which is known to have first appeared in Wuhan, China, in December 2019, after which it rapidly spread all over the world and was declared a pandemic by the World Health Organization on 11 March 2020 (Alicilar & Çöl, 2020). Due to the uncontrolled spread of the virus, countries had to take measures such as wearing a face mask, enhancing personal hygiene and quarantine or social isolation. Within these measures and with the call of "Stay at Home" in March 2020 in Turkey, the schools were closed, businesses started implementing flexible type of work as much as possible, restraints were introduced on domestic and international travel and the rule of social distancing was introduced, along with wearing masks in places such as restaurants, shopping centres, gyms and public transport. Furthermore, the lockdown was imposed on certain age groups at certain times during this period, and individuals infected with the virus were obliged to stay in quarantine for a period of 14 days.

The effects of the pandemic go beyond physical health; they are felt in various areas such as social development, personal and economic security, children and youth's education and family life (*Education and COVID-19 - UNICEF DATA*, 2020; Ercan et al., 2020). The study conducted by Parker et al. (2020) among 13,200 US adults revealed that 25% of them were laid off because of the COVID-19 infection in themselves or one of their household members and that the wages of 32% of them were cut by the reduction of their working hours. Only one third of those who were laid off due to the coronavirus were able to return to their previous jobs.

The pandemic can be associated with a range of stress factors that affect the well-being of an individual, such as anxiety about the disease, problems with access to treatment or food, changing routines, isolation from family and friends, not working, loss of income, quarantine and social distancing rules and school closures (Okur & Demirel, 2020; Ercan et al., 2020; Taylor, 2019). Therefore, it is thought that the pandemic may affect mental health of families and children. Since children have limited understanding of events and limited coping strategies, they cannot avoid the resulting physical and mental harm (Imran et al., 2020). With social isolation, closure of schools and quarantine caused by the pandemic, the areas of children's movement are restricted, which leads to an increase in sedentary behaviour. The decrease in physical activity and the increase in sedentary behaviour negatively affect children's mental health (Çalışkan, 2020). During this period, an average child's sleeping, eating and toileting habits may change; moreover, psychological aberrations may be observed such as crying more easily, quick temper, introversion,

indifference to what is happening, obsessive behaviour, isolation related problems and fear of asking questions about the pandemic (Jiao et al., 2020; Ercan et al., 2020). In children with attention deficit and hyperactivity disorder, autism or mental disability, an increase in aggressive behaviour can be observed due to staying at home (Ercan et al., 2020). Stressors such as boredom at home, disappointment, lack of personal space, lack of outdoor activities, inability to communicate with peers and teachers, financial loss in the family and fear of infection can have permanent effects on children (Wang et al., 2020). In a study conducted with 320 children and adolescents in China, it was revealed that children aged 3-6 were afraid that their family members could get infected and they manifested this fear in psychological conditions such as attachment, inattention and irritability (Jiao et al., 2020). Regarding parents, although this period is an opportunity for them to spend more time with their children and strengthen mutual communication, it creates a burden in parents as well, due to responsibilities such as continuing to live their own lives, maintaining daily work and taking an educational role in their children's lives (Spinelli et al., 2020). It is thought that this situation may increase the risk of parents experiencing negative emotions such as stress, depression and anxiety, and it may be a seed for the development of various psychological problems in children. It is therefore considered that children experiencing this period with more or less psychological damage depends on their parents' mental health (Ercan et al., 2020). A study conducted among 854 parents in Italy revealed that there is a significant relationship between parents' individual perceptions of the pandemic period, their coping mechanisms with stress caused by the quarantine, stress levels of being a parent and psychological problems of children (Spinelli et al., 2020). Since families cannot receive support from external sources such as schools or child care environments during the COVID-19 pandemic, the support that they receive at home affects their perceived stress and parenting. The level of emotional and social support a parent receives is significantly correlated with their stress perception and risk of child abuse. During this period, families who are in need of financial aid and parents with more pronounced symptoms of anxiety and/or depression are at higher risk of mistreating their children (Brown et al., 2020).

In light of this information, it is thought necessary to examine how COVID-19 has affected the depression, anxiety and stress levels of parents in Turkey; how this period has affected their stress levels and the ways in which both COVID-19 and parents' psychological well-being have affected children's behavioural problems. The aim of this paper was to examine the relationship between parents' experiences with COVID-19 (COVID-19 contact, housing conditions and the quality of life, and difficulty of the pandemic) and parental stress and their depression, anxiety and stress levels. Also, the aim was to examine the contribution of parental experiences with COVID-19, parental stress and their depression, anxiety and stress levels in explaining the variance of behavioural problems in their preschool children.

## **Research Methods**

### **Research model**

This research aimed to examine the relationship between parental experiences during the COVID-19 pandemic and parental stress and their depression, anxiety and stress levels. Furthermore, the research sought to establish the relation between parental stress and children's behavioural problems. A correlational survey model, widely used in social sciences, was utilised for this purpose.

### **Population and sample**

The research sample comprised 307 parents of children 4-6 years of age living in the province of Istanbul in Turkey. Convenience sampling, a non-random sampling method, was utilised in this research. The research sample comprised 289 (94.1%) women and 18 (5.9 %) men. Thirty-seven parents (12.1 %) were 20-30 years old, 207 (67.2 %) 30-40 and 63 (20.5 %) were between 40 and 50 years old at the time of the research. With regard to the parents' education level, seven (2.3 %) parents have primary education, 17 (5.5 %) have middle school education, 68 (22.1 %) have a high school education, 176 (57.3 %) have an undergraduate degree and 39 (12.7 %) have a graduate/postgraduate degree. According to their income level, 22 (7.2 %) parents placed themselves in the low income group, 256 (83.4 %) perceived themselves in the middle income group and 29 (9.4 %) parents had a high income perception. While 137 of the parents (44.6 %) had only 1 child, 131 (42.7 %) had 2 children and 39 (12.7 %) had 3 or more children. Of the children participating in the study, 105 (34.2 %) were four years old, 117 (38.1 %) five years old and 85 (27.7 %) were six years old at the time of the research implementation.

### **Data collection tools**

**COVID-19 Survey:** The survey consists of 23 items and 3 dimensions, i.e., COVID-19 contact, Housing conditions and the Quality of life, and the Pandemic period. The answer Yes in the survey was scored with one point and No with zero points. The details are as follows:

**COVID-19 Contact:** This dimension consists of 5 items - C1, C2, C3, C4 and C5. One point is given if a family member and/or a close relative has been in contact with an individual infected with COVID-19, if a family member and/or a close relative has tested positive for COVID-19, or if a family member and/or a close relative has been hospitalized and/or passed away due to COVID-19. As the total score increases in this dimension, the relationship with COVID-19 increases.

**Housing conditions and the Quality of life:** this dimension consists of seven items - E1, E2, E3, E4, E5, E6 and E7. One point is gained for having a detached house, having a garden at home, having a separate room for each individual and having Wi-Fi access at home. In case of job or income loss or difficulty in accessing food due to COVID-19 in the family, no points are gained since the quality of life will

increase as the total score increases. Therefore, reverse coding is done for E5, E6, E7 items.

*Difficulty of the pandemic period:* This dimension consists of 9 items - P1, P2, P3, P4, P5, P6, P7, P8 and P9. For the items P1 - P4, which include emotional difficulties in the pandemic process, difficulty in explaining the pandemic process to their child and difficulties in going out for parents and children at certain times, each item is given 1 point since the level of difficulty regarding the pandemic process increases in case when these items are present. In cases where parents can spare enough time for themselves and their children, acquire a new area of interest and have a positive effect on family communication, no points are given. Therefore, reverse coding is done for items P5 - P9.

**Depression, Anxiety and Stress Scale (DASS21):** the *Depression, Anxiety and Stress Scale* was developed by Lovibond and Lovibond (1995). The scale consists of 42 items, 14 of which are related to depression, 14 to anxiety and 14 to stress. The Turkish adaptation of the long form was carried out by Akin and Cetin (2007). The Turkish validity and reliability study of the short form of the scale (DASS 21), consisting of 21 items, was carried out by Yilmaz et al. (2017). The scale consists of three sub-dimensions: Depression, Anxiety and Stress. The depression dimension, which consists of 7 items in the scale, covers such mental states as dissatisfaction, reluctance, loss of interest or reluctance to start a job; the anxiety dimension, which consists of 7 items, includes anxiety, panic, fear and physical reactions that occur in these situations; the stress dimension, which consists of 7 items, reveals the states of overreacting, difficulty in relaxing and being irritable and nervous. Evaluation is done according to total scores on a 4- point Likert scale: 0 - *did not apply to me at all*, 1 - *applied to me to some degree or some of the time*, 2 - *applied to me to a considerable degree or a good part of time*, and 3 - *applied to me a great deal or most of the time*. Factor loadings of the scale vary between 0.41 and 0.81. The Cronbach's alpha ( $\alpha$ ) value of the scale was calculated as 0.819 for the depression dimension, 0.808 for the anxiety dimension and 0.755 for the stress dimension (Yilmaz et al., 2017). In the present study, Cronbach's alpha ( $\alpha$ ) value was 0.925 in the depression dimension, 0.887 in the anxiety dimension and 0.936 in the stress dimension. The value of the whole scale was calculated as 0.956.

