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**An investigation of parental concerns about the educational and psychosocial development of their children aged 2-6 years during the COVID-19 pandemic**

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## RESEARCH ARTICLE

## AN INVESTIGATION OF PARENTAL CONCERNS ABOUT THE EDUCATIONAL AND PSYCHOSOCIAL DEVELOPMENT OF THEIR CHILDREN AGED 2-6 YEARS DURING THE COVID-19 PANDEMIC

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## Abstract

**Background:** Fear of COVID-19 is anticipated to have the potential to adversely affect parents' mental health, which may hinder their ability to make decisions and provide adequate emotional support to their children. We aimed to identify the concerns of Turkish parents about themselves and their 2-6-year-old children's educational and psychosocial development during the COVID-19 pandemic.

**Material and Method:** We included a total of 204 parents in this cross-sectional study. As data collection tools, we developed and used a "Demographic Information Form" and the "Parental Concern Questionnaire-Pandemic." Frequencies, percentages, and Chi-square test were utilized to analyze the data gathered online.

**Results:** The findings revealed that most parents were concerned about contracting COVID-19, as well as their family members, and the uncertainty of the future. Besides, we concluded that parental concerns about their children's education and anxiety differed by the child's age. In addition, we determined that parents' concerns about their children's internet use, gaming, reduced appetite, reluctance to attend school, and future during the pandemic varied by the child's gender. Moreover, such concerns about internet use during the pandemic varied by the mother's age. Finally, we found that parents' concerns about losing their temper easily with their children during the pandemic differed by the father's age.

**Conclusions:** During the pandemic, parents had great concerns about not being able to spare enough time for themselves, the unknown future, being away from their social environments, testing positive for COVID-19, failing to find a solution to any unexpected situation, and experiencing uncontrollable events.

**Keywords:** COVID-19, pandemic, early childhood, family, Turkish sample.

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## INTRODUCTION

Following its emergence and unprecedented spread throughout China, the novel Coronavirus disease (COVID-19) started to spread worldwide in December 2019 and the first months of 2020. The disease has affected many domains of life due to restrictions and isolation<sup>1</sup> and posed a challenge to resilience as an internationally alarming public health issue.<sup>2</sup> This situation has also led to the dominance of social anxiety and mental stress among people, triggering a wide variety of psychological problems such as panic disorder, anxiety, and depression.<sup>1,3</sup> A China-based study to identify adverse psychological effects of COVID-19 revealed that more than half of the participants rated its psychological impacts as moderate to severe, and about one-third reported moderate to severe anxiety.<sup>4</sup> A pandemic that affects many millions with deadly consequences can then reasonably consolidate fear and anxiety.<sup>5</sup>

The term concern is defined as being engaged in a mental problem-solving effort about future events that bear uncertain outcomes and are believed to have undesirable consequences.<sup>5-7</sup> It is deemed to be an innate response to stress; however, it can turn into a disorder when it becomes so severe that it interferes with one's life.<sup>8</sup> Concern is usually accepted as a primitive feeling and arises in the face of a real or perceived threat. Accordingly, fear of COVID-19 is anticipated to have the potential to adversely affect parents' mental health, which may hinder their ability to make decisions and provide adequate emotional support to their children.<sup>8-10</sup> It is well-known that the pandemic has caused high levels of depression, worry, stress, anxiety, and fear among parents.<sup>11, 12, 2, 13</sup> Psychological factors, especially loneliness, isolation, anger, and stress, directly affect individuals and families during quarantine.<sup>14</sup> It has recently been reported that the pandemic has caused conditions requiring psychological interventions in China.<sup>15</sup> In European countries, it has led parents to experience increased stress and anxiety at home,<sup>16</sup> have sleep problems<sup>13</sup> and eating disorders,<sup>17</sup> and have concerns about their children's academic, social, and emotional regression.<sup>18</sup> Turkey has inevitably been among the countries affected by COVID-19 and now has one of the highest virus-leading mortality rates in the world.<sup>19</sup> The Turkish government has implemented fast, effective measures against the pandemic. While

permanent measures have been implemented in public places, workplaces have shifted to remote work or allowed flexible working hours for their employees.<sup>20</sup> The ongoing pandemic has led to an increase in the duration of restrictions with partial measures, the continuation of curfews, and full shutdown intervals in the country.<sup>21-24</sup> It is now clear that the implementation of quarantine measures to combat the pandemic affects many aspects of life.<sup>1</sup> In a study on parents in China and Turkey, cultural differences between parents have not differed, and changes to daily routines and home quarantines have seemed to pose challenges for parents during this extraordinary period.<sup>25</sup> The impacts of the pandemic have also been addressed in official sources at three levels: psychological effects, social relations, and uncertainty and vital fragility.<sup>20</sup> In addition, studies in the early stages of the pandemic have shown that COVID-19 has brought substantial effects on the Turkish people, such as worries, anxiety, fear, and depression.<sup>26, 27, 19, 28</sup>

Stress and concerns of parents may influence their children's anxiety levels.<sup>29</sup> Similarly, parents' emotional skills are considered critical for their children to regulate their emotions in stressful times.<sup>30</sup> Therefore, families must first regulate their own concerns to support children psychologically.<sup>31</sup> In particular, it has been revealed that the enrichment of the home environment during the pandemic has projections on the socio-emotional development of children in early childhood.<sup>32, 33</sup> It should be noted that children and their parents are affected by mental health problems during the pandemic, which may lead to the emergence of disorders over time.<sup>34</sup> It is thought that understanding the reasons for parental concerns about themselves and their children's educational and psychosocial development during the pandemic would enable families to eliminate the sources of and develop strategies to cope with such concerns. Ultimately, the present study aimed to reveal the situations that cause concerns among parents about themselves and the educational and psychosocial development of their children between 2-6 years of age during the pandemic.

Ultimately, the present research sought answers to the following questions:

- What level of concern do parents have about themselves and their children during the pandemic?

