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Are there any changes in mothers’ attitudes? Analysis of the impact of the COVID-19 quarantine on child-rearing attitudes

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ABSTRACT

The present study aims to examine the impact of the time spent by mothers at home with their children during the quarantine period that was implemented due to the COVID-19 pandemic on the mothers’ child-rearing attitudes, taking into consideration some variables and the experiences of mothers. The study was designed using embedded mixed design, in which qualitative and quantitative research methods were used together. The quantitative research group consisted of 673 mothers and the qualitative research group consisted of 16 mothers. The research data was gathered online using the Lime Survey platform, and the interviews with the mothers were also held online. Demographic information form, the Child Rearing Attitude Scale, and a semi-structured interview form were used as data collection tools. Moderator variable analysis was used for the quantitative research data and descriptive analysis was used for the qualitative research data in support of the quantitative data. The findings revealed that the mothers’ child-rearing attitudes changed depending on the variables concerning the children; however, the quarantine period instituted due to COVID-19 had an impact on the mothers’ child-rearing attitudes depending on the variables of age and number of children. The qualitative findings obtained from the interviews supported the quantitative findings. However, it was revealed that the mothers’ attitudes towards their children underwent changes during the quarantine period under COVID-19.

1. Introduction

Parenting has a definitive role in a child’s development, as well as in their adaptation to their environments (Bornstein et al., 2018). Furthermore, the parent–child relationship is an important predictor of parenting skills, and a positive relationship has a positive impact on parenting skills and supports the child’s development in the long term (Wang et al., 2021). There are many factors that determine the quality of the relationship between parent and child, and the parent–child relationship has important effects on the development of the child. It has been determined that parents’ culture has an impact on their parenting skills and that parents build a relationship with their children according to the norms of culture (Lansford et al., 2018; Smetana, 2017). Cultural differences have a decisive role in the parent–child relationship and an influence on parenting skills (Emmen et al., 2013). Socioeconomic differences have been pointed out as having an effect on parenting skills (Hoff-Ginsberg & Tardif, 1995), and factors such as parents’ income level, area of residence, education level, number of people in the family, and number of children in the family have been put forward as determining factors on the direction of the parent–child relationship (Altafimet al., 2018; Berger & Brooks-Gunn, 2005; Park & Lau, 2016). At the same time, the parent–child relationship is affected by other specific characteristics of the parent. Some of these characteristics are the age, gender, and parenting experience of the parent (Bornstein et al., 2012; Carter & Welch, 1981; Ren & Pope Edwards, 2015; Sak et al., 2015). These factors, which affect the development of the child, also have a determining role in parental attitudes.

Studies on parental attitudes date back to the early years of the 20th century. As of this date it has quickly become a major paradigm for the study of parent–child relationships (Holden & Edwards, 1989). Within the context of the sociological and psychological outcomes, focusing on parental attitudes and children has received great attention. Therefore, many theoretical contexts have been developed to understand the effects of parental attitudes on children (Symonds, 1949). Studies indicate that parental attitudes affect the child’s development and that the parent’s attitude towards the child will have a determining role in the child’s life in the long term (Baumrind, 1967; Darling & Steinberg, 1993; Sears et al., 1957). Baumrind (1980), who has had an important role in
popularizing studies on parental attitudes, has outlined three common parenting styles in her studies: democratic, authoritarian, and permissive. Each of these parenting styles reflects naturally occurring patterns of parental values, practices, and behaviours (Baumrind, 1991). Studies have revealed that parenting styles can help children become easy-going, independent, creative, confident, and responsible (Estefan et al., 2013; Garcia et al., 2018); however, they can also cause them to become submissive, aggressive, indecisive, insecure, antisocial, or depressed and to experience feelings of inadequacy (Daggett et al., 2000; Goodman et al., 1994; Kuppens & Ceulemans, 2019). Furthermore, parental attitudes also affect the child’s problem-solving and coping skills, creativity, social competence, and academic success (Baker et al., 2011; Halle et al., 1997; Kordi & Baharudin, 2010; Newland, 2014). Parental attitudes have an important role in the development of the child, and they can be affected by parents’ psychological well-being, as well as by extraordinary circumstances impacting the ordinary course of life. The new coronavirus strain (COVID-19) that first appeared in December 2019 and has quickly spread around the world has affected countries’ social, political, and economic policies at a macroscale while having a direct impact on families and parents’ attitudes towards their children on a microscale (Mibo, & Thevenon, 2020). Curfews, social distancing, and quarantine practices imposed due to the pandemic have caused people to spend more time at home, and lead to the reconstruction of parent–child relationships in families with children (Toran et al., 2021).

