Örgütsel Davranış Araştırmaları Dergisi
Journal Of Organizational Behavior Research
Cilt / Vol.: 8, Sayı / Is.: S, Yıl/Year: 2023, Kod/ID: 23S0-903
2528-9705

Effect of Mindful Parenting Based on Telepsychology on the Anxiety and Resilience of Mothers of Children 6-12 Years Old with ADHD in the COVID-19 Pandemic

Bahman Heidarian[1], Fatemeh Asariyan[2*], Fatemeh sadat Ghorayshi[3], Habib allah Rahimi[4]

[1]Ph.D. Department of Psychology, Faculty of Medicine, Kashan University of Medical Science, Kashan, Iran

[2.3. 4] Faculty member. Department of Psychology, Faculty of Medicine, Kashan University of Medical Science, Kashan, Iran

*Corresponding Author
E-mail: assarian_f@kaums.as.ir

ABSTRACT

***Introduction**: There are some debates about the potential benefits of mindfulness exercises for parents on increasing general health and reducing negative emotions of parents, increasing positive emotions in the child-parent relationship, and changing aggressive behavior of children. Likewise, the investigation of the impact of mindfulness-based programs has shown that these programs can increase the functioning of interpersonal relationships and the effectiveness of coping with stress in parents of children with psychological problems, including externalizing problems. Therefore, the purpose of this study was to investigate the impact of mindful parenting based on telepsychology on the anxiety and resilience of mothers of children aged 6-12 with ADHD during the COVID-19 pandemic.*

***Materials and methods:** This interventional study was conducted on mothers of children and adolescents aged 6-12 years with ADHD. At first, the diagnosis of ADHD and its types was confirmed. The list of child and adolescent patients was coded and randomly assigned to two control and experimental groups. Again, mindful parenting was implemented for applicants in the control group after 4 months and at the end of the work. In the pre-test stage, the standard questionnaire of Connor and Davidson's resilience scale (CD-RISC 25 items), and Beck's anxiety questionnaire were administered to mothers. Then, children in the control group received only the drug treatment they received before, without changing the dose, and their parents did not receive any psychological intervention. In the experimental group, the children received the same drug treatment as the control group, and their parents also received the mindful parenting treatment.*

***Results:** The findings showed that there was no significant difference in age, education, and occupation in the two studied groups. The average scores of the Beck Anxiety Questionnaire and the standard questionnaire of the Connor and Davidson Resilience Scale before the intervention were not significantly different in the two studied groups. A significant decrease in Beck's score was observed in the two groups, but this difference was not significant between the two groups. The intervention did not affect the subscale score of perception of individual competence. The total score of the subscale of trust in individual instincts to tolerate negative emotions increases significantly in the intervention group after the intervention, but decreases in the two-month follow-up, however, no significant changes were observed in the group from the beginning to the end of the study. Control.*

***Conclusion:** The findings of this study support the use of mindful parenting training to improve the anxiety and resilience of mothers of affected children.*

***Keywords:** Mindful parenting, anxiety, resilience, ADHD, COVID-19, telepsychology*

INTRODUCTION

Attention Deficit Hyperactivity Disorder (ADHD) is one of the most common psychiatric disorders in childhood (1). Its prevalence is between 5% and 7% of all school-age children (2). Boys are more than twice as likely as girls to be diagnosed with attention deficit hyperactivity disorder (3). Researches have shown that attention deficit hyperactivity disorder has adverse consequences on children and teenagers when it has a negative effect on the social success, self-esteem, and emotional development of the child. It also causes defects in learning skills, which leads to a decrease in academic self-efficacy and academic failure (4). In this regard, follow-up studies of children diagnosed with ADHD showed that these children are more at risk of having a lower level of education and dropping out (5). These academic performance disorders continue until puberty and adulthood. This group of children is likely to show substance abuse in the future, so providing appropriate treatments to reduce these problems seems necessary (6). During the COVID-19 pandemic, mothers of patients with attention deficit hyperactivity disorder experience higher degrees of depression, anxiety, and reduced quality of life, as well as exhaustion, and inability to perform routine tasks and necessary interactions in life, compared to mothers who do not have such children. (7). On the other hand, parents in this era are anxious and worried about threats to their health, family, and children, which can be challenging, especially for people with psychiatric disorders (8). According to studies in the treatment of children with attention deficit hyperactivity disorder, more emphasis has been placed on combined drug and non-drug treatments. Non-pharmacological treatments are types of psychotherapies, including behavioral therapy and third-wave interventions, including mindfulness, which have been proven effective in trials (9).

