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Virtual training for parenting and play therapy skills to improve motherhood: Evidence from the COVID-19 pandemic in Iran

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Abstract

Introduction: During the COVID-19 pandemic, parents faced various challenges that affected family well-being, especially motherhood. We evaluated the relationships between maternal depression, anxiety, and stress with child anxiety during the COVID-19 pandemic and then investigated the effectiveness of virtual training in parenting and play therapy skills on maternal anxiety, depression, and stress, as well as child anxiety.

Materials and Methods: In the present study, mothers of children aged between four and six years (N= 315) were recruited in Iran in February 2021. After the initial screening was based on the level of child anxiety and the total number of dropouts, the participants were randomly assigned to the intervention (N= 26) or the control (N= 31) group. The intervention included eight virtual 90-minute online training sessions along with follow-up acclivities using a virtual offline group. To assess the variables, the DASS-21, the SCAS-Parent and the covariance analysis methods were used.

Results: The results showed that virtual training led to a significant reduction in maternal anxiety, depression, and anxiety. Overall, this program has been effective in improving the mental health of both mothers and children.

Conclusion: Given the findings, virtual training for parenting and play therapy skills can be considered an effective therapeutic method for reducing anxiety and depression in both mothers and children during quarantine situations, such as the COVID-19 pandemic.

Keywords: COVID-19, Parenting, Play therapy

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Introduction

On January 30, 2020, the World Health Organization declared a public health emergency, which was subsequently upgraded to a pandemic on March 11, 2020. Extensive and widespread restrictions were implemented worldwide to slow the transmission of the infection. Although these measures were effective in reducing the incidence of the disease, they created numerous challenges for children, parents, and all sectors of society, contributing to increased levels of anxiety,

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depression, and stress across age groups. These restrictions were particularly burdensome for families; for instance, homeschooling, social distancing, economic difficulties, job loss, and quarantine-related social limitations had profound and complex impacts on family life (1-5). Research has shown that pandemics bring profound changes to families' daily lives, which can lead to stress, anxiety, and depression in parents, as well as increased intrafamily tension. These dynamics, in turn, may contribute to a higher incidence of adverse childhood experiences, including domestic violence, child abuse and neglect, and elevated anxiety in children. (6-8). Although research is ongoing on the social and psychological consequences of the COVID-19 pandemic in the general population (9) at different ages (10), the family context, particularly the motherhood experience, has received less attention. An online survey of 420 American caregivers during the COVID-19 pandemic revealed moderate levels of stress, anxiety, and depression (11). The effect of parental stress on children (N= 824) aged one to fourteen years was shown in Italy during the COVID-19 pandemic (12). In another study, Canadian families (N = 4,627) reported stress and the risk of domestic violence due to the COVID-19 pandemic. The results indicated that changes in employment conditions led to financial insecurity, which was the main reason for increased stress and domestic violence in families (13). Reducing social contact has also played a role in influencing domestic violence. However, the actual incidence of domestic violence has not been formally assessed (14,15). Based on the studies, during the COVID-19 pandemic, the likelihood of child abuse increased in families receiving financial assistance and in those with mothers experiencing anxiety and depression (N= 183). The evidence further suggests that, compared with single individuals, parents experience higher levels of negative emotions in response to catastrophic events (11,16). Considerable information is still lacking regarding how the psychological stress induced by the COVID-19 pandemic affects parent-child relationships.

Although the occurrence of anxiety in children during the COVID-19 pandemic is not solely related to parents, parenting style plays an important role in children's problems (17). Positive and responsive parenting can promote children's psychological well-being (18-20). The effectiveness of cognitive-behavioral play therapy for treating various child problems, especially anxiety, and improving parent-child relationships has been examined in multiple studies (21,22). Dolls can be very effective in role-playing and exploring thoughts and emotions and provide a tool for expressing children's feelings and concerns (23). The present study used a unique doll style for play therapy. These dolls are made from the drawings that a child creates, so they are very familiar to the child. Doll painting, or, in other words, three-dimensional depiction of a painting and its use in the treatment process, can be more effective in forming a quick relationship with the child and accepting treatment because of its credibility and the child's deep relationship with it (24). Owing to their uniqueness and credibility for each child, these dolls will certainly have a better impact on the treatment process (25). Certainly, when a child sees their own drawing turned into a doll in the real world, they will feel an indescribable sense of satisfaction and joy (26). Combining drawing and dolls as an effective tool and presenting it to the child will help create a stronger connection between the therapist and the child and achieve beneficial treatment goals (27). It seems that using dolls that encompass a child's inner realities and that the child is familiar with it in his/her heart and soul can be more effective in treating anxiety (28). The doll painting or three-dimensional depiction of a painting represents the external manifestation of the child's anxiety (29). In fact, with the help of these dolls, we will have a combined and tangible therapeutic painting and doll that will be presented to the child together. Given the role of maternal mental health in children's well-being, this study investigates the effectiveness of virtual training for parenting and play therapy skills using a painting doll and storytelling on children's anxiety as well as maternal anxiety, depression, and stress.