COVID-19 was declared a pandemic by the World Health Organization (WHO) on 12 March 2020 due to its rapid spread and severity. Within the scope of the policy measures to combat the pandemic (WHO, 2020), 191 countries instituted lockdowns in April 2020, which has forced individuals to have a lifestyle that has been considered as the “new normal”. Long-lasting quarantine practices have affected social and political policies. They have also had a defining impact on family relationships, as well as on parent–child relationships (Mibo, & Thevenon, 2020; UN, 2020). Quarantine has brought about new experiences in parent–child relationships and caused changes in disciplinary strategies and the ways in which parental authority is established. Furthermore, parents and children’s anxiety levels during the quarantine were found to have a positive correlation, meaning increased anxiety levels of the child had an impact on the parent’s anxiety levels (Lee et al., 2020). In addition, research conducted by Spinelli et al., (2020) determined that being quarantined has had a negative impact on the wellbeing of parents and children and that behavioural and emotional issues it has caused to children have led to a change in parental attitudes. Studies have also shown that the pressures of social isolation and quarantine have caused parents to become more authoritarian in their attitudes towards their children and that the mental health of parents and children have suffered during this period (Lee et al., 2021). It was reported that parents were having a hard time handling their children while dealing with the social isolation brought about by the pandemic (Ares et al., 2020). This has caused conflicts between the parents, which in turn has decreased the quality of childcare and increased the risk of mistreatment of the child (Wu & Xu, 2020). Furthermore, during the lockdown imposed due to the COVID-19 pandemic, it was found that mothers with high stress levels had poor coping skills and negative attitudes towards their children (Petrocchi et al., 2020). It has also been determined that long-lasting lockdowns have had negative impacts on the parents’ psychological health and that this has led to negative attitudes toward their children (Businato, et al., 2020). In line with these studies, Chung et al. (2020) have found that the long-term requirements to stay home have caused parental stress levels to increase, which has negatively impacted parent–child closeness and brought out more authoritarian parental attitudes.

The home environment, where the practical response to the policies implemented as a result of the COVID-19 pandemic revealed themselves, quickly showed the pandemic’s effect on families with children. The present study is important, as it aims to determine how the parent–child relationship has been impacted by this process, and whether there have been any changes in parental attitudes as a result. Its findings will also be useful in developing future family intervention programs. In the context of Turkey, the present study is significant, as limited research has been done on parent–child relationships and parental attitudes during the time that has elapsed since the pandemic began (Marto & Kescioglu, 2020; Toran et al., 2021; Uzun et al., 2021). This study aims to examine the impact of the time spent by mothers at home with their children during the quarantine period that was implemented due to the COVID-19 pandemic on child-rearing attitudes by taking children’s age, gender, children’s siblings’ situations, number of children, children’s congenital disease status, activities done with children at home and the of mothers’ experiences into consideration.

In the context of this aim, the following questions were sought in this study:

1. What are the mothers’ attitudes towards their children during the COVID-19 pandemic quarantine process?
2. What are the effects of the time mothers spent with their children during COVID quarantine on the relationship between mothers’ child-rearing attitudes and children’s age?
3. What are the effects of the time mothers spent with their children during COVID quarantine on the relationship between mothers’ child-rearing attitudes and children’s gender?
4. What are the effects of the time mothers spent with their children during COVID quarantine on the relationship between mothers’ child-rearing attitudes and children’s siblings’ situations?
5. What are the effects of mothers’ time spent with their children during COVID quarantine on the relationship between mothers’ child-rearing attitudes and number of children?
6. What are the effects of the time mothers spent with their children during COVID quarantine on the relationship between mothers’ child-rearing attitudes and children’s congenital disease status?
7. What are the effects of the time mothers spent with their children during COVID quarantine on the relationship between mothers’ child-rearing attitudes and activities done with children at home?

2. Method

2.1. Research design

This study utilizes embedded mixed design method, in which qualitative and quantitative research methods were used together. Embedded mixed design method uses qualitative/quantitative data to support findings that were obtained via quantitative/qualitative analyses. Embedded mixed design can be applied by the researcher using different data types to examine the main purpose of the research and to improve the applications of quantitative and qualitative methods (Creswell & Plano Clark, 2011). In this study, embedded mixed design method was used for qualitative data to support and make the quantitative data more understandable. In line with this perspective, firstly the quantitative data was collected then analyzed and to make quantitative result understandable, qualitative data was collected and analyzed. The quantitative component of this study examined whether the extra time mothers spent with their children during the quarantine period implemented due to COVID-19 caused any changes in their child-rearing attitudes according to some variables, and these findings were supported by the findings obtained through the interviews.

2.2. Participants

Since this study was carried out in extraordinary situations such as COVID-19, participants were determined by the convenience sampling method in the quantitative part of this study. With the convenience sampling method, 673 mothers whose children are 3–6 years old took part in the quantitative part of this study. In the qualitative part of this
study, the participants were determined by criterion sampling method. Participating in the quantitative part of the study, having children between 3 and 6 years old and agreeing to be volunteer for interviewing were determined as criteria for qualitative part of this study. With these criteria, 16 volunteers from 673 mothers participated in the qualitative part of the study. The demographic distribution of the participants of the study was given in Table 1 and Table 2.

Examining the demographic information belonging to the mothers and their children that took part in the quantitative component of the study reveals that majority 35.1% is 5 years old, 54.2% of the children are boys, 56.9% of the children had siblings. Additionally, it was seen that 46.2% of the majority of the mothers have 2 children. 91.5% of the children do not have any congenital diseases. Furthermore, 96% of the mothers reported having done various activities at home with their children during the quarantine period.

Table 1 demonstrates that the most populous age group of mothers in the study group is 31–35 years old with a rate of 36.7% and as for the education level of the mothers, 48.4% have undergraduate degrees. According to perceived monthly income, majority of the mothers 70.4% stated that they perceive their incomes as middle level. Examining the table reveals the Cronbach’s Alpha values for all four sub-scales to be higher than 0.70. Furthermore, following the test–retest reliability analysis, the correlation coefficient of the four scales was found to be between 0.94 and 0.98 (Democratic sub-scale 0.97; Authoritarian sub-scale 0.96, Preservative sub-scale 0.98 and Excessive Tolerant sub-scale 0.94 respectively) (Kılıç & Aral, 2016). In this study, Cronbach’s Alpha values of four sub-scales were determined between 0.49 and 0.62 according to the collected data. The scale, which has a total of 25 items, includes 6 items in the Democratic sub-scale, 7 items in the Preservative sub-scale, 6 items in the Authoritarian sub-scale, and 6 items in the Excessive Tolerant sub-scale. A high score received in a sub-scale of the scale indicates that the inclination towards that scale is high (Kılıç & Aral, 2016).