**Parental Stress Scale:** the *Parental Stress Scale* developed by Özmen and Özmen (2012) was used to measure parental stress level. This scale, developed to measure the stress experienced by parents in daily relationships with their children, is a one-dimensional scale consisting of 16 items. Parental Stress Scale includes items such as "*It's hard for me to make my child happy*", "*My responsibilities as a parent put a mental strain on me*", "*I find myself incapable of educating my child*". The lowest possible on this 4-point Likert scale (always-often-sometimes-never) is 16 and the highest is 64. High scores indicate high parental stress. Cronbach's alpha value calculated for internal consistency of the scale was 0.85 and Spearman-Brown

psychometric reliability was 0.82. Total correlations for all items in the scale vary between 0.34 and 0.58. The obtained t values were significant ( $p < .001$ ) (Özmen & Özmen, 2012). In the present study, the Cronbach's alpha ( $\alpha$ ) value of the scale was 0.94.

**Strengths and Difficulties Questionnaire:** the *Strengths and Difficulties Questionnaire* (SDQ), developed by Robert Goodman (1997), was used to survey children's emotional and behavioural problems. The questionnaire consists of 25 items that include positive and negative behaviours. The validity and reliability of the questionnaire's adaptation to Turkish were confirmed by Guvenir et al. (2008). The questionnaire consists of five sub-dimensions: hyperactivity/inattention, conduct problems, emotional problems, peer relationship problems and prosocial behaviours. In the 3-point Likert questionnaire, all items except those with different orientations are scored 0 for *Not true*, 1 for *Somewhat true* and 2 for *Certainly true*. Sample items from the Strengths and Challenges Questionnaire are as follows: "I try to be nice to other people. I care about their feelings", "I fight a lot. I can make other people do what I want", "I am often accused of lying or cheating", "I am often unhappy, depressed or tearful", "I finish the work I'm doing. My attention is good". Reverse coding is used for 5 items with different orientations (items 7, 11, 14, 21 and 25). Cronbach's alpha values for the scale's reliability were reported as 0.84 for the total difficulty score, 0.73 for emotional problems, 0.65 for conduct problems, 0.80 for hyperactivity/inattention, 0.37 for peer relationship problems and 0.73 for prosocial behaviour (Guvenir et al., 2008). In the present study, Cronbach's alpha ( $\alpha$ ) values were 0.60 for the total difficulty score, 0.64 for emotional problems, 0.54 for conduct problems, 0.60 for hyperactivity/inattention, 0.37 for peer relationship problems and 0.65 for prosocial behaviour.

### **Data collection and analysis**

The study started with the permission of the scientists who developed and adapted the measurement tools utilised in the research. Subsequently, the approval from the ethics committee of Yıldız Technical University and necessary permissions from the Ministry of National Education were obtained. The scales to be used in the research were transferred to online environment. Within the scope of the research, 341 parents were contacted and upon examining their answers, a sample of 307 subjects was formed by excluding the parents who had children other than 4-6 years old. The data from the COVID-19 Questionnaire, Parental Stress Scale and Depression, Anxiety and Stress Scale were collected from the parents individually. The Strengths and Challenges Questionnaire, which is used to describe children's emotional and behavioural problems, is also a form filled out by the parents. Therefore, data on the children are gathered via parents' reports. Research data were collected online between November 2020 and February 2021. The participants were informed that the research was completely voluntary and



that no identifying information would be requested during the research process, as well as that the answers would be kept confidential and evaluated only by the researchers. The data obtained in the present study were analysed using SPSS 25. Descriptive statistics for the scales were obtained and in order to decide which type of test to use during the analyses, the graphics showing distribution's normality and skewness and kurtosis values were examined. The skewness and kurtosis values were evaluated between the limits of -1 and +1 (Tabachnick & Fidell, 2013). Pearson correlation and Spearman correlation analysis were performed to compare the two quantitative data sets in the study. Multiple regression analysis was conducted to determine the extent to which the parents' experiences with the COVID-19 pandemic, parental stress and their depression, anxiety and stress levels predicted children's problem behaviours.

## **Results and Discussion**

### **COVID-19 Survey**

Considering the contacts of the parents, i.e. subjects in this research with COVID-19, 31 % did have contact with a person infected with COVID-19; one of the family members of 21.80 % of the participants tested positive for COVID-19; 15 % of the parents had a positive COVID-19 test in their close environment, including friends and relatives; 46 % of them had at least one person hospitalized for COVID-19 among their family members and/or close relatives; and death due to COVID-19 occurred in the family or of close relatives of 35.40 % of the parents. Considering that the pandemic process entails many restrictions, numerous risk factors emerge and, on the other hand, protective factors for parents and children's psychological well-being. Having internet access at home, living in a house with a garden, living in a detached house and having one's own private room in a household were considered protective factors; experiencing job loss, loss of income and difficulty in accessing food can be regarded as risk factors. According to the results obtained from housing conditions and the quality of life dimension, only 9.70 % of the parents owned a detached house and 36.60 % of the families in the sample had a garden. More than half of the parents (72.30 %) had a private room for each individual in their home. There were individuals in the family of 21.80 % of the parents who lost their job due to the COVID-19 pandemic. It is seen that more than half of them (50.70 %) experienced loss of income due to COVID-19 in their families. Only 9.10 % of the parents had difficulty in accessing food during the pandemic. While the pandemic process may be an opportunity for parents to spend more time with their child, it can also be a risk factor since the burden of home care is increased. In this study, 72 % of the parents stated that they devote enough time to their children, but the interesting point here is that only 39.20 % say they do not devote enough time to themselves, which leads to the conclusion that parents neglect themselves while spending time with their children. More than half

of the parents (57.20) state that the pandemic positively affects communication within the family. 68.10 % of the parents reported going out at certain times during the pandemic caused personal difficulties. As much as 82.30 % of the parents said that their child/children experienced difficulties in the time of the pandemic. It can be said that being able to go out only at certain times affects children more than parents. A striking point in the research findings is that more than half of the parents (51.60 %) have difficulty in explaining the pandemic process to their children.

The conclusion arises that parents are in a way forced to inform children about the coronavirus and the New Normal without scaring them, and they need support in this regard. Increasing time spent at home can prompt parents and children to try different activities. However, this research shows that only 30.40 % of parents and only 40.70 % of children started a new activity. Considering all these risk and protective factors, the surprising research result was that only 13.30 % of the parents reported emotional difficulties.

Table 1  
*Results of the Pearson correlation analysis of the relationship between COVID-19 experiences and parental stress, their depression, anxiety and stress levels (Strengths and Difficulties Questionnaire)*

	COVID-19 Contact	Housing conditions and the Quality of life	Difficulty of the pandemic period
Parental stress	-.02	.07	-.09
Depression	.03	.17**	.06
Anxiety	.17**	.21**	.12*
Stress	.07	.17**	.13*
Prosocial behaviours	.02	.06	.04
Inattention and hyperactivity	.05	.09	-.05
Emotional problems	.02	.08	.00
Peer relationship problems	.20	-.04	-.05
Total score of SDQ	.07	.12*	-.05

Note: N=307; \*p<0.05; \*\*p<0.01

It can be seen from the data in Table 1 that no statistically significant relationship was found between COVID-19 contact, housing conditions and the quality of life and difficulties of the pandemic period sub-dimensions of the Parental Stress Scale (p>0.05).

In a study conducted in the United States, it was found that parents reported high levels of stress due to factors such as managing their children’s distance education, their basic needs, access to health services and adaptation to new routines (American Psychological Association, 2020). Bıkmazer et al. (2020) revealed that parents of children between the ages of 6 and 18 were very worried about their own and the health of their loved ones, and they had difficulty in caring for their children. In the same study, having an acquaintance diagnosed with COVID-19



was associated with parental distress. Similarly, in another study it was observed that parents with high parental stress had more people in their close environment who tested positive for COVID-19 and were therefore hospitalized (Morelli et al., 2020). However, Spinelli et al. (2020) showed that living in an area at a higher risk of contamination or being in closer contact with the effects of the virus does not affect the well-being of parents, which is in line with the results of our study. In conclusion, difficulties experienced by parents living in Istanbul during the pandemic have no effect on their management of parenting roles or duties.

A positive statistically significant correlation was found between anxiety and COVID-19 contact sub-dimensions ( $r = .17$ ;  $p < 0.01$ ). Situations such as having an acquaintance infected with or hospitalized due to COVID-19 and the death of an acquaintance from COVID-19 in close environment can be considered risk factors for anxiety.

No statistically significant relationship was found between depression and stress subdimensions, on the one hand, and COVID-19 contact sub-dimension, on the other ( $p > 0.05$ ).