- Do parents' concerns about themselves during the pandemic differ by their age?
- Do parents' concerns about their child during the pandemic differ by the child's age?
- Do parents' concerns about their children during the pandemic differ by the child's gender?

## METHODOLOGY

### Research Design

We designed the research as a cross-sectional study to determine parents' concerns about themselves and the educational and psychosocial development of their children aged 2-6 years during the pandemic. The variables described in the cross-sectional design are measured once.<sup>34-36</sup>

### Sample

The study was carried out with a total of 204 parents with children aged 2-6 years without special needs. Since it was impossible to collect face-to-face data during the pandemic, we generated an online survey form on Google Forms and shared it on social media. We used no advertisement to disseminate the form; only voluntary parents filled it out. In this context, we utilized the convenience sampling to reach the sample. In this sampling method, the sample emerges independently of the researcher.<sup>37</sup>

### Data Collection Tools

**Demographic Information Form:** It consists of six questions about the demographic characteristics of parents and children. The form inquires about the child's and siblings' age and gender and parents' age and educational attainment.

**Parental Concern Questionnaire-Pandemic:** The questionnaire consists of 30 questions, 8 for parents' concerns about themselves and 22 for parents' concerns about their children. Prior to finalizing the questions, we reviewed the relevant literature and generated an item pool. A child development specialist reviewed the draft questions. The questions are rated on a 5-point Likert-type scale (1 = not at all concerned, 2 = not concerned, 3 = neutral, 4 = concerned, 5 = very concerned). Then, we carried out a pilot study, and two mothers checked the intelligibility of the questions. Finally, we computed Cronbach's alpha coefficient for the questionnaire to be 0.92, indicating an excellent internal

consistency.<sup>38</sup>

### Data Collection Procedure

First, we obtained the relevant permission from the Ministry of Health, COVID-19 Research Platform (2020-07-09T15\_22\_02) and the ethical approval from the Non-Interventional Ethics Committee of Hacettepe University (No. 16969557-1200, dated 08.25.2020). Then, we posted a call for research participation in parent groups on social media for parents with children aged 2-6 years with typical development. We sent the questionnaire form online to those who volunteered to participate in the study. If participating parents had more than one child, they filled out the form for the one aged 2-6 years. The questionnaire booklet starts with an informatory sheet (the purpose of the study, the number of questions, and the data collection and processing procedure) and an informed consent form. Participants were explained that they could leave the study without providing any reasons if they felt disturbed at any stage of the research. We maintained the data collection process until reaching the target number of participants. The data were collected between November 11-25 and kept in a digital medium.

### Data Analysis

Participants rated the questions on a 5-point Likert-type scale (1 = not at all concerned, 2 = not concerned, 3 = neutral, 4 = concerned, 5 = very concerned). Yet, we recoded the items on a 3-point Likert-type scale to capitalize on the convenience of the analyses (1 = not concerned, 3 = neutral, 4 = concerned). We used a statistical program for the statistical analyses of the data. The categorical variables were evaluated using the Chi-square ( $\chi^2$ ) test of independence. Since the number of cells less than 5 exceeded 20% of the total cells, we ran Fisher's exact test. In all statistical analyses,  $p < .05$  was considered to be significant.

### Limitations

We collected the data online, and participants were limited to those with a child aged between 2-6 years showing typical development. Another limitation was that we included only those living with their children in the same house. Finally, parents needed to fill out the data collection tools for only one of their children.

## RESULTS

In Table 1, 49% of children were girls, and 51% were boys. While 46.6% were aged 2-3 years, 53.4% were in the age group of 4-6 years. Among parents who participated in the study, 61.3% had one child, 35.3% had two children, 2.5% had three children, and 1% had four or more children. Twenty-six percent of mothers were aged 29 years and below, 67.6% were between 30-39 years, and 6.4% were aged 40-49 years. When it comes to fathers, 7.4% were 29 years and below, 75.5% were aged 30-39 years, and 17.2% were between 40-49 years. The majority of mothers had high school education (74.5%), while 2.9% were literate, 16.2% had primary school education, and 6.4% had undergraduate education. Similarly, more than half of fathers had high school education, while 6.9% were literate, 27% had primary school education, and 6.9% had undergraduate education. At least one family member of 35.30% of parents tested positive for COVID-19, and 15.70% of parents stated that individuals other than family members stayed in their homes during the social isolation period.

This section presents the findings of how parents' concerns about themselves during the pandemic differed by their age and how their concerns about their children varied by the child's gender and age and parents' age. The tables below present relevant findings of the response "I'm concerned."

Figure 1 shows the mean scores of parents' and their children's levels of concern during the pandemic. First, parents rated their and their children's levels of concern from 1 to 10 for a date before March 10, 2020 when they first heard the name of the virus. Then, they did the same for a date between November 10-25, 2020. As a result, we found children's mean level of concern to be 3.99 before March 10, 2020 and 4.97 between November 11-25, 2020. For parents, these levels became 7.93 before March 10, 2020 and 8.23 between November 11-25, 2020.

Table 2 shows the results of the analysis to determine how parents' concerns about themselves during the pandemic differ by their age.

Table 2 presents the Chi-square test results on whether there was a relationship between parents' concerns about themselves during the pandemic and their age. Accordingly, we could not find any statistical difference between mothers' concerns about

themselves and their age. Yet, it was not the case for fathers; those younger than 29 years were more concerned about failing to handle chores ( $\chi^2=10.74$ ;  $p<.05$ ). Besides, we determined that the majority of parents had high levels of concern about not being able to spare enough time for themselves, the uncertainty of the future, being away from their social environments, testing positive for COVID-19 (as well as COVID-19-positivity of their family members), failing to find a solution to an unexpected situation, and experiencing uncontrollable events.

Table 3 demonstrates the Chi-square test results on whether there was a relationship between the parents' concerns about their child during the pandemic and the child's age. Accordingly, parents' concerns about their children's inability to receive sufficient education ( $\chi^2=6.182$ ;  $p<.05$ ), increased anxiety ( $\chi^2=8.966$ ;  $p<.05$ ), and starting school ( $\chi^2=9.745$ ;  $p<.05$ ) differed significantly by the child's age. Moreover, we found parents with a child aged 4-6 years had more of these concerns compared to those with a child aged 2-3 years.