Table 2 demonstrates the demographic data belonging to the 16 volunteer mothers who were randomly selected out of the 673 mothers. Among the mothers who were interviewed, their ages differed between 27 and 45, and 1 had primary school education, 7 had high school education, 6 had undergraduate education, and 2 had graduate education. 3 mothers had low income, 9 had middle income and 4 had high income. The number of children the mothers had was between 1 and 5 and the children’s ages differed between 1 and 14. Among the children aged 3–6, 9 were boys and 8 were girls. The number of the days the mothers spent in quarantine with their children was between 36 and 213.

2.3. Data collection tools

This study utilizes a “Demographic Information Form” developed by the researchers to obtain demographic information about mothers, their children and duration of the quarantine which is defined as the time mothers spent at home with their children as part of the COVID-19 pandemic measures, the “Child Rearing Attitude Scale” to determine the mothers’ parental attitudes, and a semi-structured interview form about the experiences of mothers with their children during the quarantine as data collection tools. The Child Rearing Attitude Scale (CRAS) was developed by Kılınç and Aral (2016), and as a result of their exploratory factor analysis, four sub-scales were formed in the scale: Democratic, Preservative, Authoritarian, and Excessive Tolerant. The model of the scale consisting of four sub-scales was tested in the confirmatory factor analysis. Subsequently, the model fit was found to be sufficient, and the model was supported by the data (AGFI = 0.74; NNFI = 0.83; CFI = 0.85; GFI = 0.79; NFI = 0.90; St.RMR = 0.07; 2 χ² (df = 266) = 493.24; (2 χ²/df) = 1.85; RMSEA = 0.07). The reliability study of the scale revealed the Cronbach’s Alpha values for all four sub-scales to be higher than 0.70. Furthermore, following the test–retest reliability analysis, the correlation coefficient of the four scales was found to be between 0.94 and 0.98 (Democratic sub-scale 0.97; Authoritarian sub-scale 0.96, Preservative sub-scale 0.98 and Excessive Tolerant sub-scale 0.94 respectively) (Kılıç & Aral, 2016).

For the qualitative component of the study, a semi-structured interview form was developed by the researchers in order to reveal the mothers’ experiences with their children during the quarantine. The questions were given their final form after consultations with two experts. Several strategies were employed to ensure the validity and reliability of the qualitative data. Firstly, pilot interviews were conducted with three mothers prior to the data collection process and the interview forms were given their final forms based on the responses. In the semi-structured interview form, mothers were asked to share their views about their relationships with their children, changes in parenting attitudes, and the ways in which they managed their own parenting styles during the COVID-19 pandemic. Secondly, more than one interview was held with the participating mothers, the data was studied for a long time, extensive descriptions were made, the mothers were consulted for feedback, the mothers’ statements were used verbatim, and strategies such as checking the interviews, notes and voice recordings were used (Seidman, 2006). As Salmons (2014) points out, video conference interviewing combines real-time audio and video to provide social cues and visual exchange. In this study, the video conference interview technique was preferred due to the COVID-19 pandemic to collect qualitative data. Ethical principles were taken into consideration for the video conference interview process, and consent was obtained from the participants for the protection of personal data.
Table 2
The demographic distribution of the participants who were interviewed.

| Code | Age | Education | Perceived income (monthly) | Number of children | Age of children | Gender of children | Duration of Quarantine |
|------|-----|-----------|----------------------------|--------------------|----------------|-------------------|------------------------|
| Mother 1 | 42 | Secondary School | Low | 3 | 4, 9, 12 | Boy | 63 |
| Mother 2 | 45 | High School | Low | 4 | 3, 7, 9, 14 | Boy | 41 |
| Mother 3 | 40 | High School | Low | 5 | 4, 4, 8, 10, 13 | Girl, Boy | 87 |
| Mother 4 | 38 | High School | Middle | 3 | 5, 9, 12 | Girl | 118 |
| Mother 5 | 36 | High School | High | 2 | 4, 9 | Girl | 36 |
| Mother 6 | 27 | High School | Middle | 1 | 5 | Boy | 48 |
| Mother 7 | 35 | High School | Middle | 2 | 6, 11 | Boy | 179 |
| Mother 8 | 33 | High School | Middle | 2 | 3, 8 | Boy | 57 |
| Mother 9 | 37 | Undergraduate | Middle | 3 | 1, 5, 8 | Boy, Girl | 96 |
| Mother 10 | 30 | Undergraduate | Middle | 3 | 3 | Girl | 132 |
| Mother 11 | 33 | Undergraduate | Middle | 1 | 5* | Girl | 156 |
| Mother 12 | 36 | Undergraduate | Middle | 2 | 6, 10 | Girl | 167 |
| Mother 13 | 30 | Undergraduate | Middle | 1 | 4 | Girl | 213 |
| Mother 14 | 32 | Undergraduate | High | 1 | 4* | Girl | 186 |
| Mother 15 | 34 | Graduate (Ms) | High | 1 | 6 | Boy | 182 |
| Mother 16 | 37 | Graduate (Ms) | High | 2 | 3, 8 | Boy | 110 |

*Children with congenital diseases.