A positive statistically significant relationship was also found between the sub-dimensions of depression and housing conditions and the quality of life ( $r = .17$ ;  $p < 0.01$ ), between subdimensions of stress and housing conditions and the quality of life ( $r = .17$ ;  $p < 0.01$ ), and between anxiety and housing conditions and the quality of life ( $r = .21$ ;  $p < 0.01$ ). It was concluded that housing conditions and the quality of life dimension was related to parents' depression, anxiety and stress levels. Not living in a detached house, not having a house with a garden, not having a private room for every person in the house, loss of income, loss of a job and difficulty in accessing food during the pandemic are predictors of parents' depression, anxiety and stress levels. A positive statistically significant relationship was found between stress and difficulties of the pandemic period sub-dimensions ( $r = .13$ ;  $p < 0.05$ ) and between anxiety and difficulties of the pandemic period sub-dimensions ( $r = .12$ ;  $p < 0.05$ ). There was no statistically significant relationship between depression and difficulties of the pandemic period sub-dimensions ( $p > 0.05$ ).

These results are highly consistent with the ones in relevant literature. In a study conducted by Asim et al. (2021) in Karachi, participants who faced economic problems during the pandemic were found to have higher depression and anxiety levels, but having a COVID-19 positive acquaintance was not associated with depression or anxiety (Asim et al., 2021). In a study conducted in the United Arab Emirates, having been tested for COVID-19, having an infected friend or relative and suffering from financial loss were associated with increased symptoms of depression and anxiety (Thomas et al., 2020). In a study conducted by Crescentin et al. (2020) in Italy, it was reported that approximately one-fourth of the parents reported posttraumatic stress symptoms and that approximately one-tenth of them had increased symptoms of anxiety and depression compared to the pre-pandemic

process. The pandemic period has psychological effects and causes anxiety, depression and high stress levels in individuals (Badellino et al., 2021; Özdin & Bayrak Özdin, 2020; Verma & Mishra, 2020). No statistically significant relationship was found between parents' COVID-19 experiences, on the one hand, and prosocial behaviour, inattention and hyperactivity, emotional problems and peer relationship problems sub-dimensions of the Strengths and Difficulties Questionnaire, on the other ( $p > 0.05$ ). In this study, the relationship between COVID-19 experiences and conduct problems was examined with Spearman correlation analysis. There was no statistically significant relationship between COVID-19 experiences and conduct problems sub-dimensions of the Strengths and Difficulties Questionnaire ( $p > 0.05$ ).

A positive statistically significant relationship was found in this research between home features sub-dimension and the total score of the Strengths and Difficulties Questionnaire ( $r = .12$ ;  $p < 0.05$ ). There was no statistically significant relationship between COVID-19 contact and difficulty of the pandemic period sub-dimensions and the total score of the Strengths and Difficulties Questionnaire ( $p > 0.05$ ). It can be said that the children included in the study are not affected by circumstances such as having an acquaintance with COVID-19, having an acquaintance who was hospitalized due to COVID-19 or a death due to COVID-19 in the immediate environment. However, the striking point is that factors of not having a detached house, not having a house with a garden, not having internet at home, loss of income and job in the family, and difficulty in reaching food seem to cause problem behaviours in children. Francisco et al. emphasized that factors such as large number of people living at home and the absence of outdoor space such as a garden or terrace have an effect on the psychological and behavioural well-being of children in the COVID-19 pandemic, and such housing conditions can intensify the feeling of social isolation (Francisco et al., 2020). Spinelli et al. (Spinelli et al., 2020) found that parents' perceptions of the quarantine difficulty affect both parental stress and behavioural problems of children. In the present study, such a result was not found. In the study conducted by Bıkmazer et al. (2020) among children between the ages of 6 and 18, the highest score on the Strengths and Difficulties Questionnaire was obtained in emotional problems dimension. In a study conducted on children between the ages of 6 and 13 in Iraq, it was emphasized that most of the children had a fear of infection and they believed they would get an infection in case they left their homes, so they experienced high levels of stress (Abdulah et al., 2020). Available studies show that children generally exhibit internalization problems during the pandemic period. There is no study in the literature conducted on behavioural problems of children four to six years of age and their experiences during the pandemic. Our study revealed that preschool children are only affected by housing characteristics and the quality of life variables. It can be concluded that younger children have a more limited perception of the COVID-19 pandemic.

Table 2

*Inter-correlations between the predictors and their correlations with the criteria*

	1	2	3	4	5	6	7	8
1) Behavioural Problems in Children	-	.07	.12*	-.05	.24**	.20**	.20**	.24**
2) COVID-19 Contact	.07	-	.12*	.07	-.02	.03	.17**	.07
3) Housing Conditions and the Quality of Life	.12*	.12*	-	.06	.07	.17**	.21**	.17**
4) Difficulty of the Pandemic Period	-.05	.07	.06	-	-.09	.06	.12*	.13*
5) Parental Stress	.24**	-.02	.07	-.09	-	.34**	.28**	.34**
6) Depression Level	.20**	.03	.17**	.06	.34**	-	.68**	.82**
7) Anxiety Level	.20**	.17**	.21**	.12*	.28**	.68**	-	.68**
8) Stress Level	.24**	.07	.17**	.13*	.34**	.82**	.68**	-

Note: N=307; \*p&lt;0.05; \*\*p&lt;0.01

Table 3

*Multiple regression analysis with behavioural problems in children as criterion*

Predictors	$\beta$	r	sr	Model Summary
COVID-19 Contact	.05	.07	.05	R <sup>2</sup> =.10 F <sub>(7, 299)</sub> = 5.03
Housing Conditions and the Quality of Life	.07	.12	.07	
Difficulties of the Pandemic Period	-.07	-.05	-.07	
Parental Stress	.17	.24	.16	
Depression	-.03	.20	-.02	
Anxiety	.03	.20	.02	
Stress	.14	.24	.09	

Note: N=307; \*p&lt;0.05; \*\*p&lt;0.01; sr – semipartial correlation

Table 3 shows the results of multiple regression analysis conducted to reveal if the following variables act as predictors of children's behavioural problems: COVID-19 contact, housing conditions and the quality of life, difficulties of the pandemic period, parental stress and parents' depression, anxiety and stress levels. According to the research results, the stated variables have a significant relationship (R<sup>2</sup> =.10) with behavioural problems in children (F (7-299) = 5.03 p <0.05). These five variables together explain 10% of the change in children's behaviour. According to the standardized regression coefficients, the relative importance order of the predictors of children's problem behaviour is as follows: parental stress ( $\beta$ =.17), stress ( $\beta$ =.14), housing conditions and the quality of life ( $\beta$ =.07), COVID-19 contact ( $\beta$ =.05), anxiety ( $\beta$ =.03) and depression ( $\beta$ =-.03), and difficulty of the pandemic period ( $\beta$ =-.07). Examining the relationship between the predictor variables and children's behavioural problems, the following correlations are observed: parental stress (r=.24) [when other variables are controlled (sr =.16)]; depression (r=.20) [when other variables are controlled (sr=-.02)]; anxiety (r=.20) [when other variables are controlled (sr=.02)]; stress (r=.24) [when other variables

are controlled ( $sr=.09$ ); housing conditions and the quality of life ( $r=.12$ ) [when other variables are controlled ( $sr=.07$ )]; COVID-19 contact ( $r=0.7$ ) [when other variables are controlled ( $sr=.05$ )]; and difficulty of the pandemic period ( $r=-.05$ ) [when other variables are controlled ( $sr=-.07$ )].

The Durbin–Watson analysis was performed to establish a possible multiple connectivity problem between the variables. Since the calculated Durbin–Watson coefficient is 2.16 (the accepted range is 1.5 - 2.5), it can be concluded that no problem of multiple connectivity between the variables exists.

## **Conclusion**

Children's well-being is influenced not only by the well-being of parents but also by their fulfilment of parental roles and duties (Morelli et al., 2020). This research shows that the percentage of the explained variance is quite small. Hence, the results revealed that the individual psychological well-being of parents was affected by the pandemic, but the stress situations related to parenthood were not affected by it. Similarly, children's behavioural problems were only affected by housing conditions and the quality of life dimensions. In this case, parental depression, anxiety and stress levels that are results of the pandemic do not reflect in great measure on children's behaviour, that is, they do not cause problem behaviour as much. Moreover, parents even have a high level of coping skills related to parenting during the pandemic, a positive mental attitude regarding parental roles and, thus, it can be assumed that this is the reason underlying a sort of harmony the research found in children regarding the pandemic period. This research has some limitations. Namely, the research data are limited to the COVID-19 Questionnaire, Parental Stress Scale; Depression, Stress and Anxiety Scale and Strengths and Challenges Questionnaire. Furthermore, the results on children's problem behaviour were collected through parental assessment; although this method is common, a similar study could be conducted in the future by directly collecting data from children. Also, the research data are limited only to parents living in Istanbul in Turkey and children aged 4-6 years so future studies can be carried out on a larger sample. The instruments used in the study included parents' self-evaluation and the evaluation of their children, which cannot be considered the same as a professional diagnosis of mental states, i.e. health. Since we do not have the prepandemic data on parental stress and depression, anxiety and stress levels, or the data on children's problem behaviour, the results cannot be directly associated with the pandemic, but can be evaluated only according to the results of the survey about COVID-19. The results of the research emphasize the importance of reducing parents' depression, anxiety and stress levels and providing psychological support to the parents regarding the pandemic process. Pedagogues, psychological counsellors, preschool teachers and public health experts can research this subject in the future. Finally, this study was carried out among parents of average children so further research can be done on

depression, anxiety and stress levels of parents who have a child with special needs in the pandemic time and its effect on those children.