Studies emphasize that parent training and drug therapy can be helpful in the reduction of behavioral problems in children with ADHD, as well as the reduction of the stress of parents and their children (10).On the other hand, the mental health process of children may face serious problems and their behavioral problems may be aggravated during the pandemic due to the lack of receiving medical services by them (11), which exerts its effect through five processes, including listening With full attention, accepting oneself and one's children without judgment, being aware of one's own and one's children's emotions, self-regulation in parenting relationships and affection towards oneself and one's children (12).

Mindful parenting affects family functioning through factors such as reducing parenting stress, addressing the child's parent's psychological pathology, strengthening attention in the present tense, and marital practices (13). Therefore, this study was performed to evaluate the impact of mindful parenting based on telepsychology on the anxiety and resilience of mothers of children aged 6-12 with ADHD during the COVID-19 pandemic.

Materials and Methods

This interventional research was conducted on the mothers of children and adolescents aged 6-12 years old with ADHD, who were registered in the Kargranjad Psychiatric Clinic, Kashan-Iran. The sampling method was one-stage and patients who met the inclusion and exclusion criteria were included in the study. Inclusion criteria were: having a case with a diagnosis of attention deficit hyperactivity disorder and reconfirmation by a psychiatrist and clinical psychologist, age between 6-12 years, parents' education level of at least a diploma, and having informed consent.

Exclusion criteria included: mothers with a psychiatric disorder, mothers of children with another major psychiatric disorder, mothers without communication facilities, lack of informed consent, mothers who left more than two treatment sessions, having a physical disability in mother or child, and changes in the dose of the child's medication.

Sample size

According to Fazli's study (14) and the following formula, the minimum sample size for this study was 44 people.

$$n = \frac{(Z_{1-\frac{\alpha}{2}} + Z_{\beta})^2 \times (S_1^2 + S_2^2)}{(\overline{X_1} - \overline{X_p})^2} \qquad Z_{1-\frac{\alpha}{2}} = 1.96 \qquad Z_{\beta} = 0.84$$

Procedure

At first, the diagnosis of ADHD and its types (attention deficit, hyperactivity, or mixed type) was confirmed by a pediatric psychiatry specialist and a child clinical psychologist. The list of child and adolescent patients with ADHD was obtained through hospital records. First, mothers were invited to an orientation workshop. Then their list was coded and randomly divided into control and experimental groups.

Again, mindful parenting was implemented for the applicants of the control group after 4 months at the end of the work. In the pre-test stage, the standard questionnaire of the Connor and Davidson resilience scale (CD-RISC) (15) and the Beck Anxiety Inventory (BAI) (16) were administered to the mothers. Then, in the control group, the children received only the drug treatment they received before, without changing the dose, and their parents did not receive any psychological intervention. In the experimental group, children received drug treatment similar to the control group, and their parents also received mindfulness parenting therapy. After completing the mindful parenting sessions, CD-RISC and BAI questionnaires were administered again. After the end of the follow-up period of 2 months after the completion of the treatment, the mentioned questionnaires were implemented for both control and experimental groups.

Data analysis

Descriptive analysis (mean, standard deviation, and frequency) was used. Comparing the similarity of the two groups was done using Chi-square and t-tests. The effect of the intervention was evaluated using ANOVA. The data was analyzed using SPSS version 21 software. A significance level of 0.05 was considered.

Ethical considerations

The information of all patients was kept confidential by the project manager. This study was performed in accordance with relevant regulations in the ethics research committees of the University of Medical Sciences and the Declaration of Helsinki.