2.4. Ethical issues and data collection process

An ethics committee approval was obtained from the Scientific Research and Publication Ethics Committee of the institution of the first researcher dated 24 August 2020 and numbered 2020.54 regarding whether the study design and the data collection process followed ethical principles. Within the scope of the ethics committee approval, universal ethical principles such as the voluntary participation of the participants in the study, obtaining informed consent from the participants, and confidentiality of the participants’ information were followed. With the awareness that sharing personal experiences may be sensitive for the participants during a health crisis (Fahie, 2014), it was emphasized to the participants that they had the freedom to leave the study at any time, and the right to refuse to answer any questions.

The quantitative data of the study was gathered online in three months between September 2020 and November 2020 by uploading the questions on the demographic information form and the Child Rearing Attitude Scale to the licensed Lime Survey program provided by the first researcher’s institution. The qualitative data of the study was gathered through online interviews with willing mothers randomly selected out of the participants of the quantitative study.

2.5. Data analysis

Before the data gathered from the study was analyzed, a normality analysis was conducted to determine whether the data met the necessary conditions for the analysis is suitable for the research question. The results of the normality analysis were given in Table 3.

Table 3 contains the skewness and kurtosis values obtained from the analysis of the data from the sub-scales of the Child Rearing Attitude Scale. To say that these values show a normal distribution, it is sufficient for the skewness and kurtosis values to be between $-1.5$ and $+1.5$ (Tabachnick & Fidell, 2013) or $-2$ and $+2$ (George & Mallery, 2010). Based on these assumptions, the data collected from the subscales of the scale and used as the data collection tool in the study can be considered to represent normal distribution.

Moderator variable analysis was conducted to determine the effect of the time spent by mothers with their children during the quarantine measures taken due to the COVID-19 pandemic on the relationship between mothers’ child-rearing attitudes and some variables. In the study, quarantine time was accepted as the moderator variable. In order to determine the effect of this variable on the relationship between mothers’ parenting attitudes and some variables, multiple regression analysis was performed using IBM SPSS AMOS software, using the moderator analysis model created by Hayes (2018). Before the analysis, the scatterplot showing the ZPRED and ZRESID distributions for homoscedasticity, which are the assumptions of multiple regression analysis, the correlation between variables and VIF values for linear distribution and multicolinearity, and the critical ratio values of multivariate in the assessment of normality table in AMOS were examined. As a result of these analyses, it was found that the data met the multiple regression assumptions. Standardized Regression Weights (S.R. W.) and significance values ($p < .05$ and $p < .001$) obtained from the analysis were presented in the tables in the results section.

As the qualitative data is used to support the quantitative data, the descriptive analysis method was used. During the data analysis phase, the online interviews with the mothers were transcribed and read one by one. The researchers carried out the readings with the research goal and interview questions in mind and certain codes emerged for each interview. The researchers used in-vivo coding to enable them to generalize based on their subjective coding (Miles & Huberman, 1994; Roberts et al., 2006). Once the coding process reached saturation, the coding phase was finished, and then the determined codes were combined to support certain quantitative results.

3. Results

The findings of the present study, which examined how the time mothers spent at home with their children within the scope of quarantine measures taken due to the COVID-19 pandemic affected the relationship between some variables pertaining to the children and the child-rearing attitudes of mothers, were presented. Descriptive analysis was performed for the mean scores obtained through the mothers from the sub-scales of the Child Rearing Attitude Scale, and moderator variable analysis was conducted to determine how the time mothers spent at home with their children affected the relationship between some variables and the mothers’ child-rearing attitudes.

The findings on the mothers’ child-rearing attitudes presented in Table 4 demonstrate that the mothers’ democratic child-rearing average score is higher than their preservative, authoritarian, and excessive tolerant child-rearing average scores and that the preservative, authoritarian, and excessive tolerant child-rearing average scores are similar. The effect of the time spent at home on the relationship between the children’s ages and the mothers’ child-rearing attitudes was analyzed...
using moderator variable analysis and the findings were presented in Table 5. Furthermore, the experiences of mothers regarding their attitudes towards their children during the quarantine period were presented in support of these findings.

Table 5 demonstrates that the child’s age has a significant negative effect (p = .007; p < .05) on the preservative parental attitude. In light of this result, it can be said that as children get older, the preservative child-rearing attitude of mothers decreases. On the other hand, it was found that the child’s age does not have a significant effect on mothers’ democratic, authoritarian, and excessive tolerant child-rearing attitudes (p > .05). Furthermore, it was determined that time spent in quarantine at home does not have a significant effect on mothers’ child-rearing attitudes on its own (p > .05). In order to determine how the relationship between child’s age and child-rearing attitudes is affected by quarantine time, which is the moderator variable, the “age-time” variable was created as interaction term and a moderator variable analysis was conducted. The “age-time” interaction term was found to have a significant positive effect on the relationship between mothers’ preservative child-rearing attitudes and child’s age (p = .036; p < .05). This interaction term does not have a significant effect on the relationship between mothers’ democratic, authoritarian, and excessive tolerant child-rearing attitudes and child’s age (p > .05).