Table 4 demonstrates the Chi-square test results on whether there was a relationship between parents' concerns about their children during the pandemic and the child's gender. Accordingly, parents' concerns about their children's excessive internet use ( $\chi^2=6.537$ ;  $p<.05$ ), excessive gaming ( $\chi^2=11.48$ ;  $p<.05$ ), consumption of more junk foods ( $\chi^2=9.334$ ;  $p<.05$ ), future ( $\chi^2=7.593$ ;  $p<.05$ ), and reluctance to go to school after the pandemic ( $\chi^2=7.050$ ;  $p<.05$ ) differed significantly by the child's gender. In addition, we discovered parents with a boy had more of these concerns than those with a girl.

Considering the Chi-square test results on whether there was a relationship between parents' concerns about their children during the pandemic and the mother's age, we found that their concern about their children's excessive internet use differed significantly by the mother's age ( $\chi^2=9.680$ ,  $p<.05$ ). We concluded that mothers aged 30-39 years (48.50%) had more of this concern than those aged 29 years and younger (21.10%) and 40-49 years (3.40%). When it comes to the relationship between parents' concerns about their children during the pandemic and the father's age, we determined a significant difference between parents' concern about losing their temper easily with their children and the father's age ( $\chi^2=12.20$ ;  $p<.05$ ). Accordingly, fathers

aged 30-39 years were more concerned about losing their temper easily with their children (63.20%) than those aged 29 years and younger (4.90%) and 40-49 years (12.70%). However, there was no relationship between other parental concerns about their children and their age.

## DISCUSSION

In this study, we aimed to identify the situations causing concerns in Turkish parents with 2-6-year-old children about themselves and their children's educational and psychosocial development during the pandemic and determine how these concerns differ by the child's gender and age and parents' age. Parents were asked about their concerns about themselves and their children for two different time periods. We found that parents' and their children's levels of concern increased from the date the disease was first heard to the data collection period. It appeared that the number of cases also increased between November 11-25, 2020.<sup>39</sup> Therefore, it seems the increasing impact of the pandemic in our country may have led to an increase in participants' levels of concern. In addition, many other factors, such as number of children, family elders living in the same household, acquaintances testing positive for the disease, the loss of relatives, restrictions, shutdowns, and media, may have contributed to such an increase. Considering parents' concerns about themselves during the pandemic, we found that the majority were concerned about the inability to spare enough time for themselves, the uncertainty of the future, being away from their social environments, COVID-19 positivity of themselves and their family members, inability to find a solution to an unexpected situation, and experiencing uncontrollable events. The concern about failing to handle chores differed significantly in fathers aged 29 years and younger. We think that such a difference may be because relatively young fathers used to engage in chores more even before the pandemic.

The results revealed that parents with a child aged 4-6 years were concerned more about their children's education than those with a child aged 2-3 years (Table 3). Moreover, those with a boy were concerned more about their children's reluctance to go to school after the pandemic than parents with a girl. The

pandemic has driven the countries into severe problems in education. Although various tools have been adapted for distance education, the learning gap has peaked in this period due to accessibility problems, network problems, or lack of relevant devices. Consequently, parents have had to undertake the burden of pedagogical routines used to be implemented by preschool institutions. Then, these changes have likely affected parenting skills and attitudes and parent-child relationships.<sup>40</sup> The fact that children aged 4-6 years would attend primary education in the following year may have caused parents with a child in this age group to have more concerns than others. Moreover, we think that school readiness is critical for preschool kids, which may have elevated the concerns of the parents with a child in this age group.<sup>41</sup> In addition, since formal education starts in the 69<sup>th</sup> month for children in Turkey<sup>42</sup>, parents with a child aged 4-6 years may have thought that their children would have difficulties at school if the pandemic did not end, which can be considered to be another factor contributing these parents' concerns about their children. The difference in the levels of concern between parents is supported by some previous findings showing that parents were concerned about the uncertainty about the education system due to the pandemic.<sup>42-44</sup>

Similar to concerns about education, we found that parents with a child between 4-6 years had higher concerns about an increase in their children's anxiety during the pandemic. The relevant literature also suggests that there has been an elevation in children's anxiety during the pandemic.<sup>44</sup> It was previously reported that 3-6-year-old children in quarantine were more anxious, more attached to their parents, and more worried about losing a family member.<sup>45</sup> The pandemic is likely to lead to losses of family members, and almost everyone has concerns about such potential losses.<sup>46</sup> When it comes to the aforementioned finding of this study, the developmental characteristics of children may have led to such concerns in parents. Considering the cognitive development of children aged 4-6 years, magical thinking, which refers to children's associating previously-experienced natural events with different causes (e.g., a specific behavior or thought causes disease), as well as the formation of schemas belonging to concepts (e.g., pandemic, illness, and death), may have led to high levels of concerns in parents.<sup>46-49</sup> In other words, when



compared to parents with a child aged 4-6 years, those with a child aged 2-3 years may not be aware of the cognitive, psycho-social, and emotional changes their children have experienced or will experience due to the pandemic.

Parents with a boy were more concerned about their children's socialization (excessive internet use, excessive gaming, and future life) than parents with a girl (Table 4). Moreover, the previous research detected a link between parenting stress and the child's anxiety<sup>29</sup>; therefore, we think that the anxiety levels of boys of participating parents may be higher than those of girls. On a gender basis, relevant studies revealed that parents with a boy have more challenging parenting experiences.<sup>50</sup> Hence, such parents may be more concerned about their children than parents with a girl. Besides, it is known that the frequencies of play and activities have decreased and that screen time has increased during the shutdown period.<sup>4,51,52</sup> In terms of gender, the screen time of boys increased during the pandemic, and similarly, it was stated that boys had already more screen time before the pandemic.<sup>53</sup>

The literature hosts studies revealing that families are concerned that their children may gain weight for various reasons (e.g., excessive unhealthy eating and lack of physical activity) during the pandemic.<sup>44,49,54</sup> Before the pandemic, the studies evaluating malnutrition and obesity prevalence in preschool children in Turkey determined that obesity was more prevalent in boys.<sup>55</sup> In this context, the concerns of parents with a boy about junk food consumption may have been influenced by their previous experiences (Table 4).