Results

A total of 47 patients were included in the study, of which 3 patients were not included in the intervention due to having one of the reasons for the exclusion criteria. The average age of the studied subjects was 32.23 ± 5.43 years. 25 people (56.8%) of the studied women had a diploma education and below, and 19 people (43.2%) had a university education. 8 of the studied women (18.2%) were employed and the rest were housewives. The average score of the BAI questionnaire in the studied women was 20.41±12.5 and the average score of the standard

questionnaire of CD-RISC was 86.75±15.37. It is worth mentioning that the two groups were similar in terms of age, education, and occupation, and no significant difference was found between the two studied groups in terms of age, education, and occupation (P<0.05).

No significant difference was found between education and occupation in the two studied groups (P>0.05; Table 1).

Table 1: Comparing the frequency distribution of education and occupation

			Group		P-value
			Interventional	Control	
Educational	Diploma and under diploma	Number	15 (60%)	10 (40%)	0.543
	Number	Number	9 (47.45)	10 (52.6%)	
Total		Number	24 (54.5%)	20 (45.5%)	
Job	Number	Number	18 (50%)	18 (50%)	0.259
	Number	Number	6 (75%)	2 (25%)	
Total		Number	24 (54.5%)	20 (45.5%)	

The results showed that the average age in the intervention and control groups were 33.67±5.78 and 4.53±30.5 years, and statistically no significant difference was observed between the two groups P=0.053.

The average score of the BAI questionnaire in the intervention and control groups was 11.4±21.21 and 13.95±19.45, respectively (P=0.648). Also, the average score of the standard questionnaire of CD-RISC in the intervention and control groups was determined to be 17.67±85.58 and 12.36±88.15, respectively (P=0.587), and no statistically significant difference was observed.

The changes in BAI in the patients of each group were examined during time intervals (Table 2). The results of the test showed a significant decrease in the score over time in general (P<0.001), but this difference between the two groups was not significant (P=0.62). There was also an interaction between the time and the type of intervention (P<0.001), where it significantly decreases in the intervention group after the intervention, but increases again. In the control group, a gradual decrease was observed from the beginning to the end of the study.

Table 2: Examining the changes in BAI in the studied patients in each group and the comparison between the two studied groups during periods

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilonb		
					Greenhouse-Geisser	Huynh-Feldt	Lower bound
Beck's anxiety questionnaire score (before the intervention - after the intervention - two-month follow-up)	0.579	17.49	2	0.001	0.704	0.748	0.5

Source		Type III Sum of Squares	df	Mean Square	P-value
Beck's anxiety questionnaire score (before the intervention - after the intervention - two-month follow-up)	Huynh-Feldt	955.23	1.5	638.57	0.001
Beck's anxiety questionnaire score * Groups	Huynh-Feldt	309.29	1.5	206.76	0.001

The subscale score of perception of individual competence in both intervention and control groups increased by 1.2 and decreased by 1.13 respectively during the study period. According to the result of the Mochli test, the test results were not found to be statistically significant (P>0.05), and the test results showed no change in score over time in general. Also, no significant difference was found between the two groups. Overall, the intervention did not affect the subscale score of the perception of individual competence (Table 3).

Table 3: Changes in the subscale of the perception of individual competence in the studied patients in each group during time intervals

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	Df	Sig.	Epsilonb		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Subscale of perception of individual competence (before the intervention - after the intervention - two-month follow-up)	0.935	2.16	2	0.34	0.939	1.0	0.5

Source	Type III Sum of Squares	df	Mean Square	P-value

Subscale of perception of individual competence (before the intervention - after the intervention - two-month follow-up)	Sphericity Assumed	44.82	2	22.41	0.102
Competence perception subscale Individual* groups	Sphericity Assumed	25.39	2	12.7	0.269

The total score of the subscale of trust in individual instincts to tolerate negative emotions in both intervention and control groups during the study period increased by 2.55 and decreased by 0.26 respectively. Due to the significance of Mochli's test result, the Huynh-Feldt correction factor was used for ANOVA analysis. The results of the test showed a significant increase in the score over time in general (P<0.05), but this difference between the two groups was not significant (P>0.05). There was also an interaction between the time variable and the type of intervention (P<0.05), indicating a significant increase in the intervention group after the intervention, while it decreased in the two-month follow-up. No significant changes were observed in the control group from the beginning to the end of the study (Table 4).