Materials and Methods

The present study conducted in Mashhad-Iran in 2021. Participants were mothers who had access to virtual platforms. The inclusion criteria were as follows: 1) having a child aged between 4 and 6 years, 2) no history of divorce, 3) not being infected with COVID-19, 4) not receiving any concurrent intervention, 5) providing informed consent and willingness to participate in the virtual intervention, and 6) obtaining a score of 37 or higher on the Spence Children's Anxiety Scale—Parent Form

(SCAS-Parent) for child anxiety (maternal anxiety not included). Because the focus of this study was to examine the effectiveness of play therapy and prior research has established a significant relationship between maternal mental health and child anxiety, only child anxiety was considered as the inclusion criterion (30). The exclusion criteria were as follows: 1) absence from the intervention group for more than two sessions, 2) infection with COVID-19 during the study, and 3) voluntary withdrawal.

Procedure

Due to the COVID-19 quarantine, a virtual call for participation was announced, and the questionnaires were distributed through virtual social networks. A total of 315 mothers with children aged 4 to 6 years answered the study questionnaires. Based on Cochran's formula for large or infinite populations, a sample size of 315 participants was deemed appropriate for this study. After the initial analysis, a total of 105 participants whose child anxiety index was in the range of moderate to high anxiety (99 participants with moderate anxiety and six participants with high anxiety) met the inclusion criteria. However, out of those 105 participants, 69 mothers provided their contact information to participate in the next phase of the study. They were randomly assigned to either the intervention group or the control group (35 participants in the intervention group and 34 in the control group). Then, using the contact information provided in the questionnaires, all the mothers received initial explanations about the study, including the participation criteria and the importance of their active involvement. However, during the study course, both the intervention and control groups experienced dropouts. In the intervention group, six mothers withdrew from the study at the outset due to inability to fully participate in the sessions. Additionally, three mothers were excluded because of missing more than two sessions and failing to submit assignments or complete required follow-ups. Consequently, the intervention group consisted of 26 participants. In the control group (n= 34), three mothers did not complete the post-test because the phone number they had provided was blocked, resulting in a final sample of 31 participants. After completing the virtual play therapy sessions in the intervention group, both the intervention and control groups completed the online questionnaires again for post-test assessment. To ensure ethical considerations, all interventions provided to the intervention group were also delivered to the control group after this stage. The intervention consisted of eight virtual sessions, each lasting 90 minutes, conducted weekly over a two-month period. Finally, the pre- and post-test data were analyzed using multivariate analysis of covariance (MANCOVA). The content of the sessions is as follows (Table 1) (21,26-28). The research procedure is depicted in Figure 1.