Davico (2020) discovered a relationship between the COVID-19-related stress levels of children and their parents and that boys experienced less stress than girls.<sup>56</sup> Considering these findings, we anticipated that parents with a girl would be more concerned about their children's future than those with a boy. Yet, we reached a contrary result in our study, which may have been because of parents' increased tendency to be protective toward their children. Moreover, the gender perspectives of parents may have an effect on their concerns about their boys. The cultural burden of gender roles on the male child, such as education and employment, and securing marriage and maintenance of the family, may cause parents to be more concerned about

their male children's future.<sup>57-59</sup>

In the context of the socialization of children, we determined that mothers aged 30-39 years were more concerned about their children's excessive internet use than those in the other age groups. We may attribute this finding to younger mothers' being more engaging in the internet and pandemic-specific content when compared to those in other age groups, which may lead them to normalize their children's excessive internet use. Similarly, the relatively poorer experience of mothers aged 40-49 years with the internet may influence weak concerns about their children's excessive internet use. In other words, we propose that mothers thought to spend more time on the internet or vice versa may have limited concerns about to what extent their children engage in the internet.

While employed parents have switched to telecommuting, they now take care of their child(ren) as well as handle their daily, developmental, and academic responsibilities. Besides, those who most likely have to take on these additional responsibilities are mothers.<sup>52, 60-63</sup> The increase in the responsibilities of fathers causes a change to their routines as well. A study by Russell et al. (2020) showed significant links between parents' childcare burden, mental health, and children's perceptions of stress and child-parent closeness and conflict. Being at home for an indefinite period of time during the pandemic may have unprecedented effects on the mental health of individuals as well as unknown impacts on child-parent relationships. These impacts were emphasized for fathers in that study, and it was stated that such impacts would become intensified for families experiencing mental health symptoms.<sup>64</sup> Consistent with the literature, we determined that fathers aged 30-39 years were more concerned about getting angry with their children than those in the other age groups (Table 5). We speculate that fathers younger than 29 years may tolerate possible conflicts with their children more and that those aged 40-49 years may also be more tolerant thanks to their maturity.

Our study is not free from a few limitations. It is known that parents with more children have an increased childcare burden, which is highlighted in our explanations. However, our findings were blind to some factors affecting children's development and

parental stress (e.g., children's special needs and chronic or acute diseases (if any), the age of the sibling(s)). Therefore, future research may consider these variables in examining parents' concerns about their children's educational and psychosocial development.

## CONCLUSION

In this study, we concluded that parents faced increasing concerns about themselves and their children. Specifically, parents had high levels of concern about the inability to spare enough time for themselves, the uncertainty of the future, being away from their social environments, COVID-19-positivity for themselves and their family members, failing to find a solution to an unexpected situation, and experiencing uncontrollable events. We also determined parents became more concerned about their children's education and anxiety as they grew up. There were differences in parents' concerns by the child's gender; parents with a boy were more concerned about their children's reluctance to go to school after the pandemic. In addition, we discovered the concerns of parents with a boy about their children's excessive internet use and gaming, junk food consumption, and future differed statistically from such concerns of parents with a girl. The mothers aged 30-39 years were more concerned about their children's excessive internet use than those in the other age groups. The pandemic has inevitably affected each family member. Considering fathers' concerns in this period, we determined that fathers aged 30-39 years were more concerned about getting angry with their children easily than those in the other age groups. Based on the findings above, we offer the following recommendations:

- Governments may attempt to identify the psychosocial, as well as biological, impacts of the pandemic on individuals.
- Governments may attempt to initiate mid- and post-pandemic psychosocial support programs to reduce the impacts of the pandemic on parents and children with the cooperation of different institutions (e.g., ministries of health, education, and family).
- The Ministry of National Education may provide school adaptation programs to eliminate parents' concerns about their children's education, secure student retention, and develop a

positive school climate.

- Further research may employ in-depth interviews with parents to examine parents' and children's concerns and stress levels during and after the pandemic.

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## REFERENCES

1. Qiu J, Shen B, Zhao M, Wang Z, Xie B, Xu Y. A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: implications and policy recommendations. *Gen Psychiatr* 2020; 33(2):e100213.
2. Wang C, Pan R, Wan X, Tan Y, Xu L, Ho CS et al. Immediate Psychological Responses and Associated Factors during the Initial Stage of the 2019 Coronavirus Disease (COVID-19) Epidemic among the General Population in China. *Int J Environ Res Public Health* 2020; 17(5).
3. Bao Y, Sun Y, Meng S, Shi J, Lu L. 2019-nCoV epidemic: address mental health care to empower society. *The Lancet* 2020; 395(10224):e37-e38.
4. Wang G, Zhang Y, Zhao J, Zhang J, Jiang F. Mitigate the effects of home confinement on children during the COVID-19 outbreak. *The Lancet* 2020; 395(10228):945-7.
5. Akoğlu G, Karaaslan BT. COVID-19 ve izolasyon sürecinin çocuklar üzerindeki olası psikososyal etkileri. *İzmir Katip Çelebi Üniversitesi Sağlık Bilimleri Fakültesi Dergisi* 2020; 5(2):99-103.
6. Borkovec TD, Robinson E, Pruzinsky T, DePree JA. Preliminary exploration of worry: Some characteristics and processes. *Behaviour Research and Therapy* 1983; 21(1):9-16.
7. MacLeod AK, Williams JM, Bekerian DA. Worry is reasonable: the role of explanations in pessimism about future personal events. *J Abnorm Psychol* 1991; 100(4):478-86.