Table 4: Changes in the subscale of trust in individual instincts to tolerate negative emotions in the studied patients in each group during time intervals

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilonb		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
The subscale of trust in individual instincts to tolerate negative emotions (before the intervention - after the intervention - two-month follow-up)	0.829	6.02	2	0.049	0.854	0.923	0.5
Source		Type III Sum of Squares		df	Mean Square		P value

The subscale of trust in individual instincts to tolerate negative emotion (before the intervention - after the intervention - two-month follow-up)	Huynh-Feldt	58.78	2	31.85	0.012
The subscale of trust in individual instincts to tolerate negative emotion * Groups	Huynh-Feldt	44.03	1.85	23.86	0.034

Considering the significance of Mochli's test result, the Huynh-Feldt correction factor was used for ANOVA analysis (Table 5). The results of the test showed a significant decrease in the score over time in general (P<0.05), but this difference between the two groups was not significant (P>0.05). There was also an interaction between the time variable and the type of intervention (P<0.05), indicating a significant decreasing trend in the intervention group.

Table 5: Changes in the subscale of positive acceptance of change and safe relationships in the studied patients in each group during time intervals

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilonb		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
The total score of the subscale of positive acceptance of change and secure relationships (before the intervention - after the intervention - two-month follow-up)	0.823	6.25	2	0.044	0.849	0.918	0.5

Source		Type III Sum of Squares	df	Mean Square	P-value
The total score of the subscale of positive acceptance of change and secure relationships (before the intervention - after the intervention - two-month follow-up)	Huynh-Feldt	15.83	1.84	8.63	0.024
The total score of the positive acceptance of change and secure relationships subscales *	Huynh-Feldt	13.43	1.84	7.32	0.04

The intervention and control groups showed a significant decrease and increase (0.25 and 0.13) in fluctuation during the study period (Table 6) (P<0.05), but this difference between the two groups was not statistically significant (P>0.05). Furthermore, no interaction was found between the time variable and the type of intervention.

Table 6: Changes in the control subscale in the studied patients in each group during periods

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilonb		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Control subscale (before the intervention - after the intervention - two-month follow-up)	0.943	1.89	2	0.388	0.946	1.0	0.5

Source		Type III Sum of Squares	df	Mean Square	P-value
Control subscale (before the intervention - after the intervention - Two	Sphericity Assumed	25.06	2	12.53	0.034
Control subscale groups	Sphericity Assumed	1.36	2	0.68	0.824

The total score of the Connor-Davidson Resilience scale (CD-RISC) increased by 1.2 and decreased by 1.14 in the intervention and control groups during the study period, respectively. Due to the significance of Mochli's test result, the Huynh-Feldt correction factor was used to use ANOVA analysis. The test results showed a significant increase in the score over time (P<0.05), but this difference between the two groups was not significant (P>0.05). Also, there was an interaction between the variable of time and the type of intervention (P<0.05), where it increases significantly in the intervention group but decreases again, while the gradual process of reduction is observed from the beginning to the end of the study in the control group. Table 7).