Table 1. Summary of content of play therapy sessions

Session	Main objectives and content
1	Introducing group members and the facilitator, outlining program goals and conditions, emphasizing confidentiality, initiating training on positive mother-child interaction, practicing emotion reflection, engaging in child-centered play, and presenting the drawing doll as a therapeutic tool
2	Review of the previous session and assigned tasks, continuation of training on positive interaction techniques (focusing on setting limits), introduction to parenting styles, instruction on doll-making through drawing, and discussion on anxiety and the importance of parental follow-up
3	Review of previously assigned tasks, continuation of training on positive interaction strategies (including how to communicate effectively and express affection toward the child), teaching the 5 love languages for children, introduction to parent-focused activities, interactive games for identifying emotions, storytelling using drawing dolls, and discussing characters' feelings
4	Providing feedback on previous assignments, continuing positive interaction training (focused on teaching the child decision-making skills), continuing emotion recognition games, identifying physical signs of anxiety in children, and engaging in storytelling activities with positive emotional language, accompanied by drawing with dolls
5	Review of assignments; discussion of parenting fundamentals (including deliberate planning, patient effort, trust, and reliance); continuation of training in positive interaction techniques (focused on enhancing self-confidence); emotion regulation through diaphragmatic breathing and relaxation games; positive imagery exercises with dolls; and storytelling using empowering language
6	Review of previous sessions, continuation of training on positive interaction strategies (focusing on the difference between praise and encouragement), teaching recognition of anxiety-provoking thoughts through play, storytelling with dolls to address children's fears (particularly related to COVID-19), guiding mothers to identify and interpret characters' feelings and thoughts, offering coping strategies, and engaging in joint enactment activities with children
7	Review of the previous session; continuation of training on advanced choice-making and positive interaction techniques; interactive games for identifying cognitive traps; teaching the relationship between thoughts, emotions, and behaviors; brainstorming with mothers; and using storytelling with dolls to uncover painful emotions, resolve conflicts, and practice replacing negative thoughts with positive ones.
8	An overview of all sessions, emphasizing the importance of patience, persistence, and repetition; providing encouragement and appreciation to mothers; incorporating metaphorical storytelling therapy with dolls; creating narratives where heroes (illustrated through dolls) overcome challenges such as COVID-19; and presenting stories with positive endings that convey messages of resilience and hope."