Graphic 1 demonstrates the effect of the time spent in quarantine on the relationship between child’s age and the mothers’ preservative child-rearing attitudes, revealing that while the time spent at home in quarantine was short, mothers’ preservative child-rearing attitudes were similar regardless of the child’s age. As the time spent at home got longer, there was a decrease in the preservative child-rearing attitudes of mothers who had five and six-year-old children, whereas the preservative child-rearing attitudes of mothers who had three-year-old children increased. As a result, it can be said that the effect of the child’s age on mothers’ preservative child-rearing attitude (S.R.W. = -.103; p < .05) changes over time (S.R.W. = -.080; p < .05).

The age of the child is a determinant in the relationship of mothers with their children; Mothers 2 and 8 stated that they tried to protect their children, especially during the time they spent at home with them, and they tried not to take their children out, especially if they were young.

“…my older child listens to me and remembers the rules when we go out to get some air, but I always try to hold the younger one’s hand, I stop him from touching things, I’m always watching him. When he touches things, I immediately wipe his hands, I constantly warn him not to touch his face or eyes.” (Mother 2; Age 45).

“I haven’t taken my younger child out at all; I haven’t let him touch things brought in from the outside without wiping them down properly. My older child doesn’t touch things brought in from the outside anyway as he knows the rules…” (Mother 8; Age 33)

It can be said that the mothers’ views support the research findings and that the younger the children are, the more preservative mothers get depending on time spent at home. The effect of time spent at home on the relationship between child’s gender and child-rearing attitudes of mothers was analyzed using moderator variable analysis and the findings were presented in Table 6.

Table 6 demonstrates that child’s gender does not have a significant effect on the child-rearing attitudes of mothers (p > .05). Furthermore, the moderator variable analysis conducted to determine whether quarantine time spent at home had an effect on the relationship between the two variables did not reveal a significant effect (p > .05). The interviews with the mothers also revealed that the child’s gender did not play a defining role in the mothers’ attitudes towards their child. Statements by Mother 3 and Mother 9 reveal that their attitudes towards their children were the same and that they did not discriminate between their sons and daughters.

Table 4

The descriptive statistics of the mothers’ child-rearing attitudes.

| Sub-scales      | N  | Mean | SD  |
|-----------------|----|------|-----|
| Democratic      | 673| 3.285| .421|
| Preservative    | 673| 1.910| .411|
| Authoritarian   | 673| 1.607| .344|
| Excessive       | 673| 1.603| .352|

Table 5

Moderator variable analysis of children’s age, child-rearing attitudes, and quarantine time.

| Sub-scales      | Estimate (S.R. W.) | S.E. | C.R. | p     |
|-----------------|--------------------|------|------|-------|
| Democratic      | Age                | -0.070| .016| -1.808| .071  |
| Authoritarian   | Age                | -0.009| .014| -2.222| .026  |
| Excessive       | Age                | 0.047 | .013| 21.23 | .225  |
| Tolerant        | Age                | -0.013| .013| -1.263| .217  |
| Democratic      | Time               | -0.025| .016| 1.150 | .250  |
| Authoritarian   | Time               | -0.031| .013| -8.17 | .414  |
| Excessive       | Time               | -0.053| .014| -1.363| .173  |

Table 6

Moderator variable analysis of children’s gender, child-rearing attitudes, and quarantine time.

| Sub-scales      | Estimate (S.R. W.) | S.E. | C.R. | p     |
|-----------------|--------------------|------|------|-------|
| Democratic      | Gender             | .021 | .016| .405  | .686  |
| Authoritarian   | Gender             | .026 | .013| .670  | .503  |
| Excessive       | Gender             | .014 | .014| .354  | .724  |
| Tolerant        | Time               | -0.020| .016| 0.909 | .511  |
| Authoritarian   | Time               | -0.026| .013| -6.681| .496  |
| Excessive       | Time               | -0.050| .014| -1.299| .194  |
| Democratic      | Gender,Time        | .011 | .016| .285  | .775  |
| Authoritarian   | Gender,Time        | .000 | .013| .009  | .993  |
| Excessive       | Gender,Time        | .031 | .014| .794  | .427  |

* p < 0.05.
their daughters.

“...I don’t discriminate between boys and girls, they are all my children, and how can I make a choice between them? I treat my sons and daughters in the same way at home, however I treat my son, that’s how I treat my daughter...” (Mother 3; Age 40)

“...My children know how I treat them, I expect both of them to follow the rules I set for them, if I’m going to allow something, I’ll allow it for both of them... Especially during COVID-19, I can say that I’ve become more compassionate and preservative towards both my daughter and my son” (Mother 9; Age 37)

The analysis revealed that gender was not a determining factor in mothers’ child-rearing attitudes, and the mothers’ statements supported this finding. The effect of the time spent in quarantine at home on the mothers’ child-rearing attitudes depending on whether the children had siblings was examined and the findings were presented in Table 7.

Table 7 demonstrates that the existence of siblings has a significant positive effect on the authoritarian child-rearing attitudes of mothers (p = .023; p < .05). According to this result, the mothers of children with siblings exhibit more authoritarian child-rearing attitudes. However, the moderator variable analysis did not reveal the time spent at home have a significant moderator variable effect on the relationship between having siblings and child-rearing attitudes (p > .05). It was found that the children with siblings led the mothers to adopt a more authoritarian child-rearing attitude. The effect of the time spent at home during the quarantine process was found to have a significant effect on the relationship between number of children and child-rearing attitudes was examined using a moderator variable analysis and the findings were presented in Table 8.