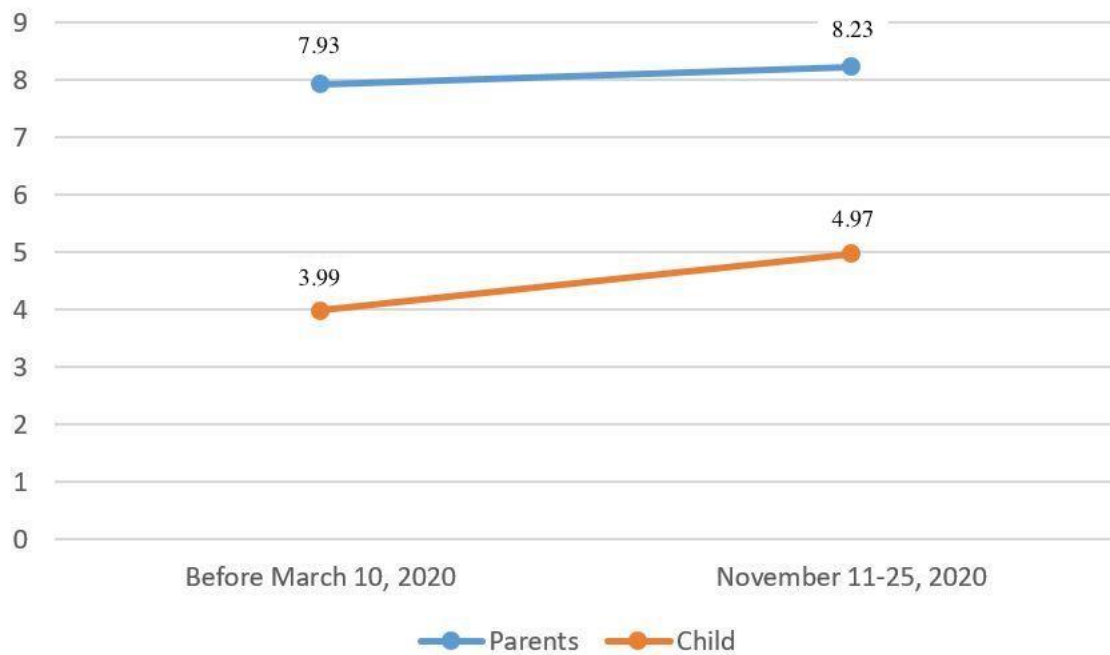


8. Kauffman JM, Landrum TJ. Duygusal ve Davranışsal Bozukluğu Olan Çocukların ve Gençlerin Özellikleri. (Çev. Ed. Kaner, S.). Nobel Yayıncılık; 2015.
9. Landolt MA, Ystrom E, Sennhauser FH, Gnehm HE, Vollrath ME. The mutual prospective influence of child and parental post-traumatic stress symptoms in pediatric patients. *J Child Psychol Psychiatry* 2012; 53(7):767–74.
10. Carmassi C, Corsi M, Bertelloni CA, Pedrinelli V, Massimetti G, Peroni D et al. Post-traumatic stress spectrum symptoms in parents of children affected by epilepsy: Gender differences. *Seizure* 2020; 80:169–74.
11. American Psychological Association (APA). Stress in America 2020: Stress in the time of COVID-19; 2020 [cited 2021 Apr 15]. Available from: URL: <https://www.apa.org/news/press/releases/stress/2020/report>.
12. Patrick SW, Henkhaus LE, Zickafoose JS, Lovell K, Halvorson A, Loch S et al. Well-being of Parents and Children During the COVID-19 Pandemic: A National Survey. *Pediatrics* 2020; 146(4).
13. Zreik G, Asraf K, Haimov I, Tikotzky L. Maternal perceptions of sleep problems among children and mothers during the coronavirus disease 2019 (COVID-19) pandemic in Israel. *J Sleep Res* 2021; 30(1):e13201.
14. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N et al. The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet* 2020; 395(10227):912–20.
15. Duan L, Zhu G. Psychological interventions for people affected by the COVID-19 epidemic. *The Lancet Psychiatry* 2020; 7(4):300–2.
16. Thorell LB, Skoglund C, La Peña AG de, Baeyens D, Fuernberger ABM, Groom MJ et al. Parental experiences of home-schooling during the COVID-19 pandemic: differences between seven European countries and between children with and without mental health conditions. *Eur Child Adolesc Psychiatry* 2022; 31(4):649–61.
17. Flaudias V, Iceta S, Zerhouni O, Rodgers RF, Billieux J, Llorca P-M et al. COVID-19 pandemic lockdown and problematic eating behaviors in a student population. *J Behav Addict* 2020; 9(3):826–35.
18. Mann MJ, Smith ML, Kristjansson AL, Daily S, McDowell S, Traywick P. Our Children Are Not “Behind” Due to the COVID-19 Pandemic, but Our Institutional Response Might Be. *J Sch Health* 2021; 91(6):447–50.
19. Ustun G. Determining depression and related factors in a society affected by COVID-19 pandemic. *Int J Soc Psychiatry* 2021; 67(1):54–63.
20. Turkish Academy of Sciences. Covid-19 Küresel Salgın Değerlendirme Raporu. Ankara; 2020.
21. Aykut S, Aykut SS. Kovid-19 Pandemisi ve Travma Sonrası Stres Bozukluğu Temelinde Sosyal Hizmetin Önemi 1; 1.
22. Demirbilek Y, Pehlivan Türk G, Özgüler ZÖ, Alp Meşe E. COVID-19 outbreak control, example of ministry of health of Turkey. *Turk J Med Sci* 2020; 50(SI-1):489–94.
23. Hotar N, Omay Re, Bayrak S, Kuruüzüm Z, Ünal B. Pandemi-nin Toplumsal Yansımaları. *İzmir İktisat Dergisi* 2020; 35(2):211–20.
24. Kiliç R, Ataman Hatipoğlu Ç, Güneş C. Quarantine and its legal dimension. *Turk J Med Sci* 2020; 50(SI-1):544–8.
25. Toran M, Sak R, Xu Y, Şahin-Sak İT, Yu Y. Parents and children during the COVID-19 quarantine process: Experiences from Turkey and China. *Journal of Early Childhood Research* 2021; 19(1):21–39.
26. Bostan S, Erdem R, Öztürk YE, Kılıç T, Yılmaz A. The Effect of COVID-19 Pandemic on the Turkish Society. *Electron J Gen Med* 2020; 17(6).
27. Özdin S, Bayrak Özdin Ş. Levels and predictors of anxiety, depression and health anxiety during COVID-19 pandemic in Turkish society: The importance of gender. *Int J Soc Psychiatry* 2020; 66(5):504–11.
28. Özmen S, Özkan O, Özer Ö, Yanardağ MZ. Investigation of COVID-19 Fear, Well-Being and Life Satisfaction in Turkish Society. *Soc Work Public Health* 2021; 36(2):164–77.
29. Lee SJ, Ward KP, Chang OD, Downing KM. Parenting activities and the transition to home-based education during the COVID-19 pandemic. *Child Youth Serv Rev* 2021; 122:105585.