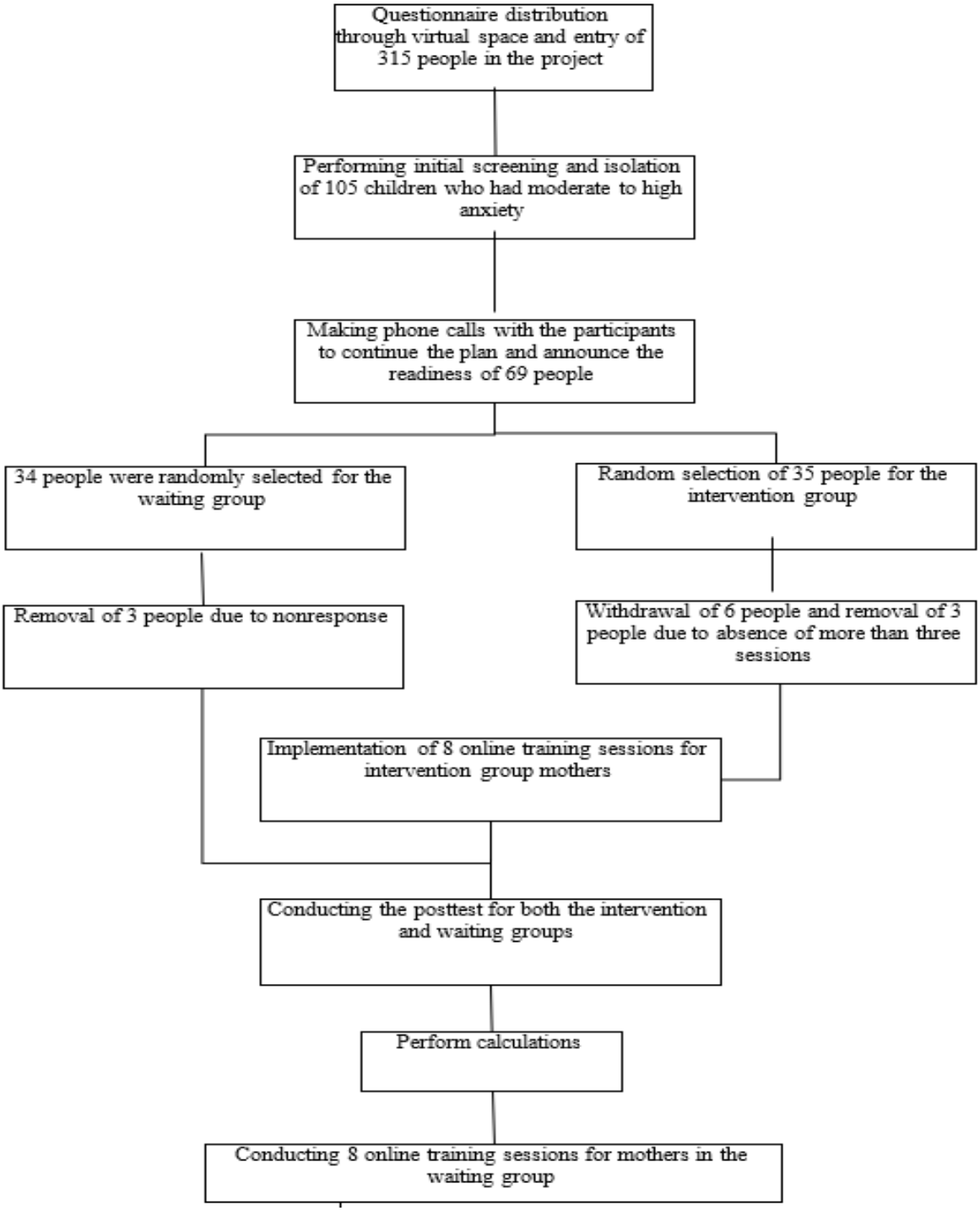

Figure 1. Research procedure

The virtual play therapy intervention comprised several dimensions. The first dimension focused on accepting the child and fostering communication skills through child-centered, unstructured play. The second dimension involved asking children to draw pictures related to COVID-19 and teaching mothers how to transform their child's drawing into a doll. This technique was developed based on the authors' clinical experience and a review of the literature (Amir Ardejani, 2023; Didehban and Afshani, 2023; Madyawati, Zubadi, and Yudi, 2016; Nikneshan, Golparvar, and Abedi, 2020). Initially, it was applied in several individual interventions and later implemented virtually under the supervision of an expert play therapist. To illustrate the technique more concretely, examples of children's drawings transformed into dolls are presented in Figure 2 (21,26-28). The third dimension focused on

teaching and applying Cognitive-Behavioral Play Therapy (CBPT) to address child anxiety. This included practicing the basics of play therapy through storytelling with the dolls created and actively involving children in the games. To support therapeutic activities during the week (e.g., completing assignments and responding to questions), an interactive virtual group was established. Mothers shared their work samples and received corrective and supplementary feedback. Several examples of dolls and drawings are presented in Figure 2. There was no intervention for the control group between the pre-test and post-test after the data collection, and the intervention program was also offered to the volunteers in the control group.

Research instruments

A) Spence Child Anxiety Scale Parent form (SCAS-Parent): This questionnaire was designed by Spence in Australia in 1997 to evaluate anxiety in children aged 3 to 8 years on the basis of the diagnostic and statistical classification of the DSM-IV. The Spencer questionnaire has two versions: one for children (45 items) and one for parents (38 items). The scoring is based on a 4-point Likert scale ranging from never (0), sometimes (1), often (2), and always (3), and it measures six dimensions of anxiety, including separation anxiety, social anxiety, obsessive-compulsive symptoms, panic-agoraphobia, general anxiety, and physical injury fears (31). The reliability of this scale has been reported to be α= 0.92 for general anxiety and between α= 0.60 and α= 0.82 for its subscales (Spence, 1998). The reliability of the Persian SCAS-Parent has been reported to be between α= 0.60 and α= 0.89, and the construct validity of this scale was validated via confirmatory factor analysis (32).

B) Depression, Anxiety, and Stress Scale-21 (DASS-21): The DASS (Lovibond and Lovibond, 1995) consists of 42 questions that assess the psychological constructs of stress, anxiety, and depression through 14 different questions for each construct. The stress subscale refers to both physical and psychological stress, and it diagnoses and screens the symptoms of stress, anxiety, and depression over the past week.

This four-point Likert scale is used for individuals aged 15 years and older, with response options ranging from "not at all (0)" to "very much (3)." In this study, the 21-item form of the DASS questionnaire was used. The 21 items of the DASS are selected in such a way that they represent all the subscales, and by multiplying the score of the subscales by two, they lead to the same score as the 42-item version.

The reliability of the subscales has been reported as α = 0.81 for stress, α= 0.79 for anxiety, and α= 0.71 for depression. The criterion validity of the scale was also confirmed via the Beck Anxiety Inventory (BAI; r= 0.81) and the Beck Depression Inventory (BDI; r= 0.74). In a Iranian study, the psychometric properties of this scale reported as acceptable in Iranian populations (33).