## References

- Abdulah, D. M., Abdulla, B. M. O., & Liamputtong, P. (2020). Psychological response of children to home confinement during COVID-19: A qualitative arts-based research. *International Journal of Social Psychiatry*, 20764020972439. <https://doi.org/10.1177/0020764020972439>
- Akin, A., & Çetin, B. (2007). Depresyon Anksiyete Stres Ölçeği (DASÖ): Geçerlik ve Güvenirlik Çalışması [The depression anxiety and stress scale (DASS): The study of validity and reliability]. *Kuram ve Uygulamada Eğitim Bilimleri*, 7, 241–268.
- Alicılar, H. E., & Çöl, M. (2020). COVID-19'dan Korunmada Etkili Yaklaşımlar [Effective approaches to prevention from COVID-19 prevention]. <http://www.medicine.ankara.edu.tr/wp-content/uploads/sites/121/2020/05/COVID-19-Kitap.pdf>
- American Psychological Association. (2020). *Stress in America™ 2020: Stress in the time of COVID-19*, 1, 1-3. <https://www.apa.org/news/press/releases/stress/2020/report>
- Asim, S. S., Ghani, S., Ahmed, M., Asim, A., & Qureshi, A. F. K. (2021). Assessing mental health of women living in Karachi during the Covid-19 pandemic. *Frontiers in Global Women's Health*, 1, 1–9. <https://doi.org/10.3389/fgwh.2020.594970>
- Badellino, H., Gobbo, M. E., Torres, E., & Aschieri, M. E. (2021). Early indicators and risk factors associated with mental health problems during COVID-19 quarantine: Is there a relationship with the number of confirmed cases and deaths? *International Journal of Social Psychiatry*, 67(5), 567–575. <https://doi.org/10.1177/0020764020966020>
- Bıkmazer, A., Kadak, M. T., Görmez, V., Doğan, U., Aslankaya, Z. D., Bakır, F., Tarakçıoğlu, M. C., Kaya, İ., Gümüş, Y. Y., Esin, İ. S., Karayağmurlu, A., Adak, İ., Yaylacı, F., Güller, B., Tanır, Y., Koyuncu, Z., Serdengeçti, N., Ermiş, Ç., Kaçmaz, G. B., ... Öztürk, M. (2020). Parental psychological distress associated with COVID-19 outbreak: A large-scale multicenter survey from Turkey. *International Journal of Social Psychiatry*, 1-9. <https://doi.org/10.1177/0020764020970240>
- Brown, S. M., Doom, J. R., Lechuga-Peña, S., Watamura, S. E., & Koppels, T. (2020). Stress and parenting during the global COVID-19 pandemic. *Child Abuse and Neglect*, 110 (June), 104699. <https://doi.org/10.1016/j.chiabu.2020.104699>
- Çalışkan, Y. (2020). Covid-19 pandemisi ve karantina sürecinde çocuk ve ruh sağlığı [Child and mental health during the covid-19 pandemic and quarantine]. *Medical Research Reports*, 3(Supp 1), 149–154.
- Education and COVID-19 - UNICEF DATA. (2020). <https://data.unicef.org/topic/education/COVID-19/>
- Ercan, E. S., Rodopman Arman, A., İnal Emiroğlu, N., Öztop, D. B., & Yalçın, Ö. (2020). *Türkiye Çocuk ve Genç Psikiyatrisi Derneği COVID-19 (Korona) Virüs Salgını Sırasında Aile, Çocuk ve Ergenlere Yönelik Psikososyal ve Ruhsal Destek Rehberi* [Turkish Association of Child and Adolescent Psychiatry Psychosocial and Spiritual Support Guidelines for Family,

- Children and Adolescents During the COVID-19 (Corona) Virus Outbreak]. Türkiye Çocuk ve Genç Psikiyatrisi Derneği(COGEPPER). <https://doi.org/10.37609/akya.45>
- Francisco, R., Pedro, M., Delvecchio, E., Espada, J. P., Morales, A., Mazzeschi, C., & Orgilés, M. (2020). Psychological symptoms and behavioral changes in children and adolescents during the early phase of COVID-19 quarantine in three European countries. *Frontiers in Psychiatry, 11*, 1–14. <https://doi.org/10.3389/fpsy.2020.570164>
- Güvenir, T., Özbek, A., Baykara, B., Arkar, H., Şentürk, B., & İncekaş, S. (2008). Güçler Ve Güçlükler Anketinin (Gga) Türkçe Uyarlamasının Psikometrik Özellikleri [Psychometric properties of the Turkish adaptation of the Strengths and Challenges Questionnaire (GGA)]. *Çocuk ve Gençlik Ruh Sağlığı Dergisi, 15*(2), 65–74. <http://toad.edam.com.tr/sites/default/files/pdf/gucler-ve-guclukler-anketi-toad.pdf>
- Imran, N., Zeshan, M., & Pervaiz, Z. (2020). Mental health considerations for children & adolescents in covid-19 pandemic. *Pakistan Journal of Medical Sciences, 36*(COVID19-S4), 67–72. <https://doi.org/10.12669/pjms.36.COVID19-S4.2759>
- 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. *In Journal of Pediatrics, 221*(e1), 264–266. <https://doi.org/10.1016/j.jpeds.2020.03.013>
- Kaymak Özmen, S., & Özmen, A. (n.d.). ANNE BABA STRES ÖLÇEĞİNİN GELİŞTİRİLMESİ [Adaptation of Parenting Stress].
- Morelli, M., Cattelino, E., Baiocco, R., Trumello, C., Babore, A., Candelori, C., & Chirumbolo, A. (2020). Parents and children during the COVID-19 lockdown: The influence of parenting distress and parenting self-efficacy on children's emotional well-being. *Frontiers in Psychology, 11*, 1–10. <https://doi.org/10.3389/fpsyg.2020.584645>
- Okur, İ., & Demirel, Ö. F. (2020). COVID-19 ve Psikiyatrik Bozukluklar [COVID-19 and Psychiatric Disorders]. *REWİE Med Res Rep, 3*(Supp 1), 86–99.
- Özdin, S., & Bayrak Özdin, Ş. (2020). Levels and predictors of anxiety, depression and health anxiety during COVID-19 pandemic in Turkish society: The importance of gender. *International Journal of Social Psychiatry, 66*(5), 504–511. <https://doi.org/10.1177/0020764020927051>
- Parker, K., Minkin, R., & Bennett, J. (2020). *Economic fallout from COVID-19 continues to hit lower-income Americans the hardest*. Pew Research Center. <https://www.pewresearch.org/social-trends/2020/09/24/economic-fallout-from-COVID-19-continues-to-hit-lower-income-americans-the-hardest/>
- Spinelli, M., Lionetti, F., Pastore, M., & Fasolo, M. (2020). Parents' stress and children's psychological problems in families facing the COVID-19 outbreak in Italy. *Frontiers in Psychology, 11*, 1–7. <https://doi.org/10.3389/fpsyg.2020.01713>
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th Edition). Allyn and Bacon
- Taylor, S. (2019). The psychology of pandemics: Preparing for the next global outbreak of infectious disease. - PsycNET.
- Thomas, J., Barbato, M., Verlinden, M., Gaspar, C., Moussa, M., Ghorayeb, J., Menon, A., Figueiras, M. J., Arora, T., & Bentall, R. P. (2020). Psychosocial correlates of depression and anxiety in the United Arab Emirates during the COVID-19 pandemic. *Frontiers in Psychiatry, 11*, 1–10. <https://doi.org/10.3389/fpsy.2020.564172>



- Verma, S., & Mishra, A. (2020). Depression, anxiety, and stress and socio-demographic correlates among general Indian public during COVID-19. *International Journal of Social Psychiatry*, 66(8), 756–762. <https://doi.org/10.1177/0020764020934508>
- Wang, G. H., Zhang, Y. T., Zhao, J., Zhang, J., & Jiang, F. (2020). Mitigate the effects of home confinement on children during the COVID-19 outbreak. *Journal of Shanghai Jiaotong University (Medical Science)*, 40(3), 279–281. <https://doi.org/10.3969/j.issn.1674-8115.2020.03.001>
- Yılmaz, Ö., Boz, H., & Arslan, A. (2017). Depresyon Anksiyete Stres Ölçeğinin (DASS 21) Türkçe Kısa Formunun Geçerlilik-Güvenilirlik Çalışması [Validity-Reliability study of Turkish short form of Depression Anxiety Stress Scale (DASS 21)]. *Finans Ekonomi ve Sosyal Araştırmalar Dergisi*, 2(2), 78–91.