30. Shorer M, Leibovich L. Young children's emotional stress reactions during the COVID-19 outbreak and their associations with parental emotion regulation and parental playfulness. *Early Child Development and Care* 2022; 192(6):861–71.
31. Saxena R, Saxena SK. Preparing Children for Pandemics. In: Saxena SK, editor. *Coronavirus Disease 2019 (COVID-19)*. Singapore: Springer Singapore; 2020. p. 187–98 (Medical Virology: From Pathogenesis to Disease Control).
32. Moroni G, Nicoletti C, Tominey E. Child Socio-Emotional Skills: The Role of Parental Inputs. *SSRN Journal* 2019.
33. Moron G, Nicoletti C, Tominey E. Children's socio-emotional skills and the home environment during the COVID-19 crisis; 2020. Available from: URL: <https://cepr.org/voxeu/columns/childrens-socio-emotional-skills-and-home-environment-during-covid-19-crisis>.
34. Ravens-Sieberer U, Kaman A, Erhart M, Devine J, Schlack R, Otto C. Impact of the COVID-19 pandemic on quality of life and mental health in children and adolescents in Germany. *Eur Child Adolesc Psychiatry* 2022; 31(6):879–89.
35. Levin KA. Study design III: Cross-sectional studies. *Evid Based Dent* 2006; 7(1):24–5.
36. Lodico MG, Spaulding DT, Voegtke KH. *Methods in educational research: From theory to practice*. John Wiley & Sons; 2010.
37. Etikan I, Bala K. *Sampling and Sampling Methods*. BBIJ 2017; 5(6):215–7.
38. Kilic S. Cronbach's alpha reliability coefficient. *JMOOD* 2016; 6(1):47.
39. Republic of Turkey Ministry of Health. General Coronavirus Chart; 2020. Available from: URL: 1. <https://covid19.saglik.gov.tr/TR-66935/genel-koronavirus-tablosu.html>.
40. Cluver L, Lachman JM, Sherr L, Wessels I, Krug E, Rakotomalala S et al. Parenting in a time of COVID-19. *The Lancet* 2020; 395(10231):e64.
41. Gaynor AK. Development toward School Readiness: A Holistic Model. *Journal of Education* 2015; 195(3):27–40.
42. Milli Eğitim Bakanlığı. Okul Öncesi Eğitim ve İlköğretim Kurumları Yönetmeliğinde Değişiklik Yapılmasına Dair Yönetmelik (2019, 10 Temmuz). Available from: URL: <https://www.resmigazete.gov.tr/eskiler/2019/07/20190710-6.htm>.
43. Bokayev B, Torebekova Z, Davletbayeva Z, Zhakypova F. Distance learning in Kazakhstan: estimating parents' satisfaction of educational quality during the coronavirus. *Technology, Pedagogy and Education* 2021; 30(1):27–39.
44. Kurt Demirbaş N, Sevgili Koçak S. 2-6 yaş arasında çocuğu olan ebeveynlerin bakış açısıyla covid-19 salgın sürecinin değerlendirilmesi. *Avrasya Sosyal ve Ekonomi Araştırmaları Dergisi* 2020; 7(6):328–49.
45. Jiao WY, Wang LN, Liu J, Fang SF, Jiao FY, Pettoello-Mantovani M et al. Behavioral and Emotional Disorders in Children during the COVID-19 Epidemic. *J Pediatr* 2020; 221:264–266.e1.
46. Weingarten K, Worthen M. The Solace of an Uncertain Future: Acute Illness, the Self, and Self-Care. *Fam Process* 2018; 57(2):572–86.
47. Dalton L, Rapa E, Stein A. Protecting the psychological health of children through effective communication about COVID-19. *The Lancet Child & Adolescent Health* 2020; 4(5):346–7.
48. Keinan G. Effects of stress and tolerance of ambiguity on magical thinking. *Journal of Personality and Social Psychology* 1994; 67(1):48–55.
49. Piaget J. *The Child's Conception of the World*. London: Routledge & Kegan Paul; 1929.
50. Bor W, Sanders MR. Correlates of self-reported coercive parenting of preschool-aged children at high risk for the development of conduct problems. *Aust N Z J Psychiatry* 2004; 38(9):738–45.
51. Guan W-J, Ni Z-Y, Hu Y, Liang W-H, Ou C-Q, He J-X et al. Clinical Characteristics of Coronavirus Disease 2019 in China. *N Engl J Med* 2020; 382(18):1708–20.
52. Xiang M, Zhang Z, Kuwahara K. Impact of COVID-19 pandemic on children and adolescents' lifestyle behavior larger than expected. *Prog Cardiovasc Dis* 2020; 63(4):531–2.