Figure 2. Examples of children's drawings turning into dolls

Results

Mothers' (N= 315) anxiety (r= 0.42, *P*< 0.01), depression (r= 0.40, *P*< 0.01), and stress (r= 0.34, *P*< 0.01) scores were significantly correlated with children's total anxiety scores. Furthermore, the regression test statistics revealed that the variance in this model was significant, indicating that the predictive variables of maternal anxiety, depression, and stress can explain changes in the explained variance of children's anxiety under COVID-19 quarantine conditions (F= 29.981, *P*< 0.01). Therefore, the relationships between children's anxiety and maternal anxiety, depression, and stress are well demonstrated in this statistical sample. After screening and separating mothers who had children with moderate to high anxiety, 57 mothers were enrolled in the study. The intervention group consisted of twelve boys and fourteen girls, and the waitinglist control group consisted of fifteen boys and sixteen girls. The mean age of the mothers in the intervention group was 33.04 years, whereas it was 34.03 years in the waitlist control group. Table 2 presents the demographic variables.

Table 2. The frequency percentage of children's anxiety levels based on demographic information

Variable	Groups	Classes of child anxiety	
		37-75 (medium)	75-112 (high)
Father's workplace during quarantine	Home	90.9	9.1
	Workplace	93.5	6.5
Mother's workplace during quarantine	Home	91.3	8.7
	Workplace	100	0
Father's job	Freelance job	91.4	8.6
	Employee	95.2	4.8
Mother's job	housewife	90.7	9.3
	Employee	100	0
The duration of the child's play with family members	Less than 1 hour a day	90.6	9.4
	Between 2-3 hours a day	93.3	6.7
	More than 3 hours a day	100	0
The duration of communication with friends in quarantine	Less than 1 hour a day	90.2	9.8
	More than 3 hours a day	100	0
	Family	96.2	3.8

Source of children's information about COVID-19	TV and radio	87.5	12.5

Table 2 displays the percentage of children with anxiety levels based on demographic information during the quarantine period. The findings of this study revealed that the greater the number of parents who stayed at home due to COVID-19 quarantine was, the greater their children's anxiety levels. This finding may indicate a lack of parental skills in critical conditions. Additionally, the percentage of highly anxious children was greater among fathers with freelance jobs and housewives. These findings indicate that children who spend all their time with their parents during the quarantine period experience higher levels of anxiety than other children do. This may be because the percentage of children with high anxiety levels was greater among children who spent less than one hour in contact with their families and friends. Children who used television and radio as their source of information about the coronavirus, rather than their families, also reported a higher percentage of anxiety. Table 3 displays the descriptive characteristics of the research variables for the intervention and control groups.

Table 3. Descriptive statistics of the research variables

Variable		Stage	Intervention group (n=26)		The control group (n=31)	
			Mean	SD	Mean	SD
Mother's anxiety-stress-depression	Mother's anxiety	Pre-test	13.77	7.95	13.61	9.49
		Post-test	18.77	11.57	23.42	10.83
	Mother's stress	Pre-test	24.54	9.24	25.23	8.82
		Post-test	7.76	5.32	10.84	7.99
	Maternal depression	Pre-test	16.69	10.05	18.52	11.65
		Post-test	9.46	8.79	16.64	12.62
	General anxiety of the child	Pre-test	48.57	8.81	48.67	8.25
		Post-test	34	12.58	47.48	14.6

The research variables were examined via univariate and multivariate analyses of covariance. To examine data normality, the Kolmogorov-Smirnov test was used separately for two groups in the pre-test and post-test conditions. According to Table 4, the normality assumption for all the research variables was confirmed ($P \geq 0.05$), so analysis of covariance can be used to analyze the research hypotheses. The results of Levene's test to examine the homogeneity of the data variances are presented in Table 5, which indicates the homogeneity of the data variance ($P > 0.05$). The homogeneity of regression slopes for the interaction between group and children's anxiety scale at pre-test was not significant ($P = 0.161$, $F = 0.0242$). Therefore, it can be concluded that the homogeneity assumption of the data variances has been met. On the basis of the results of the Kolmogorov-Smirnov test for the normality of the data distribution ($P > 0.05$), the homogeneity of variances, the homogeneity of regression slopes for the interaction between group and pre-test scores, and the absence of outliers, ANCOVA can be used to test children's anxiety.