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# Problemi u ponašanju predškolske djece tijekom pandemije COVID-19 u Turskoj: uloga iskustava roditelja s pandemijom koronavirusa i njihove razine depresije, anksioznosti i stresa

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## **Sažetak**

Cilj je ovoga rada istražiti odnos između iskustava roditelja s pandemijom COVID-19 (Kontakt s virusom, Uvjeti stanovanja i kvaliteta života i Teškoće pandemijskoga razdoblja) i stresa roditeljstva te razina depresije, anksioznosti i stresa roditelja. U ovome istraživanju korišten je model korelacijskoga intervjua koji spada u skupinu kvantitativnih istraživačkih modela. Sudionici su odabrani metodom prigodnoga uzorkovanja. 307 roditelja djece u dobi od četiri do šest godina odabralo je sudjelovati u istraživanju ( $M = 4,94$ ;  $SD = 0,79$ ). Podatci su sakupljeni online uz upotrebu sljedećih instrumenata: Obrazac s općim informacijama; COVID-19 upitnik; Skala stresa roditelja; Skala depresije, anksioznosti i stresa (SDAS21) i Upitnik snaga i problema (USP). Dobiveni podatci analizirani su u programu SPSS 25. Rezultati istraživanja nisu pokazali značajan odnos između roditeljskih iskustava s pandemijom COVID-19 i stresa roditeljstva, tj. dokazano je da kontakt roditelja s COVID-om ne utječe na njihove razine depresije, anksioznosti i stresa. Ipak, uvjeti stanovanja i promjenjiva kvaliteta života zbog virusa te doživljene teškoće tijekom pandemije imaju učinak na razinu anksioznosti i stresa roditelja. Rezultati pokazuju da kontakt s pandemijom i zbog toga doživljene teškoće roditelja nisu povezane s problemima u ponašanju djece. S druge strane, rezultati govore uz prilog zajedničkom značajnom djelovanju roditeljskih iskustava s pandemijom i njihovih razina depresije, anksioznosti i stresa na probleme u ponašanju djece.

**Ključne riječi:** pandemija COVID-19; predškolski period; problemi u ponašanju djece; stres roditelja.

## Uvod

COVID-19 je bolest dišnoga sustava koja se prvi put pojavila u Wuhanu u Kini u prosincu 2019. godine, nakon čega se brzo proširila širom svijeta i 11. ožujka 2020. godine Svjetska zdravstvena organizacija proglasila ju je pandemijom (Aliclar i Çöl, 2020). Zbog nekontroliranoga širenja virusa, zemlje su morale poduzimati mjere poput nošenja maski za lice, pojačane osobne higijene i karantene ili socijalne izolacije. U sklopu tih mjera, s javnim pozivom „Ostanite kod kuće” u ožujku 2020., u Turskoj se zatvaraju škole, kompanije počinju primjenjivati fleksibilnu vrstu rada, uvode se ograničenja u domaćim i inozemnim putovanjima te na snagu stupa pravilo socijalnoga distanciranja, uz nošenje maski na mjestima poput restorana, trgovačkih centara, teretana i javnoga prijevoza. Osim toga, određenim dobnim skupinama u određeno vrijeme tijekom ovoga perioda nametnuto je zatvaranje (*lockdown*), a pojedinci zaraženi virusom morali su ostati u karanteni 14 dana.

Učinci pandemije nadilaze granice fizičkoga zdravlja: osjete se u različitim područjima života poput društvenoga razvoja, osobne i ekonomske sigurnosti, obrazovanja djece i omladine i u području obiteljskoga života (*Obrazovanje i COVID-19 - PODATCI UNICEF-a*, 2020; Ercan i sur., 2020). Istraživanje Parkera i suradnika (2020) među 13 200 odraslih osoba u SAD-u otkrilo je da je 25 % njih bilo otpušteno zbog toga što su oni sami ili neki od članova njihovoga kućanstva bili zaraženi koronavirusom, te da su plaće 32 % manje zbog smanjenja radnih sati. Samo trećina onih koji su bili otpušteni zbog koronavirusa vratili su se na prijašnje poslove.

Pandemija se može povezati sa širokim rasponom stresnih čimbenika koji utječu na dobrobit osobe, poput anksioznosti zbog bolesti, problema s pristupom hrani ili liječenju, mijenjanja navika, odvojenosti od obitelji i prijatelja, gubitaka posla i prihoda, karantene i pravila socijalnoga distanciranja te zatvaranja škola (Okur i Demirel, 2020; Ercan i sur., 2020; Taylor, 2019), pa tako utječe i na mentalno zdravlje obitelji i djece. Budući da djeca imaju ograničeno razumijevanje događaja i nerazvijene strategije rješavanja problema, ne mogu izbjeći posljedičnu fizičku i mentalnu štetu (Imran i sur., 2020). Socijalna izolacija, zatvaranje škola i karantena uzrokovana pandemijom dovode do smanjenoga kretanja djece i više zastupljenoga sjedilačkoga načina života, što negativno utječe na mentalno zdravlje djece (Çalışkan, 2020). Tijekom ovoga perioda može doći do promjena u navikama spavanja, hranjenja i odlaska na toalet djece; štoviše, mogu se javiti psihološki poremećaji u obliku češćega plakanja, naglosti, povučenosti, ravnodušnosti, opsesivnoga ponašanja, problema vezanih uz izolaciju i straha od postavljanja pitanja o pandemiji (Jiao i sur., 2020; Ercan i sur., 2020). Kod djece s poremećajima pažnje i hiperaktivnosti, autizmom ili mentalnom retardacijom mogu se povećati oblici agresivnoga ponašanja zbog boravka kod kuće, tj. izolacije (Ercan i sur., 2020). Stresori poput dosade u kući, nemogućnosti komunikacije s vršnjacima i učiteljima, financijskoga gubitka u obitelji i straha od infekcije mogu imati trajne posljedice na djecu (Wang i sur., 2020). U istraživanju provedenom s 320 djece i adolescenata u Kini otkriveno je da su djeca od tri do šest godina strahovala

od zaraze članova obitelji i taj su strah iskazivala kroz psihološka stanja poput pretjerane privrženosti, nepažnje ili nervoze (Jiao i sur., 2020). Iako je ovaj period bio prilika za roditelje da provedu više vremena sa svojom djecom i osnaže međusobnu komunikaciju, on također za roditelje predstavlja teret zbog odgovornosti održavanja svakodnevnoga života i rada te preuzimanja obrazovne uloge u životu djece (Spinelli i sur., 2020). Smatra se da ova situacija može povećati rizik za doživljavanje negativnih emocija roditelja poput stresa, depresije i anksioznosti te djelovati kao agens u razvoju raznih psiholoških problema djece. Iz navedenoga proizlazi da to hoće li djeca proći ovaj period s manje ili više štetnih psiholoških posljedica ovisi o mentalnom zdravlju njihovih roditelja (Ercan i sur., 2020). Istraživanje provedeno s 854 roditelja u Italiji pokazalo je značajnu povezanost između pojedinačnih percepcija roditelja razdoblja pandemije, njihovih mehanizama suočavanja sa stresom uzrokovanim karantenom, razinama stresa roditeljstva i psiholoških problema djece (Spinelli i sur., 2020). Budući da obitelji nisu u mogućnosti dobivati podršku od vanjskih izvora poput škola ili drugih institucija za dječju skrb tijekom COVID-19 pandemije, podrška koju primaju u domu utječe na doživljeni stres i roditeljstvo. Razina dobivene emocionalne i socijalne podrške roditelja u izravnoj je korelaciji s njihovom percepcijom stresa i rizikom od zlostavljanja djece. Tijekom ovoga perioda obitelji koje su u financijskoj nestašici i roditelji s većim simptomima anksioznosti i/ili depresije u većem su riziku od zlostavljanja djece (Brown i sur., 2020).

Iz navedenih činjenica proizlazi nužnost istraživanja načina na koji je COVID-19 pandemija utjecala na razine depresije, anksioznosti i stresa roditelja u Turskoj; načina na koji je ovaj period utjecao na njihove razine stresa i načina na koje su oboje koronavirus i roditeljsko psihološko blagostanje utjecali na probleme u ponašanju djece. Cilj je ovoga istraživanja bio ispitati odnos između roditeljskih iskustava s koronavirusom (Kontakt s virusom, Uvjeti stanovanja i kvaliteta života i Teškoće pandemijskoga razdoblja) i stresa roditeljstva te njihovih razina depresije, anksioznosti i stresa. Osim toga, cilj je bio ispitati doprinos roditeljskih doživljaja COVID-19 pandemije, stresa roditeljstva te razina depresije, anksioznosti i stresa roditelja na probleme u ponašanju njihove predškolske djece.