Examining Table 8 reveals that the number of children has a significant negative effect on democratic child-rearing attitude (p = .036; p < .05), and a significant positive effect on authoritarian child-rearing attitude (p = .013; p < .05). Therefore, it can be said that the more children a mother has, the more authoritarian their child-rearing attitudes are, and the fewer children a mother has, the more democratic their child-rearing attitudes are. However, there is no significant relationship between number of children and preservative or excessive tolerant child-rearing attitudes (p > .05).

The “number of children-time” interaction term was created to determine the effect of staying at home during the quarantine process as a moderator variable on the relationship between the number of children and the mothers’ child-rearing attitudes. The subsequent analysis reveals that this interaction term only had a significant effect on the excessive tolerant child-rearing attitude. Number of children alone did not have a significant effect on mothers’ excessive tolerant child-rearing attitudes

| Table 8 | Moderator variable analysis of the number of children, child-rearing attitudes, and quarantine time. |
|---------|-----------------------------------------------------------------------------------------------------|
| Estimate | S.E. | C.R. | p |
| Democratic <= Number of Children | -0.080 | .016 | -2.092 | .036 |
| Preservative <= Number of Children | -0.041 | .016 | -1.074 | .283 |
| Authoritarian <= Number of Children | .096 | .013 | 2.497 | .013 |
| Excessive <= Number of Children | .058 | .014 | 1.514 | .130 |
| Tolerant Democratic <= Time | .046 | .016 | 1.200 | .230 |
| Preservative <= Time | -0.019 | .016 | -.495 | .621 |
| Authoritarian <= Time | -0.030 | .013 | -.773 | .440 |
| Excessive <= Time | -0.051 | .013 | -1.338 | .181 |
| Tolerant Democratic <= Number of Children, Time | -0.054 | .016 | -1.402 | .161 |
| Preservative <= Number of Children, Time | -0.084 | .016 | -.600 | .548 |
| Authoritarian <= Number of Children, Time | -0.006 | .013 | -.161 | .872 |
| Excessive <= Number of Children, Time | -0.023 | .014 | -2.189 | .029 |

<sup>*</sup> p < 0.05.

(S.R.W. = .058; p > .05), whereas staying at home during the quarantine process was found to have a significant effect on the relationship between number of children and excessive tolerant child-rearing attitudes of the mothers (S.R.W. = .023; p < .05). This interaction revealed itself in the child-rearing attitudes of mothers with one child and mothers with the children. There was an increase in the excessive tolerant child-rearing attitude of mothers with one child as the time spent at home in quarantine increased, whereas the mothers with two children displayed a decrease in excessive-tolerant child-rearing attitudes as the duration of time in quarantine increased (Graphic 2).

The analysis of the mothers’ statements regarding their child-rearing attitudes revealed that the mothers adopted an authoritarian attitude as they had more children, but that as they had to be at home constantly, work from home, and take on multiple roles at home due to the time they spent at home in quarantine, they spent less time with their children, and they were more tolerant of their children’s behaviours at home.

“...I mean my children are very active, they all have different requests all the time, so I set stricter rules, or else it’s very difficult to deal with them all. Sometimes one wants one thing, the other wants another thing, and it tests my patience... At the start of quarantine, I was strict with implementing the rules, but as we spent more time at home, I started to leave them to themselves at times, I realized that I eased up on the rules” (Mother 1; Age 42)
“I have always tried to establish my relationships with my children based on respect, of course, this respect is not unconditional obedience. It’s more like a mutual understanding... Things changed once we were at home 24 h a day and days got long, I let them do things on their own a little, but truth be told, now they do whatever they want...” (Mother 3; Age 40)

It was observed that mothers’ child-rearing attitudes varied depending on the number of children they had and mothers adopted democratic child-rearing attitudes as the number of children decreased, and authoritarian child-rearing attitudes as the number of children increased. This finding is also supported by the interviews with the mothers.

The effect of time spent at home on the relationship between whether the child has a congenital disease and child-rearing attitudes of mothers was analyzed using moderator variable analysis and the findings were presented in Table 9.

Table 9 illustrates that the children’s having a congenital disease has a significant positive effect on the preservative child-rearing attitudes of mothers (p = .031; p < .05). This means that mothers of children with congenital diseases are more preservative towards their children. On the other hand, it was found that whether the child has a congenital disease does not have a significant effect on mother’s democratic, authoritarian, and excessive tolerant child-rearing attitudes (p > .05). The moderator variable analysis conducted on how the time spent in quarantine affected the relationship between the children’s congenital disease status and the child-rearing attitudes of mothers revealed that the duration of time spent at home during the quarantine period did not have a significant moderator variable effect on the relationship between these two variables (p > .05). Furthermore, although the children’s congenital disease status was found to have an effect on the mothers’ preservative child-rearing attitudes, the time spent at home in quarantine did not play a defining role in mothers adopting a preservative child-rearing attitude. The statements made by Mothers 11 and 14 during the interviews supported this finding.

“My child was born with a heart condition; this was devastating for us. I’m so afraid something will happen to my child that I try to protect her from everything, from what she eats to what she wears. The pandemic has not affected us too much, we have kept being careful with our child as before...” (Mother 11; Age 33)

“Of course, I am protective of my child; she has already needed special care, so we do our best to protect her... We haven’t already left the house, and we haven’t left the house since the pandemic began, not much has changed for us...” (Mother 14; Age 32)

The effect of the time spent at home on the relationship between doing activities with the children and child-rearing attitudes of mothers was analyzed using moderator variable analysis and the findings were presented in Table 10.