Table 4. Kolmogorov-Smirnov test for data normality

Variable		Stage	Intervention group (n=26)		The control group (n=31)	
			P	Z Score	P	Z Score
Mother's anxiety-stress-depression	Mother's anxiety	Pre-test	0.067	0.165	0.200	0.111
		Post-test	0.055	0.169	0.056	0.155
	Mother's stress	Pre-test	0.200	0.140	0.200	0.086
		Post-test	0.200	0.095	0.200	0.111
	Maternal depression	Pre-test	0.200	0.132	0.200	0.100
		Post-test	0.057	0.168	0.158	0.135

General anxiety of the child	Pre-test	0.086	0.160	0.053	0.156
	Post-test	0.200	0.106	0.199	0.130

Table 5. Levene's test for data homogeneity

Variable	F	Degrees of freedom 1	Degrees of freedom 2	P
Child anxiety	0.034	1	55	0.854
Maternal depression	0.022	1	55	0.882
Mother's anxiety	0.229	1	55	0.634
Mother's stress	3.438	1	55	0.069

Table 6 displays the results of the analysis of covariance for the children's anxiety scores. According to Table 6, the difference in the children's anxiety variable between the experimental group and the control group was significant when the pre-test effect was controlled for ($P< 0.001$, $F_{(1,54)}= 20.121$). Therefore, on the basis of the mean anxiety level of the experimental and control groups, the intervention was effective in reducing the children's anxiety level ($P< 0.05$).

Table 6. Analysis of covariance test for the child's anxiety score

Source of changes	Sum of squares	Mean of squares	dF	F	P	Coefficient Eta
Pre-test	3526.566	3526.566	1	27.992	0.000	0.341
Group	2534.910	2534.910	1	20.121	0.000	0.271
Error	6803.175	125.985	54			

Table 7 displays the results of Pillai's trace test for maternal anxiety, stress and depression. These results suggest that virtual training in parenting and play therapy has a significant effect on maternal anxiety, depression, and stress. The result of the Box test for maternal anxiety, depression, and stress (F (6, 20110.932) = 1.804, $P> 0.05$), indicating homogeneity of the covariance matrices. Therefore, for the variables of maternal anxiety, depression, and stress, multivariate analysis of covariance was used.

Table 7. Multivariate analysis of covariance for the effect of intervention on mothers' anxiety, depression and stress

Effect		Value	F	df1	df2	P	μ2
Group	Pillai's Trace	0.176	3.552	3	50	0.021	0.176
	Wilke's Lambda	0.824	3.552	3	50	0.021	0.176
	Hotelling Trace	0.213	3.552	3	50	0.021	0.176
	Roy's Larest Root	0.213	3.552	3	50	0.021	0.176

Table 8 displays the results of the multivariate analysis of covariance for each of the scores of maternal anxiety, depression, and stress. For all the variables except maternal stress, there was a significant difference between the experimental and control groups from the pre-test to the post-test after the pre-test effect was controlled ($P< 0.05$). Therefore, the intervention was effective in reducing maternal anxiety and depression. However, after the pre-test effect on the maternal stress score was removed, there was no significant difference between the experimental and control groups from the pre-test to the post-test.

Table 8. Covariance analysis test for the subscales of maternal anxiety, depression and stress

Variable	Sum of squares	Mean square	F	df	P	Effect coefficient
Maternal depression	447.316	447.316	10.572	1	0.002	0.169

Mother's anxiety	107.513	107.513	4.285	1	0.043	0.076
Mother's stress	212.884	212.884	2.993	1	0.093	0.053

Discussion

The findings of the present study revealed a significant increase in negative emotions—such as anxiety, depression, and stress—among both mothers and children during the COVID-19 pandemic. These results align with previous research documenting the psychological impact of quarantine, disrupted daily routines, and socioeconomic stressors on families (1,6,8,34). Factors such as increased maternal burden from homeschooling, remote work, financial insecurity, and the loss of family members contributed to heightened maternal oversensitivity and maladaptive interactions with children, which, in turn, intensified children's psychological distress. This evidence further supports prior findings emphasizing the interdependence of parental and child psychological well-being (11,17,30).