## **Metode istraživanja**

### ***Model istraživanja***

Cilj je ovoga istraživanja bio je ispitati odnos između iskustava roditelja s pandemijom COVID-19 i stresa roditeljstva te razina depresije, anksioznosti i stresa roditelja. Osim toga, istraživanjem se nastojala ustanoviti priroda odnosa između stresa roditeljstva i problema u ponašanju djece. U tu svrhu korišten je model korelacijskoga istraživanja, koji ima široku upotrebu u području društvenih znanosti.

### ***Uzorak***

Uzorak istraživanja sastojao se od 307 roditelja djece u dobi od četiri do šest godina, koji su u vrijeme istraživanja živjeli u Istanbulu u Turskoj. U istraživanju je

upotrijebljena metoda namjernoga uzorkovanja, tj. metoda prigodnoga uzorka. Uzorak je obuhvatio 289 žena (94,1 %) i 18 (5,9 %) muškaraca. Trideset sedam roditelja (12,1 %) bili su dvadeset do trideset godina stari, 207 (67,2 %) u dobnoj skupini od trideset do četrdeset godina i 63 (20,5 %) roditelja bili su u između četrdeset i pedeset godina starosti za vrijeme provedbe istraživanja. S obzirom na stupanj obrazovanja roditelja, sedmero je završilo osnovnu školu (2,3 %), 17 (22,1 %) je završilo nižu srednju školu<sup>1</sup>, 68 roditelja ima srednjoškolsko obrazovanje, 176 (57,3 %) njih završilo je fakultet i 39 (12,7 %) postdiplomski studij. Kada razmatramo osobni dohodak, 22 (7,2 %) roditelja pripada skupini niskih prihoda, 256 (83,4 %) skupini srednjih prihoda i 29 (9,4 %) roditelja smatra da ima visoke prihode. Dok 137 roditelja (44,6 %) ima samo jedno dijete, 131 (42,7 %) ima dvoje djece, a 39 (12,7 %) ima troje ili više djece. Među djecom sudionicima 105 (34,2 %) ih je za vrijeme provedbe istraživanja imalo četiri godine, 117 (38,1 %) pet godina i 85 (27,7 %) šest godina.

### ***Instrumenti za prikupljanje podataka***

**COVID-19 upitnik:** Upitnik se sastoji od 23 čestice i 3 dimenzije, tj. Kontakt s koronavirusom, Uvjeti stanovanja i kvaliteta života i Teškoće pandemijskoga razdoblja. Odgovor DA u upitniku nosio je jedan bod, a odgovor NE nula bodova. Detalji su u nastavku rada:

*Kontakt s koronavirusom:* Ova dimenzija obuhvaća 5 čestica - C1, C2, C3, C4 i C5. Jedan bod je dodijeljen ako je član obitelji i/ili bliski rođak bio u kontaktu sa ili zaražen koronavirusom, ako je član obitelji i/ili bliski rođak bio pozitivan na COVID testu ili ako je član obitelji i/ili bliski rođak bio hospitaliziran ili preminuo zbog koronavirusa. Viši ukupni rezultat u ovoj dimenziji znači veći kontakt s koronavirusom raste.

*Uvjeti stanovanja i kvaliteta života:* ova dimenzija obuhvaća čestice E1, E2, E3, E4, E5, E6 i E7. Jedan bod dodjeljuje se za odvojenu kuću, vrt, posebnu sobu za svakog člana kućanstva i bežični internet u kući. U slučaju gubitka posla ili prihoda ili teškoća u prehranjivanju obitelji zbog koronavirusa, ne dodjeljuju se bodovi jer kvaliteta života raste s ukupnim rezultatom. Stoga se za čestice E5, E6, E7 primjenjuje obrnuto kodiranje.

*Teškoće pandemijskoga razdoblja:* Ova dimenzija obuhvaća devet čestica - P1, P2, P3, P4, P5, P6, P7, P8 i P9. Za čestice P1 - P4, koje podrazumijevaju emocionalne nedaće u razdoblju pandemije, teškoće u objašnjavanju pandemije vlastitoj djeci i probleme u izlaženju, tj. napuštanju kuće za roditelje i djecu u određeno vrijeme, dodjeljuje se jedan bod budući da razina teškoća u pandemijskom periodu raste u slučaju prisutnosti tih čestica. Bodovi se ne dodjeljuju u slučaju kada roditelji provode dovoljno vremena sa svojom djecom te imaju dovoljno vremena za sebe, stječu novo područje interesa i imaju pozitivan učinak na komunikaciju u obitelji. Obrnuto se kodiranje tako primjenjuje za čestice P5 - P9.

**Skala depresije, anksioznosti i stresa (SDAS21):** Skalu depresije, anksioznosti i stresa konstruirali su Lovibond i Lovibond (1995). Ova ljestvica obuhvaća 42 čestice, od

<sup>1</sup> U Hrvatskoj je to ekvivalent viših razreda osnovne škole.

kjih se 14 odnosi na depresiju, 14 na anksioznost i 14 na stres. Tursku prilagodbu ljestvice proveli su Akin i Cetiin (2007). Yilmaz i sur. (2017) provjerili su valjanost i pouzdanost turske, prilagođene, skraćene ljestvice koja obuhvaća 21 česticu. Ova verzija skale uključuje tri poddimenzije: depresiju, anksioznost i stres. Dimenzija depresije, koja se sastoji od 7 čestica, obuhvaća mentalna stanja poput nezadovoljstva, nevoljkosti, gubitka interesa ili nedostatka motivacije za radom; dimenzija anksioznosti, koja obuhvaća sedam čestica, uključuje anksioznost, paniku, strah i fizičke reakcije koje se javljaju u tim stanjima; dimenzija stresa, koja se sastoji od 7 čestica, uključuje stanja poput pretjeranih reakcija, nemogućnosti opuštanja i iritabilnost i nervozu. Evaluacija ljestvice provodi se prema ukupnim rezultatima na Likertovoj ljestvici od 4 stupnja: 0 – *uopće se ne odnosi na mene*, 1 – *donekle se odnosi na mene ili ne sve vrijeme*, 2 – *odnosi se na mene u većoj mjeri ili dobar dio vremena* i 3 – *odnosi se na mene velikoj mjeri ili većinu vremena*. Zasićenja faktora skale variraju u rasponu od 0,41 do 0,81. Cronbachov alpha ( $\alpha$ ) koeficijent za ovu skalu iznosi 0,819 za depresiju, 0,808 za anksioznost i 0,755 za dimenziju stresa (Yilmaz i sur., 2017). U ovom istraživanju izračunata Cronbachov alpha ( $\alpha$ ) koeficijent iznosio je 0,925 za dimenziju depresije, 0,887 za dimenziju anksioznosti i 0,936 za dimenziju stresa. Ista vrijednost za cijelu ljestvicu iznosila je 0,956.

**Skala stresa roditelja:** *Skala stresa roditelja* koju su konstruirali Özmen i Özmen (2012) upotrijebljena je u ovom istraživanju kako bi se ispitala razina stresa roditeljstva. Ova ljestvica, razvijena za mjerenje stresa koji roditelji svakodnevno doživljavaju u odnosu sa svojom djecom, jednodimenzionalna je skala koja obuhvaća šesnaest čestica. Skala stresa roditelja uključuje čestice poput: „*Teško mi je usrećiti svoje dijete*”, „*Moje odgovornosti kao roditelja psihički me opterećuju*”, „*Smatram da nisam sposoban obrazovati svoje dijete*”. Najniži mogući rezultat na četverostupanjskoj Likertovoj ljestvici (*uvijek, često, ponekad, nikada*) je 16, a najviši 64. Visoki rezultati ukazuju na izražen stres roditelja. Izračunati Cronbachov alpha koeficijent za unutarnju dosljednost skale iznosio je 0,85 i Spearman–Brown koeficijent psihometrijske pouzdanosti 0,82. Ukupne korelacije za sve čestice ljestvice u rasponu su između 0,34 i 0,58. Dobivene t-vrijednosti bile su značajne ( $p < ,001$ ) (Özmen i Özmen, 2012). U ovom istraživanju Cronbachov alpha koeficijent bio je 0,94.

**Upitnik snaga i problema:** *Upitnik snaga i problema* (SDQ), koji je konstruirao Robert Goodman (1997), korišten je kako bi se ustanovili problemi u ponašanju djece. Upitnik obuhvaća 25 čestica koje uključuju pozitivna i negativna ponašanja. Valjanost i pouzdanost turske adaptacije upitnika potvrdili su Guvenir i suradnici (2008). Upitnik se sastoji od pet poddimenzija: hiperaktivnost/nepažnja, problemi u ponašanju, emocionalni problemi, problemi u vršnjačkim odnosima i prosocijalna ponašanja. Sve čestice bodovane su na Likertovoj ljestvici od tri stupnja, osim onih s različitom orijentacijom (0 - *nije točno*, 1 - *donekle točno* i 2 - *točno*). Primjeri čestica u Upitniku prednosti i teškoća su: „*Pokušavam biti dobar prema drugim ljudima. Brinem se o njihovim osjećajima*”, „*Puno se svađam. Mogu učiniti da drugi ljudi rade što želim*”, „*Često me optužuju za laganje i varanje*”, „*Često sam nesretna, depresivna i u suzama*”,



„Završim posao koji radim. Moja pažnja je dobra“. Obrnuto kodiranje primijenjeno je na pet čestica različite orijentacije (čestice 7, 11, 14, 21 i 25). Cronbachov alpha koeficijent pouzdanosti skale je 0,84 za ukupan rezultat teškoća, 0,73 za emocionalne probleme, 0,65 za probleme u ponašanju, 0,80 za hiperaktivnost/nepažnju, 0,37 za probleme u vršnjačkim odnosima i 0,73 za prosocijalno ponašanje (Guvenir i sur., 2008). U ovom istraživanju Cronbachov alpha koeficijenti izračunati su kao 0,60 za ukupne teškoće, 0,64 za emocionalne probleme, 0,54 za probleme u ponašanju, 0,60 za hiperaktivnost/nepažnju, 0,37 za probleme u vršnjačkim odnosima i 0,65 za prosocijalno ponašanje.