Table 7: Changes in the total score of (CD-RISC) in the studied patients in each group during time intervals

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	Df	Sig.	Epsilonb		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
(CD-RISC) total score (Before the intervention - after the intervention - Two-month follow-up)	0.818	6.43	2	0.04	0.846	0.914	0.5

Source	Type III Sum of	df	Mean Square	P value

(CD-RISC) total score (Before the intervention - after the	Huynh-Feldt	368.58	1.83	201.66	0.016
(CD-RISC) total score * Groups	Huynh-Feldt	348.54	1.83	190.7	0.019

Discussion

There are discussions about the potential benefits of mindfulness exercises for parents on increasing general health and reducing negative emotions of parents, increasing positive emotions in the child-parent relationship, and changing the aggressive behavior of children. Also, the study of the impact of mindfulness-based programs has shown that these programs can increase the functioning of interpersonal relationships and the effectiveness of coping with stress in parents of children with psychological problems, including externalizing problems (17). Since it is recommended to provide health services online during the COVID-19 pandemic and even in the long-term horizon. Therefore, the current study aimed at investigating the impact of mindful parenting based on telepsychology on the anxiety and resilience of mothers of children aged 6-12 with ADHD during the COVID-19 pandemic. The results of the research showed that mindful parenting based on telepsychology had a positive effect on the anxiety and resilience of mothers of children aged 6-12 with ADHD during the COVID-19 pandemic. The findings of this research on the beneficial effects of mindful parenting are consistent with the results of other studies in this field. Yazdanimehr et al. showed the effect of 8 sessions of a cognitive-behavioral mindfulness program on reducing mothers' anxiety and depression. It has also been reported that mindful parenting has positive effects on children and reduces behavioral disorders such as anxiety, depression, isolation, ignoring rules, aggressive behavior, and social problems in ADHD children (18).

In this study, mindful parenting was based on telepsychology. No study in this field based on telepsychology has been reported, but one study reported that parents expect the period of parenting to be longer for better effects. A longer course or regular post-course sessions with a mindfulness coach may be helpful in the future to reinforce what they have learned and motivate them to continue their mindfulness practice. In this regard, it has been suggested to carry out conscious parenting and its exercises based on telepsychology (12). In explaining these results, mindful parenting through non-judgmental acceptance teaches parents to use a beginner's mind to observe their child and be sensitive to their child's conversational context, tone of voice, facial expression, and language. Mindful parenting helps parents to see the positive characteristics of their child in difficult situations. This knowledge reduces parents' anxiety and increases their resilience by reducing the intellectual preoccupation of parents (19).

Another study by Behbahani et al. aimed at the effectiveness of mindful parenting training on parenting stress, clinical symptoms, and self-efficacy of children with ADHD. 40 children and their mothers were examined in two control and intervention groups for 8 weeks by performing the method of mindful parenting, and each meeting was held in person for 1 hour per week. In this research, diagnostic questionnaires for attention deficit and hyperactivity disorder (SNAP), Abidin Parental Stress Questionnaire for children (PSI-SF36), and Morris Self-Efficacy Questionnaire (SEQ-C) were used. The results of this research indicate that mindful parenting training is an effective educational method to reduce the clinical symptoms of attention deficit

hyperactivity disorder, it has also been effective in increasing self-efficacy in children and reducing parenting stress in the parents of these children (2), which was in line with the present study.

Mindfulness training teaches mothers to look at themselves, their circumstances, and their children without preconceptions regarding their children's disorders. Likewise, the non-judgmental look of mothers leads to the improvement of their relationships with their children, helping to reduce their children's behavioral problems. If this relationship is distorted, it is an important factor in fueling children's problems. This educational method helps to improve the mother-child relationship. In explaining the effect of this method on mothers with children with attention deficit hyperactivity disorder, it is important to mention that this method improves the symptoms of people with this disorder in three parts. In the behavioral section, mindfulness training focuses on increasing the ability to control, which is effective in reducing problems caused by inattention in the child and mother, and on the other hand, increasing concentration in mothers helps to improve their response in stressful situations. In the same way, this training causes the reduction of uninformed responses in children and especially in mothers (20).

The findings of this study were similar to the findings of Singh et al. which showed the impact of mindfulness training on children with autism, mentally retarded children, and children with ADHD and their parents. This effect was observed in children by reducing the variables of irritability, aggressiveness, and stubborn behaviors. Also, an increase in positive social relations was seen in children. In mothers, positive effects were also obtained in the relationship with their children (21). Also, the findings of this research with the results of Bögels et al.'s study, where the effect of mindful parenting training on parents of children and adolescents with hyperactive attention deficit. It has been shown to reduce their symptoms. It is necessary to mention that the difference between this research with the study of Bögels et al. is only the teaching of mindfulness training to mothers and the lack of direct interventions for children suffering from hyperactivity disorder (22).