It was determined that the mothers who did home activities with their children adopted a democratic child-rearing attitude and that an increase in the frequency and the number of activities had a significant positive effect on the mothers’ democratic child-rearing attitudes (p = .000; p < .05). On the other hand, it was found that the home activities mothers did with their children did not have a significant effect on mothers’ preservative, authoritarian, and excessive tolerant child-rearing attitudes (p > .05). The moderator variable analysis conducted on how the time spent in quarantine affected the relationship between activities done at home with the children and the child-rearing attitudes of mothers revealed that the duration of time spent at home during the quarantine period did not have a significant moderator variable effect on the relationship between these two variables (p > .05). In light of this, it can be said that mothers who spent quality time with their children, did home activities with them, and ensured that their children participated in the activities at home adopted a democratic attitude, but that the time spent at home in quarantine did not have an effect on this democratic attitude. The interviews with the mothers support this finding, illustrating the fact that mothers who did activities at home with their children or involved their children in activities at home provided a democratic environment for their children.

“I approach my child in a way that supports and enriches their interests. I believe that my child is an active member of our family. We both organize events with him in the house and treat him as an active member of our home, which is our living space. My partner and I take great care of this... Our attitude did not change during the pandemic, we mutually established our routines, how much time we would spend together, how much time we would spend on personal things, how we would run the household, etc. When we compare it to our normal life, not much has changed...” (Mother 15; Age 34)

The findings reveal that variables related to children have a defining role in mothers’ child-rearing attitudes. The time spent together at home...
in quarantine mostly affected the child-rearing attitudes of the mothers in relation to variables related to the number of children and the child’s age.

4. Discussion

the present study examines the effect of the time mothers spent at home with their children within the scope of quarantine measures taken due to the COVID-19 pandemic on the relationship between some variables and the child-rearing attitudes of mothers, it was determined that the variables related to the children were determinant on the child-rearing attitudes of mothers, but that the duration of time spent staying at home during the quarantine process was determinant on the child-rearing attitudes of the mothers in relation to some variables that belonged only to the children. Furthermore, statements made by mothers also revealed that the time mothers spent at home with their children during the quarantine period caused changes in their child-rearing attitudes.

It was observed that the age of the children was a determining factor in the child-rearing attitudes of the mothers. With older children, the mothers had less of preservative child-rearing attitudes, whereas the younger the children were, the more protective was the mothers’ child-rearing attitudes. Furthermore, as the mothers spent more time at home with their children during the quarantine period implemented due to the COVID-19 pandemic, their preservative child-rearing attitudes increased. Studies (Avery & Park, 2021; Tambling et al., 2021) have shown that during the COVID-19 pandemic, parents have used their preservative roles more effectively to protect their children and keep them safe and that they have improved their parenting skills to protect their children from the disease. Furthermore, studies have revealed that the fear, stress, anxiety, and uncertainty resulting from the COVID-19 pandemic has affected parent–child relationships negatively and that this has caused parents to adopt a more preservative attitude (Ares et al., 2020; Casinato et al., 2020; Spiteri, 2021).

It was found that the gender of the children was not a determinant in the child-rearing attitudes of the mothers, and the time spent at home during the quarantine process did not affect the child-rearing attitudes of the mothers in relation to the gender of the children. It was stated in various studies (Alfaﬁm et al., 2021; Hu & Feng, 2021) that the gender of the children was not determinant in the attitudes of mothers towards their children, and mothers displayed similar child-rearing attitudes towards both their sons and their daughters. On the other hand, studies have found that mothers’ child-rearing attitudes were more moderate in relation to the gender of their children, while fathers had different child-rearing attitudes, in that they were more authoritarian towards boys (Ziv & Arbel, 2021).

It was determined that mothers adopted a more authoritarian child-rearing attitude when their children had siblings. Furthermore, the more children mothers had, the more authoritarian, and the less democratic, their attitudes became. It was established that while mothers’ child-rearing attitudes varied between democratic and authoritarian according to the number of children, as the duration of staying at home during the quarantine process increased, mothers’ democratic and authoritarian attitudes tended to shift to excessive tolerant attitudes. Rana et al. (2021) revealed that being isolated negatively affected mother–child interaction and caused them to exhibit authoritarian attitudes. Psychological factors such as mothers staying at home for a long time, uncertainty, stress, and anxiety that occurred due to the COVID-19 outbreak were thought to inﬂuence this (Biyima & Irmak 2021). Research also suggests that during the COVID-19 pandemic both Turkish and Chinese parents were inconsistent in their parenting strategies, which potentially stemmed from the children’s stay in the same environment for a long time (Toran et al., 2021). Furthermore, the COVID-19 pandemic and governments’ lockdown restrictions were found to have a negative effect on parenting skills, and this negative effect has caused parents to take stricter attitudes towards their children (Andrés-Romero et al., 2021; Chung et al., 2020). Similarly, research conducted by Riazi et al. (2021) revealed that with the COVID-19 pandemic, parents were excessively controlling their children, displaying an overly intrusive attitude from choosing playgrounds to whom to play with and where to touch.