## Rezultati i diskusija

### COVID-19 upitnik

Razmatrajući kontakte roditelja s koronavirusom ustanovljeno je da ih je 31 % bilo u kontaktu s virusom, jedan od članova obitelji 21,80 % sudionika istraživanja bio je pozitivan na koronavirus, 15 % roditelja imalo je nekoga tko je bio pozitivan na virus u svojem bliskom okruženju, uključujući prijatelje i rođake; barem jedan član obitelji 46 % ispitanika bio je hospitaliziran zbog koronavirusa i 35,40 % roditelja doživjelo je smrt nekog člana obitelji zbog koronavirusa. S obzirom na to da razdoblje pandemije podrazumijeva mnoga ograničenja, javljaju se brojni faktori rizika i, s druge strane, zaštitni čimbenici psihološkoga blagostanja roditelja i djece. Zaštitni čimbenici obuhvaćaju pristup internetu u domu, život u kući s vrtom, život u odvojenoj kući i vlastitu sobu svakoga člana kućanstva. S druge strane, gubitak posla, gubitak prihoda i teškoće u prehranjivanju obitelji mogu se promatrati kao faktori rizika. Prema rezultatima u dimenziji Uvjeta stanovanja i kvalitete života, samo 9,70 % roditelja imalo je odvojenu kuću, a 36,60 % obitelji imalo je vrt. Više od polovine roditelja (72,30 %) imalo je privatnu sobu za svaku osobu u kućanstvu. Pojedinci u obiteljima 21,80 % sudionika istraživanja izgubili su posao zbog pandemije COVID-19. Više od polovine ispitanika (50,70 %) doživjelo je gubitak prihoda zbog koronavirusa u obitelji, a samo se 9,10 % roditelja teško prehranjivalo zbog pandemije. Osim toga, dok s jedne strane pandemija može biti prilika za roditelje da provedu više vremena sa svojim djetetom, ovaj period također može biti faktor rizika zbog povećanoga tereta brige u domu. U ovom istraživanju 72 % roditelja izjavilo je da posvećuje dovoljno vremena svojoj djeci, ali zanimljivo je da 39,20 % njih kažu da ne posvećuju dovoljno vremena sebi, što navodi na zaključak da se roditelji zanemaruju zbog vremena koje provode s djecom. Više od polovine roditelja (57,20) navodi da pandemija pozitivno utječe na komunikaciju u obitelji. 68,10 % roditelja izjavilo je da im je izlazak iz kuće u određeno vrijeme prouzročio osobne tegobe. 82,30 % ispitanika izjavilo je da njihovo dijete/djeca doživljavaju teškoće zbog pandemije. Može se reći da izlazak iz kuće u određeno vrijeme više utječe na djecu nego roditelje. Zanimljiv rezultat istraživanja jest da više od polovine roditelja (51,60 %) ima problema u objašnjavanju pandemijskoga razdoblja djeci.

Nameće se zaključak da su roditelji na neki način prisiljeni informirati djecu o koronavirusu i *novom normalnom* a da ih uplaše, te da u tom pogledu trebaju podršku.

Sve više vremena koje provode kod kuće može poslužiti kao poticaj roditeljima i djeci da se okušaju u novim aktivnostima. Ipak, ovo istraživanje pokazuje da je samo 30,40 % roditelja i 40,70 % djece počelo bavljenje novom aktivnošću. S obzirom na sve faktore rizika i zaštite, iznenađujući rezultat istraživanja je samo 13,30 % roditelja koji su izjavili da doživljavaju emocionalne teškoće.

Tablica 1.

Podatci u Tablici 1 pokazuju da nije ustanovljena statistički značajna korelacija između poddimenzija Kontakt s koronavirusom, Uvjeti stanovanja i kvaliteta života i Tegobe pandemijskoga razdoblja na *Skali stresa roditelja* ( $p > 0,05$ ).

U istraživanju koje je provedeno u SAD-u roditelji su izvješćivali o visokim razinama stresa zbog čimbenika poput upravljanja obrazovanjem na daljinu svoje djece, njihovih osnovnih potreba, pristupa uslugama zdravstva i prilagodbe njihove djece na nove navike (Američko udruženje psihologa, 2020). U istraživanju Bikmazera i suradnika (2020) pokazalo se da su roditelji djece u dobi od 6 do 18 godina bili vrlo zabrinuti zbog vlastitoga zdravlja i zdravlja svojih voljenih i da su imali teškoća zbog brige za svoju djecu. U istom je istraživanju čimbenik poznanstva s osobama kojima je dijagnosticiran COVID-19 bio povezan sa stresom roditelja. Slično tomu, u još jednom istraživanju pokazalo se kako su ispitanici s visokim razinama stresa roditeljstva imali više ljudi svojoj bliskoj okolini koji su bili pozitivni na koronavirus i stoga hospitalizirani (Morelli i sur., 2020). Unatoč tome, Spinelli i suradnici (2020) otkrili su da život u području s višim rizikom od zaraze ili bliski kontakt s posljedicama virusa ne utječe na blagostanje roditelja, što je u skladu s rezultatima ovoga istraživanja. Može se zaključiti da problemi koje su doživjeli roditelji u Istanbulu tijekom pandemije nemaju učinka na njihovo ispunjavanje roditeljske uloge i dužnosti.

Otkrivena je pozitivna statistički značajna korelacija između poddimenzija anksioznosti i kontakta s COVID-19 ( $r = ,17$ ;  $p < 0,01$ ). Situacije poput onih u kojima su ljudi imali zaražene ili hospitalizirane poznanike te doživjeli smrt poznanika u bliskoj okolini zbog koronavirusa može se smatrati faktorom rizika za anksioznost.

Nije pronađen statistički značajan odnos između poddimenzija Depresije i stresa i Kontakta s koronavirusom ( $p > 0,05$ ). Pozitivna statistički značajna korelacija pronađena je između poddimenzija Depresije i Uvjeta stanovanja i kvalitete života ( $r = ,17$ ;  $p < 0,01$ ), između poddimenzija Stresa i Uvjeta stanovanja i kvalitete života ( $r = ,17$ ;  $p < 0,01$ ) i između Anksioznosti i Uvjeta stanovanja i kvalitete života ( $r = ,21$ ;  $p < 0,01$ ). Nameće se zaključak da je dimenzija Uvjeti stanovanja i kvaliteta života povezana s razinama depresije, anksioznosti i stresa roditelja. Život u kući koja nije odvojena, bez vrta i privatne soba za svakog člana kućanstva, gubitak posla i teškoće u prehranjivanju tijekom pandemije prediktori su roditeljskih razina depresije, anksioznosti i stresa.

Pozitivna statistički značajna korelacija pronađena je između poddimenzija Stresa i Teškoća pandemijskoga razdoblja ( $r = ,13$ ;  $p < 0,05$ ) i između Anksioznosti i Teškoća pandemijskoga razdoblja ( $r = ,12$ ;  $p < 0,05$ ). Nije otkrivena statistički značajna povezanost između Depresije i Teškoća pandemijskoga razdoblja ( $p > 0,05$ ).

Ovi se rezultati u velikoj mjeri podudaraju s onima u relevantnoj literaturi. U istraživanju koje su proveli Asim i suradnici (2021) u Karačiju sudionici koji su bili suočeni s ekonomskim problemima tijekom pandemije imali su više razine depresije i anksioznosti, ali poznanstvo s osobama pozitivnima na koronavirus nije dokazano povezano s depresijom i tjeskobom (Asim i sur., 2021). U istraživanju provedenom u Ujedinjenim Arapskim Emiratima pozitivan test na COVID, poznanstvo s ili rodbina zaražena koronavirusom i financijski gubitak bili su čimbenici dokazano povezani s povišenim simptomima depresije i anksioznosti (Thomas i sur., 2020). U istraživanju Crescentina i suradnika (2020) u Italiji približno je jedna četvrtina roditelja sudionika izvijestila o simptomima posttraumatskoga stresa i jedna desetina roditelja u uzorku imala je veće simptome anksioznosti i depresije nego u razdoblju prije pandemije. Pandemijsko vrijeme ima psihološke posljedice i uzrokuje tjeskobu, depresiju i visoke razine stresa (Badellino i sur., 2021; Özdin i Bayrak Özdin, 2020; Verma i Mishra, 2020).