It has been stated that mindfulness is paying attention to the goal in the present without judging internal and external experiences. This state of mind is often learned through our different ways of doing things before, and its purpose is to create a different attitude and relationship with thoughts, feelings, and emotions, which includes having an attitude of acceptance and non-judgment because most of the challenges and tasks of raising a child can make parenting stressful. The reduction of internal energies of parents under stress and anxiety causes them to experience depression, fatigue, and nervous pains (24). Since the children did not receive Mindfulness training in this study, it is therefore suggested that in future studies, a combination of education be given to mothers and their children to increase the effect of the intervention and the stability of the effect. Moreover, there are different types of ADHD and the severity of different ADHD symptoms varies among these subgroups. Although it seems that mindful parenting has benefits for ADHD patients and their mothers, future studies should investigate the educational effect of mindful parenting on different subtypes of ADHD.

Conclusion

The findings of this study support the application of mindful parenting training to improve the anxiety and resilience of mothers of children with ADHD.

Acknowledgment:

Thanks to Dr. Fatemeh Asarian, Professor of the Department of Psychiatry, Kashan University of Medical Sciences, who did the utmost in guiding and solving the scientific problems of the research.

I express my gratitude to Dr. Ahmadvand, the head of the Department of Psychiatry of the University of Medical Sciences, for facilitating the implementation of his thesis.

I appreciate the efforts of Dr. Rahimi for his guidance in solving the statistical problems of this research.

Also, I sincerely thank Dr. Behbahani for providing mindfulness intervention to mothers.

Conflict of Interest: Funding:

"No conflicts of interest are disclosed by the authors."

Also, the authors of this article have not received any financial resources or grants from Kashan University of Medical Sciences and other affiliated institutions to conduct this study.

Ethical statements:

The authors of this article have acted according to the ethical protocols of Helsinki studies and the information of the patients participating in this study will remain completely anonymous and all this information will remain protected after the study. Also, all the participants in this study have filled the consent form to participate in this study and all the purposes of the study have been fully explained to the participants.

References

1- Association AP. Diagnostic and statistical manual of mental disorders (DSM-5®): American Psychiatric Pub; 2013.
2- Behbahani M, Zargar F, Assarian F, Akbari H. Effects of Mindful Parenting Training on Clinical Symptoms in Children with Attention Deficit Hyperactivity Disorder and Parenting Stress: Randomized Controlled Trial. Iranian Journal of medical sciences. 2018; 43(6):596-604.
3- Wolraich ML, Hagan JF, Jr., Allan C, Chan E, Davison D, Earls M, et al. Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents. Pediatrics. 2019; 144(4):e20192528.
4- Bertin M. Mindful Parenting for ADHD: a guide to cultivating calm, reducing stress, & helping children thrive. Oakland, CA: New Harbinger Publications, Inc.; 2015. x, 228 pages p.
5- Sadock BJ, Sadock VA, Ruiz P. Synopsis of psychiatry: behavioral sciences, clinical psychiatry: Wolters Kluwer; 2015.
6- Cortese S, Coghill D, Santosh P, Hollis C, Simonoff E. Starting ADHD medications during the COVID-19 pandemic: recommendations from the European ADHD Guidelines Group. The Lancet Child & Adolescent Health. 2020; 4(6):e15.
7- Dhiman S ,Sahu PK, Reed WR, Ganesh GS, Goyal RK, Jain S. Impact of COVID-19 outbreak on mental health and perceived strain among caregivers tending children with special needs. Res Dev Disabil. 2020; 107:103790.