While children’s congenital diseases caused mothers to adopt a preservative child-rearing attitude, it was also determined that the duration of time spent at home did not have an effect on the preservative child-rearing attitude during the quarantine period implemented due to the COVID-19 pandemic. It was established that the child’s health condition was a determining factor in parental attitudes (Park & Walton-Moss, 2012) and that the parents of sick children experienced more stress, anxiety, and depression and had a preservative attitude towards their children (Cousino & Hazen, 2013; Malm-Buatsi et al., 2015). As revealed by studies, mothers had a preservative attitude towards their children due to the congenital disease of the child.

Mothers who did home activities with their children adopted a democratic child-rearing attitude, and the frequency and number of the home activities mothers did with their children had a positive effect on their democratic child-rearing attitude, but the time spent at home in quarantine during the COVID-19 pandemic did not have an effect on this democratic attitude. It was found that parents’ spending quality time at home with their children, performing activities and ensuring active participation of children in family life had a positive effect on the parent–child relationship (Lauffer & Bitton, 2021; Leidy et al., 2010), and mothers’ having a positive attitude towards their children also led to positive changes in their children’s behaviours (Boeldt et al., 2012). At the same time, within the context of the time spent at home during quarantine due to COVID-19, the positive attitudes of the parents in the parent–child relationships caused the child to exhibit fewer behavioural problems (Canzi et al., 2021; Meoded Karabanov et al., 2021), and the attitudes of the parents who had more quality interactions with their children changed positively (Toran et al., 2021). During the COVID-19 pandemic, the well-being levels of the children of the mothers who had high coping skills in the families were high (Petrocchi et al., 2020), and the quality of the mother–child relationship of mothers who had positive stress management was found to be positively affected (Tambling et al., 2021).

The present study reveals that variables related to children have a defining role in mothers’ child-rearing attitudes. However, it was determined that the duration of staying at home during the quarantine measures implemented due to COVID-19 affected the preservative attitudes of the mothers differently according to the ages of the children, and there was a change from democratic and preservative attitude to overly tolerant attitude according to the number of children. The findings of this study were also supported by other studies.

5. Conclusion

The present study examines how the time mothers spent at home with their children within the scope of quarantine measures taken due to the COVID-19 pandemic affect the relationship between some variables pertaining to the children and the child-rearing attitudes of mothers. In this context, quantitative and qualitative data were collected and analyzed. The findings obtained from the quantitative data were supported with the qualitative data and the results of the study were aimed to be evaluated in a multidimensional way.

The analyses revealed that the mothers participating in this study generally had a democratic child-rearing attitude. However, it was also observed that the mothers’ child-rearing attitudes changed based on demographic variables related to the children. With older children, the mothers’ preservative child-rearing attitude showed a decrease, while the mothers of younger children adopted a more preservative attitude. Moreover, the time mothers spent at home with their children during the quarantine period that was implemented due to the COVID-19 pandemic was found to have an effect on preservative child-rearing attitudes of mothers in relation to the children’s age.
The children’s having siblings caused the mothers to adopt a more authoritarian child-rearing attitude, and the number of the children that mothers had was also a determining factor on the adoption of an authoritarian child-rearing attitude by the mothers, in that the more children a mother had, the more authoritarian her attitude would be. However, this attitude underwent changes during the time mothers spent at home with their children in the quarantine period implemented due to the COVID-19 pandemic, and the mothers started to adopt an excessive tolerant child-rearing attitude according to the duration of time. The congenital disease status of the children had a determining effect on the mothers’ child-rearing attitudes. The present study results show that mothers adopted a preserving attitude towards their children, but this attitude was not affected by the quarantine period implemented due to the COVID-19 pandemic. Another result of the study was that mothers who did home activities with their children adopted a more democratic child-rearing attitude, but this attitude was not affected by the time spent in quarantine during COVID-19. Despite these quantitative results, the qualitative findings of this study revealed that mothers’ child-rearing attitudes changed due to the time spent in quarantine during COVID-19 and staying at home for a long time caused a change in the mother—child relationship.

In conclusion, the child-rearing attitudes of mothers were affected by certain variables. Within the context of COVID-19, the time spent at home in quarantine was found to affect child-rearing attitudes only in relation to the number of children and the child’s age. The interviews revealed that mother—child interactions underwent changes during the quarantine period implemented due to COVID-19 and that mothers’ attitudes towards their children were impacted by this process.

6. Limitations

The most important limitation of this study is that it was only conducted on mothers. A further study including both mothers and fathers can be designed. Furthermore, by designing research involving the child, the attitudes of parents towards their children during the COVID-19 pandemic can be determined. As the research data was gathered online, mostly mothers were reached through their accesses to the internet and digital tools. A study design that makes reaching disadvantaged groups who do not have accesses to the internet and digital tools possible is recommended. This study was carried out during the COVID-19 lockdown and this is one of the limitations of this study. Therefore, a comparative study between the COVID-19 pandemic lockdown and post COVID-19 pandemic situation is recommended. The place of the residence of the participants was not examined in this study; this is also another limitation of this study. A study that considers the place of residence of participants is also recommended. In this study, the participants were determined according to the convenience sampling method in the quantitative part. In line with this method, mothers were reached through preschool teachers. Since these mothers have preschool-aged children, the participants of the study consisted of mothers with children between the ages of 3–6. Mothers with children in this age group are an important limitation of this study. It is recommended to conduct a research with other age groups as well.

Compliance with ethical standards

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical. Informed consent was obtained from all individual participants included in the study.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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