Nije pronađena statistički značajna korelacija između Iskustava roditelja s pandemijom, s jedne strane, i poddimenzija Prosocijalno ponašanje, Nepažnja i hiperaktivnost, Emocionalni problemi i Problem u odnosima s vršnjacima *Upitnika snaga i problema*, s druge strane ( $p > 0,05$ ).

U ovom istraživanju odnos između Iskustava s pandemijom roditelja i Problema u ponašanju djece ispitao se upotrebom Spearmanova koeficijenta korelacije, koji nije pokazao statistički značajan odnos između spomenutih poddimenzija *Upitnika snaga i problema* ( $p > 0,05$ ).

U ovom istraživanju pronađena je pozitivna statistički značajna korelacija između poddimenzije Uvjeti stanovanja i ukupnoga rezultata *Upitnika snaga i problema* ( $r = ,12$ ;  $p < 0,05$ ). Nije ustanovljena statistički značajna korelacija između Kontakta s koronavirusom i Teškoća pandemijskoga razdoblja i ukupnoga rezultata u prethodno spomenutom upitniku ( $p > 0,05$ ). Može se zaključiti kako djeca uključena u ovo istraživanje nisu bila pod utjecajem okolnosti poput poznanika zaraženih koronavirusom ili hospitaliziranih te smrti zbog COVID-a u neposrednoj okolini. Ipak, značajna je činjenica da čimbenici poput života u kući koja nije odvojena, bez vrta, bez pristupa internetu, gubitka posla u obitelji i teškoća u prehranjivanju predstavljaju faktore koji uzrokuju problematična ponašanja djece. Francisco i suradnici naglasili su da čimbenici poput velikoga broja ljudi koji žive u kućanstvu ili neimanja vanjskoga prostora poput vrta ili terase djeluju na psihološko zdravlje i ponašanje djece u pandemiji, te takvi uvjeti stanovanja mogu intenzivirati osjećaj socijalne izolacije (Francisco i sur., 2020). Spinelli i suradnici (Spinelli i sur., 2020) otkrili su da roditeljska percepcija karantene utječe oboje na njihov stres i probleme u ponašanju djece. U ovom istraživanju takav rezultat nije nađen. U istraživanju koje su proveli Bikmazer i suradnici (2020) s djecom u dobi od 6 do 18 godina najviši rezultat na *Upitniku snaga i problema* postignut je u dimenziji Emocionalni problemi. U istraživanju provedenom među djecom u dobi od 6 do 13 godina u Iraku naglašeno je da su većina djece imala strah od zaraze i vjerovala da se mogu zaraziti ako napuste svoje domove, pa su tako pokazivala visoke razine

stresa (Abdulah i sur., 2020). Postojeće studije pokazuju da djeca općenito pokazuju probleme s internalizacijom tijekom pandemijskoga razdoblja. Nema istraživanja u literaturi o problemima u ponašanju djece u dobi od četiri do šest godina i njihovim iskustvima tijekom pandemije. Naše istraživanje pokazalo je da su djeca u toj dobi jedino pod utjecajem varijable Uvjeti stanovanja i kvaliteta života, što navodi na zaključak da mlađa djeca imaju ograničenu percepciju pandemije COVID-19.

Tablica 2.

Tablica 3.

U Tablici 3 prikazani su rezultati višestruke regresijske analize koja je provedena kako bi ustanovili djeluju li sljedeće varijable kao prediktori problema u ponašanju djece: Kontakt s COVID-19, Uvjeti stanovanja i kvaliteta života, Teškoće pandemijskoga razdoblja, Stres roditeljstva, Razine depresije, anksioznosti i stresa roditelja. Prema rezultatima istraživanja navedene varijable imaju značajan odnos ( $R^2 = ,10$ ) s problemima u ponašanju djece ( $F_{(7-299)} = 5,03$   $p < 0,05$ ). Navedenih pet varijabli zajedno objašnjavaju 10 % promjene u ponašanju djece. Prema standardiziranim regresijskim koeficijentima relativni redoslijed prediktora problema u ponašanju djece je sljedeći: Stres roditeljstva ( $\beta = ,17$ ), Stres ( $\beta = ,14$ ), Uvjeti stanovanja i kvaliteta života ( $\beta = ,07$ ), Kontakt s COVID-19 ( $\beta = ,05$ ), Anksioznost ( $\beta = ,03$ ) i Depresija ( $\beta = -,03$ ), Teškoće pandemijskoga razdoblja ( $\beta = -,07$ ). Prilikom ispitivanja odnosa između prediktorskih varijabli i problema u ponašanju djece primijećene su sljedeće korelacije: Stres roditeljstva ( $r = ,24$ ) [kada su ostale varijable kontrolirane ( $sr = ,16$ )]; Depresija ( $r = ,20$ ) [kada su ostale varijable kontrolirane ( $sr = -,02$ )]; Anksioznost ( $r = ,20$ ) [kada su ostale varijable kontrolirane ( $sr = ,02$ )]; Stres ( $r = ,24$ ) [kada su ostale varijable kontrolirane ( $sr = ,09$ )]; Uvjeti stanovanja i kvaliteta života ( $r = ,12$ ) [kada su ostale varijable kontrolirane ( $sr = ,07$ )]; Kontakt s COVID-19 ( $r = 0,7$ ) [kada su kontrolirane ostale varijable ( $sr = ,05$ )]; i Teškoće pandemijskoga razdoblja ( $r = -,05$ ) [kada su ostale varijable kontrolirane ( $sr = -,07$ )].

Provedena je Durbin–Watsonova analiza kako bi se ustanovio mogući problem višestruke povezanosti između varijabli. Budući da je izračunat Durbin–Watsonov koeficijent iznosio 2,16 (prihvaćeni raspon je 1,5 – 2,5), može se zaključiti da problem višestruke povezanosti između varijabli nije postojao.

## **Zaključak**

Na dobrobit djece ne utječe samo dobrobit roditelja, već i njihovo ispunjavanje roditeljske uloge i dužnosti (Morelli i sur., 2020) Ovo istraživanje pokazuje da je postotak objašnjene varijance prilično malen. Stoga rezultati pokazuju da je pojedinačno psihološko blagostanje roditelja bilo pod utjecajem pandemije, ali stresne situacije vezane za roditeljstvo nisu bile pod utjecajem pandemije. Slično tomu, problemi u ponašanju djece bili su pod utjecajem jedino dimenzije Uvjeti stanovanja i kvaliteta života. U tom slučaju, razine depresije, anksioznosti i stresa roditelja koje su rezultat

pandemije ne odražavaju se u velikoj mjeri na ponašanje djece, tj. ne uzrokuju znatno problematična ponašanja. Štoviše, roditelji čak imaju višu razinu vještina za suočavanje s problemima roditeljstva tijekom pandemije i pozitivan mentalni stav o ulozi roditelja, iz čega proizlazi pretpostavka da je spomenuto razlog koji se nalazi u pozadini svojevrstne harmonije koje je istraživanje ustanovilo među djecom u odnosu na pandemijski period. Ovo istraživanje ima neka ograničenja. Naime, podatci dobiveni u istraživanju ograničeni su na instrumente COVID-19 upitnik, Skalu stresa roditelja; Skalu depresije, anksioznosti i stresa i Upitnik snaga i problema. Osim toga, rezultati koji govore o problematičnim ponašanjima djece prikupljeni su procjenama roditelja, iako je ta metoda uobičajena, u budućnost bi trebalo provesti slično istraživanje u kojemu bi se podatci prikupljali direktno od djece. Osim toga, podatci istraživanja ograničeni su samo na roditelje iz Istambula u Turskoj i djecu u dobi od četiri do šest godina, pa bi tako buduća istraživanja trebalo provesti na većem uzorku. Instrumenti korišteni u istraživanju obuhvaćaju samoprocjene roditelja i njihovu evaluaciju vlastite djece, što se ne može smatrati stručnom psihološkom dijagnozom. Budući da nemamo predpandemijske podatke o stresu roditeljstva i njihovim razinama depresije, anksioznosti i stresa, niti podatke o problemima u ponašanju djece, rezultati se ne mogu direktno povezati s pandemijom, već evaluirati samo prema rezultatima ankete o COVID-19 pandemiji. Rezultati ovoga istraživanja naglašavaju važnost smanjivanja razina depresije, anksioznosti i stresa roditelja te pružanja podrške roditeljima u razdoblju pandemije. Pedagozi, psiholozi savjetnici, odgajatelji i stručnjaci u području javnoga zdravlja mogu provesti istraživanje o toj temi u budućnosti. Konačno, ovo istraživanje provedeno je s roditeljima prosječne djece, pa bi se tako u budućnosti moglo provesti ispitivanje razina depresije, anksioznosti i stresa roditelja djece s posebnim potrebama u razdoblju pandemije i njezina djelovanja na djecu s posebnim potrebama.