53. Ozturk Eyimaya A, Yalçın Irmak A. Relationship Between Parenting Practices and Children's Screen Time During the COVID-19 Pandemic in Turkey. *J Pediatr Nurs* 2021; 56:24–9.
54. Aguilar-Farias N, Toledo-Vargas M, Miranda-Marquez S, Cortinez-O'Ryan A, Cristi-Montero C, Rodriguez-Rodriguez F et al. Sociodemographic Predictors of Changes in Physical Activity, Screen Time, and Sleep among Toddlers and Preschoolers in Chile during the COVID-19 Pandemic. *Int J Environ Res Public Health* 2020; 18(1).
55. Önal S, Özdemir A, Meşe C, Koca B. Okulöncesi dönem çocuklarda malnütrisyon ve obezite prevalansının değerlendirilmesi: Ankara örneği. *Ankara Üniversitesi Dil ve Tarih-Coğrafya Fakültesi Dergisi* 2016; 56(1):210–25.
56. Davico C, Ghiggia A, Marcotulli D, Ricci F, Amianto F, Vitiello B. Psychological Impact of the COVID-19 Pandemic on Adults and Their Children in Italy. *SSRN Journal* 2020; 2(3):177.
57. Vatandaş C. Toplumsal Cinsiyet ve Cinsiyet Rollerinin Algılanışı. *Sosyoloji Konferansları* 2011; (35):29–56.
58. Kıran E. Toplumsal cinsiyet rolleri bağlamında türkiye'de çocuk gelinler. *Balkan Sosyal Bilimler Dergisi* 2017:1–8.
59. Blackstone A. Gender Roles and Society. In: Miller, J: Lerner, R, Schiamberg L, editors. *Human Ecology: An Encyclopedia of Children, Families, Communities, and Environments*; 2003. p. 335–8.
60. Alon T, Doepke M, Olmstead-Rumsey J, Terlilt M. The impact of COVID-19 on gender equality. National Bureau of economic research.; 2020. Available from: URL: <http://www.nber.org/papers/w26947>.
61. Di Giorgio E, Di Riso D, Mioni G, Cellini N. The interplay between mothers' and children behavioral and psychological factors during COVID-19: an Italian study. *Eur Child Adolesc Psychiatry* 2021; 30(9):1401–12.
62. Orgilés M, Morales A, Delvecchio E, Mazzeschi C, Espada JP. Immediate Psychological Effects of the COVID-19 Quarantine in Youth From Italy and Spain. *Front Psychol* 2020; 11:579038.
63. Viner RM, Russell SJ, Croker H, Packer J, Ward J, Stansfield C et al. School closure and management practices during coronavirus outbreaks including COVID-19: a rapid systematic review. *The Lancet Child & Adolescent Health* 2020; 4(5):397–404.
64. Russell BS, Hutchison M, Tambling R, Tomkunas AJ, Horton AL. Initial Challenges of Caregiving During COVID-19: Caregiver Burden, Mental Health, and the Parent-Child Relationship. *Child Psychiatry Hum Dev* 2020; 51(5):671–82.

## ANNEX

**FIGURE 1.** Parents' and their children's levels of concern.

**TABLE 1.** Demographic characteristics of the sample

Variables		n	%	Variables		n	%
<b>Child's age</b>	2-3 years	95	46.57	<b>Child's gender</b>	Female	100	49.02
	4-6 years	109	53.43		Male	104	50.98
<b>Number of Children</b>	1	125	61.3	<b>The presence of people other than family members at home during the social isolation period</b>	Yes	32	15.70
	2	72	35.3		No	172	84.30
	3	5	2.5				
	4 and above	2	1.0				
<b>Mother's age</b>	29 years and below	53	25.98	<b>Father's age</b>	29 years and below	15	7.35
	30-39 years	138	67.65		30-39 years	154	75.49
	40-49 years	13	6.37		40-49 years	35	17.16
<b>Mother's education</b>	Literate	6	2.94	<b>Father's education</b>	Literate	14	6.86
	Primary school	33	16.18		Primary school	55	26.96
	High school	152	74.51		High school	121	59.31
	University	13	6.37		University	14	6.86
<b>COVID-19 positivity in family members</b>	Yes	72	35.30				
	No	132	64.70				
<b>Total</b>		<b>204</b>	<b>100.0</b>	<b>Total</b>		<b>204</b>	<b>100.0</b>

**TABLE 2.** Comparison of parents' concerns about themselves during the pandemic by their age

	<b>29 years and below</b>		<b>30-39 years</b>		<b>40-49 years</b>		<b>Total</b>		<b>x<sup>2</sup></b>	<b>p</b>
<b>Concerned (Mother's age)</b>	<b>(n)</b>	<b>%</b>	<b>(n)</b>	<b>%</b>	<b>(n)</b>	<b>%</b>	<b>(n)</b>	<b>%</b>		
About not being able to spare enough time for myself	(35)	17.20	(101)	49.50	(8)	3.90	(144)	70.60	3.870	0.398
About the uncertainty of the future.	(46)	22.50	(125)	61.30	(11)	5.40	(182)	89.20	3.012	0.484
About being away from my social environment	(40)	19.60	(107)	52.50	(10)	4.90	(157)	77.00	0.447	0.986
About testing positive for COVID-19	(48)	90.60	(120)	87.00	(11)	84.60	(179)	87.70	7.486	0.228
About COVID-19 positivity of family members	(48)	90.60	(128)	92.80	(12)	92.30	(188)	92.20	2.363	0.613
About failing to handle chores	(25)	47.20	(58)	42.00	(5)	38.50	(88)	43.10	4.456	0.325
About failing to find a solution to an unexpected situation	(47)	88.70	(120)	87.00	(10)	76.90	(177)	86.80	5.741	0.308
About experiencing uncontrollable events	(48)	90.60	(121)	87.70	(11)	84.60	(180)	88.20	1.737	0.779
<b>Concerned (Father's age)</b>										
About not being able to spare enough time for myself	(9)	4.40	(111)	54.40	(24)	11.80	(144)	70.60	1.826	0.398
About the uncertainty of the future.	(15)	7.40	(136)	66.70	(31)	15.20	(182)	89.20	3.813	0.356
About being away from my social environment	(12)	5.90	(117)	57.40	(28)	13.70	(157)	77.00	2.078	0.626
About testing positive for COVID-19	(15)	100	(133)	86.40	(31)	88.60	(179)	87.70	7.407	0.160
About COVID-19-positivity of family members	(15)	100	(141)	91.60	(32)	91.40	(188)	92.2	1.408	1.000
About failing to handle chores	(10)	66.70	(59)	38.30	(19)	54.30	(88)	43.10	10.74	<b>0.023*</b>
About failing to find a solution to an unexpected situation	(15)	8.50	(131)	85.10	(31)	88.60	(177)	86.80	6.166	0.187
About experiencing uncontrollable events	(14)	93.30	(135)	87.70	(31)	88.60	(180)	88.20	1.990	0.706