8- Cortese S, Asherson P, Sonuga-Barke E, Banaschewski T, Brandeis D, Buitelaar J, et al. ADHD management during the COVID-19 pandemic: guidance from the European ADHD Guidelines Group. The Lancet Child & Adolescent Health. 2020; 4(6):412-4.

9- Duan L, Shao X, Wang Y, Huang Y, Miao J, Yang X ,et al. An investigation of the mental health status of children and adolescents in China during the outbreak of COVID-19. J Affect Disord. 2020; 275: 112-8.

10- Loades ME, Chatburn E, Higson-Sweeney N, Reynolds S, Shafran R, Brigden A, et al. Rapid Systematic Review: The Impact of Social Isolation and Loneliness on the Mental Health of Children and Adolescents in the Context of COVID-19. J Am Acad Child Adolesc Psychiatry. 2020; 59(11):1218-39 e3.

11- Zhang J, Shuai L, Yu H, Wang Z, Qiu M, Lu L, et al. Acute stress ,behavioural symptoms and mood states among school-age children with attention-deficit/hyperactive disorder during the COVID-19 outbreak. Asian J Psychiatr. 2020; 51: 10207.

12- Mah JWT, Murray C, Locke J, Carbert N. Mindfulness-Enhanced Behavioral Parent Training for Clinic-Referred Families of Children With ADHD: A Randomized Controlled Trial. J Atten Disord. 2020:1087054720925882.

13- Gasnier M, Pelissolo A, Bondolfi G, Pelissolo S, Tomba M, Mallet L, et al. [Mindfulness-based interventions in obsessive-compulsive disorder: Mechanisms of action and presentation of a pilot study]. Encephale. 2017; 43(6):594-9.

14- Fazli N., Sajjadian i. The effectiveness of mindful parenting education on child behavior's problems and parenting stress among mothers with attention-deficit hyperactivity disorder. knowledge & research in applied psychology. 2016; 17(3): 65-70.

15- Seddiqi Arfai F, Yazdakhasi A, Nadi Ravandi M. The predictability of resilience based on spiritual intelligence in students and religious scholars. 2013; 4(3).

16- Beck AT, Epstein N, Brown G, Steer RA. An inventory for measuring clinical anxiety: psychometric properties. Journal of Consulting and clinical psychology. 1988; 56(6):893-7.

17- Vinkers CH, van Amelsvoort T, Bisson JI, Branchi I, Cryan JF, Domschke K, et al. Stress resilience during the coronavirus pandemic. European Neuropsychopharmacology. 2020; 35: 12-6.

18- Yazdanimehr R, Omidi A, Sadat Z, Akbari H The effect of mindfulness-integrated cognitive behavior therapy on depression and anxiety among pregnant women: a randomized clinical trial. Journal of Caring Sciences 2016; 5:195.

19- Cassone AR. Mindfulness training as an adjunct to evidence-based treatment for ADHD within families. J Atten Disord. 2015; 19(2):147-57.

20- Rojas-Torres LP, Alonso-Esteban Y, López-Ramón MF, Alcantud-Marín F Mindfulness-Based Stress Reduction (MBSR) and Self Compassion (SC) Training for Parents of Children with Autism Spectrum Disorders: A Pilot Trial in Community Services in Spain. Children 2021; 8: 316.

21- Singh, N., Singh, A.N., Lancioni, G.E., Singh, J., Winton, A.S.W., & Adkins, A.D. (2010). Mindfulness training for parents and their children with ADHD increases the children's compliance. Journal of Child and Family Studies, 19, 157–174.

22- Bögels, S.M., Lehtonen A., & Restifo K. (2010). Mindful Parenting in Mental Health Care. Mindfulness. 1(2): 107-120.

23- Liu P, Qiu S, Lo HHM, Song X, Qian Q Applying for the Mindful Parenting Program Among Chinese Parents of Children with ADHD: A Randomized Control Trial. Mindfulness 2021; 12:1473-1489.

24- Sahu KK, Mishra AK, Lal A. Comprehensive update on current outbreak of novel coronavirus infection (2019-nCoV). Annals of translational medicine. 2020;8(6).