Our findings are also consistent with those of Orsini et al. (35), who reported that parents of children testing positive for COVID-19 were more prone to post-traumatic stress, anxiety, and depressive symptoms. This highlights the central role of maternal anxiety in shaping children's anxiety during crises. Similar conclusions have been drawn in studies showing that fear of death, illness, and strict quarantine restrictions exacerbate maternal distress (20-22). The novelty of the present study lies in moving beyond the predominantly descriptive accounts produced during the pandemic (1,6,8,34) by introducing and evaluating an interventional approach. Specifically, the combined use of virtual parenting skills training and cognitive–behavioral play therapy resulted in significant reductions in children's anxiety as well as in mothers' anxiety and depression scores. These findings are consistent with prior evidence supporting the protective role of positive parenting programs (19,20) and the effectiveness of play-based interventions in reducing anxiety and strengthening parent–child relationships (21-29). Notably, unlike previous studies that typically focused on either parent or child outcomes, the present study simultaneously addressed both domains through a structured, remote program—a methodological innovation that has been rarely documented in the literature. Another notable finding was that maternal micro-level stress did not decrease. This outcome may be explained by the timing of the post-test, which coincided with the fourth wave of COVID-19 in Iran, a period marked by heightened uncertainty and strict social restrictions (36-39). In our subscale, stress was conceptualized as encompassing flexibility, resilience, and patience. Given these dimensions, an increase in stress during this peak wave was not unexpected and reflects the contextual influence of broader societal crises on psychological outcomes. In line with the findings of Zolfaghari et al. (40), who reported that both children's awareness of COVID-19 and maternal mental health significantly predicted child anxiety, our results underscore the importance of providing age-appropriate information by parents. Promoting health-related beliefs, hygiene practices, problem-solving skills, and emotional regulation may serve as effective strategies to mitigate children's anxiety during health crises. Furthermore, the present study demonstrates that interactive tools—such as painting puppets—can strengthen parent–child bonding and enhance the therapeutic quality of play, consistent with earlier evidence on art- and play-based techniques (23-25,27-29).

Our results also contrast with studies reporting a surge in domestic violence and child maltreatment during the pandemic (7,13). While such risks were indeed present, our findings suggest that preventive educational programs for parents can buffer against them and function as universal strategies for safeguarding children (40). Moreover, although previous research has emphasized the challenges of remote interventions (8), the present study demonstrates that thoughtful adaptations—such as recorded sessions, support groups, and interactive feedback—can mitigate the limitations of online platforms and still produce meaningful outcomes.

Despite its strengths, this study has several limitations. The relatively small sample size, a result of social distancing measures, may limit the generalizability of the findings. Additional concerns include the reliance on self-report

assessments and the absence of longitudinal follow-up to evaluate the sustainability of effects. Technical barriers, such as internet connectivity issues and the lack of face-to-face therapist–parent interactions, also posed challenges, although measures such as session recordings and support groups helped to partially mitigate these difficulties. Future research should include larger and more diverse samples, extend follow-up periods, and examine potential moderators (e.g., socioeconomic status, parental resilience) that may influence the effectiveness of virtual parenting interventions.

The strengths of this study compared with prior research include:

1. An experimental and controlled design, enhancing causal inference beyond descriptive or cross-sectional studies.
2. Integration of parenting training with play-based therapy, simultaneously addressing maternal and child outcomes.
3. Virtual delivery, increasing accessibility and scalability under quarantine conditions.
4. Focus on preschool children (ages 4-6), a developmental stage underrepresented in pandemic research.

Clinically, these findings highlight that structured virtual programs can serve as cost-effective and scalable strategies to protect family mental health during crises. Policy-makers and practitioners should consider incorporating parent training and play-based components into public health responses, ensuring that interventions remain accessible even under restrictive conditions. Taken together, these results suggest that, although the pandemic imposed unprecedented psychological burdens, it also provided an opportunity to explore innovative delivery formats. The present study demonstrates that targeted, family-centered, and skill-based virtual interventions can buffer the negative psychological impacts of crises, offering a replicable model for future health emergencies.

Conclusion

This study provides robust evidence that virtual parenting education combined with cognitive-behavioral play therapy (CBPT) can effectively reduce children's anxiety and alleviate mothers' anxiety and depression during the COVID-19 pandemic. Unlike much of the existing literature, which has predominantly reported negative consequences, our findings demonstrate that structured, interactive, and remotely delivered interventions can yield measurable benefits for both mothers and children.

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Conflict of Interest

The authors declare no conflicts of interest.

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Ethical Considerations

Ferdowsi University of Mashhad and Shahrood Islamic Azad University approved this research.

Code of Ethics

IR.IAU.SHAHROOD.REC.1400.018

Authors Contributions

All authors involved equally in design, conduct the study, and writing the manuscript.

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