**TABLE 3.** Comparison of parents' concerns about their children during the pandemic by the child's age

Concerned	2-3 years		4-6 years		Total		$\chi^2$	p
	(n)	%	(n)	%	(n)	%		
About my child's inability to receive sufficient education	(10)	29.40	(6)	42.20	(146)	71.60	182	<b>0.045*</b>
About the disruption in my child's education	(6)	22.50	(7)	32.80	(113)	55.40	440	0.066
About my child's starting school	(6)	22.50	(8)	33.30	(114)	55.90	745	<b>0.008*</b>
About my child's decreased achievement	(9)	28.90	(7)	37.70	(136)	66.70	621	0.060
About my child's reluctance to attend school after the pandemic	(8)	23.50	(9)	33.80	(117)	57.40	775	0.092
About my child's COVID-19 positivity	(34)	41.20	(01)	49.50	(185)	90.70	632	0.282
About my child's inability to socialize sufficiently	(85)	41.70	(0)	44.10	(175)	85.80	951	0.067
About my child's inability to establish friendships with others	(73)	76.80	(9)	63.30	(142)	6.60	365	0.111
About an increase in my child's anxiety	(61)	29.90	(0)	44.10	(151)	75.00	966	<b>0.011*</b>
About my child's changing his/her pre-pandemic habits	(63)	30.90	(8)	38.20	(141)	69.10	732	0.421
About my child's inability to travel freely in the future	(75)	36.80	(4)	41.20	(159)	77.90	109	0.947
About my child's future	(71)	34.80	(3)	35.80	(144)	70.60	949	0.377
About losing my temper easily with my child	(73)	35.80	(2)	45.10	(165)	80.90	817	0.258
About the disruption of communication between me and my child	(48)	23.50	(7)	27.90	(105)	51.50	308	0.857
About the inability to spend more quality time with my child than before	(55)	27.00	(0)	34.30	(125)	61.30	981	0.612
About the inability to support my child when needed	(62)	65.30	(6)	69.70	(138)	67.60	778	0.422
About the inability to set limits for my child	(58)	28.40	(8)	33.30	(126)	61.80	325	0.850
About my child's excessive internet use	(68)	33.30	(1)	39.70	(149)	73.00	264	0.903
About my child's excessive gaming	(53)	26.00	(9)	33.80	(122)	59.80	176	0.193
About my child's reduced appetite	(15)	7.40	(1)	10.30	(36)	17.60	492	0.782
About my child's more consumption of more junk foods	(38)	18.60	(6)	22.50	(84)	41.20	810	0.405

 **$p < 0.05$**

**TABLE 4.** Comparison of parents' concerns about their children during the pandemic by the child's gender

Concerned	Girl		Boy		Total		$\chi^2$	p
	(n)	%	(n)	%	(n)	%		
About my child's inability to receive sufficient education	66)	32.40	(80)	39.20	(146)	71.60	5.796	0.055
About the disruption in my child's education	50)	24.50	(63)	30.90	(113)	55.40	2.316	0.314
About my child's starting school	53)	26.00	(61)	29.90	(114)	55.90	1.229	0.541
About my child's decreased achievement	60)	29.40	(76)	37.30	(136)	66.70	4.036	0.133
About my child's reluctance to attend school after the pandemic	48)	23.50	(69)	33.80	(117)	57.40	7.050	<b>0.029*</b>
About my child's COVID-19 positivity	89)	43.60	(96)	47.10	(185)	90.70	2.883	0.199
About my child's inability to socialize sufficiently	(81)	39.70	(94)	46.10	(175)	85.80	4.129	0.127
About my child's inability to establish friendships with others	(67)	67.0	(75)	72.10	(138)	69.60	1.202	0.553
About my child's increased anxiety	(72)	35.30	(79)	38.70	(151)	74.00	0.419	0.811
About my child's changing his/her pre-pandemic habits	(63)	30.90	(78)	38.20	(141)	69.10	3.541	0.170
About my child's inability to travel freely in the future	(77)	37.70	(82)	40.20	(159)	77.90	1.880	0.391
About my child's future	(79)	38.70	(94)	46.10	(173)	84.80	7.593	<b>0.022*</b>
About losing my temper easily with my child	(75)	36.80	(90)	44.10	(165)	80.90	5.475	0.065
About the disruption of communication between me and my child	(48)	23.50	(57)	27.90	(105)	51.50	3.780	0.151
About the inability to spend more quality time with my child than before	(56)	27.50	(69)	33.80	(125)	61.30	0.981	0.612
About the inability to support my child when needed	(67)	67.0	(71)	68.30	(138)	67.60	1.343	0.540
About the inability to set limits for my child	(54)	26.50	(72)	35.30	(126)	61.80	5.412	0.067
About my child's excessive internet use	(65)	31.90	(84)	41.20	(149)	73.00	6.537	<b>0.038*</b>
About my child's excessive gaming	(48)	23.50	(74)	36.30	(122)	59.80	11.48	<b>0.003*</b>
About my child's reduced appetite	(16)	7.80	(20)	9.80	(36)	17.60	4.918	0.086
About my child's consumption of more junk foods	(39)	19.10	(45)	22.10	(84)	41.20	9.334	<b>0.009*</b>