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RESEARCH

Reflections of the Mother's Mental Processes on the Symptoms Observed in Children During Coronavirus Pandemic

Koronavirüs Pandemisinde Annenin Ruhsal Süreçlerinin Çocuklarda Görülen Belirtilere Yansımaları

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Abstract

In this study, it was examined whether the pandemic process triggered the emergence of behavioral / emotional symptoms that were not observed in children before and the relationship between the levels of stress and hopelessness perceived by mothers and the emergence of these symptoms as well as their children's emotional functions. In addition, the social support received by mothers, the prolongation of the quarantine process, the effects of socio-economic conditions on these variables were examined. In the study conducted with 744 mothers during the pandemic period, Perceived Stress Scale, Beck Hopelessness Scale and Parent-Child Containing Function Scale: Not-Contained Relationship Subscale was applied. The findings indicate that the pandemic process significantly affects the mental processes of children and adolescents and that 58%of them have emotional and behavioral symptoms that were not observed before or increased. While 35.3%of the mothers who reported the emergence of symptoms mentioned the symptoms related to fear and loneliness, 25%stated that their children had sleep problems, 23%observed anger and irritability reactions in their children and 17%reported somatic symptoms. According to the results of the research, it is seen that there is a significant and positive correlation between not-contained mother/child relationship and the occurrence of symptoms in children. In connection with these findings, the hopelessness level and perceived stress of mothers with low containing function are also high, and are also associated with the occurrence of symptoms in children. It is observed that the most important factor affecting the mental processes of the mothers is "social support".

Keywords: Covid 19, coronavirus, pandemic, child, symptom

Öz

Bu araştırmada pandemi sürecinin çocuklarda daha önceden gözlemlenmeyen davranışsal/duygusal belirtilerin ortaya çıkışını tetikleyip tetiklemediği incelenmiş, annelerin algıladıkları stres ve umutsuzluk düzeyleri ile çocuklarının duygularını kapsayıcı işlevlerinin bu belirtilerin ortaya çıkışı ile ilişkisi değerlendirilmiştir. Bunun yanı sıra, annelerin aldığı sosyal destek, karantina sürecinin uzaması, sosyo-ekonomik koşulların bu değişkenlere etkileri incelenmiş, çocukların uzaktan eğitime uyum niteliğinin, annelerin duygu durumu ve kapsayıcılık işlevleri ile ilişkisi incelenmiştir. Pandemi döneminde 744 anneyle yürütülen çalışmada, Algılanan Stres Ölçeği, Beck Umutsuzluk Ölçeği ve Ebeveyn Çocuk Kapsayıcı İşlev Ölçeği: Kapsanamayan İlişki Alt Boyutu uygulanmıştır. Bulgular, pandemi sürecinin çocuk ve ergenlerin ruhsal süreçlerini önemli ölçüde olumsuz etkilediğine ve çocukların 58%'inde daha önceden gözlemlenmeyen veya artış gösteren duygusal ve davranışsal belirtiler ortaya çıktığına işaret etmektedir. Belirti ortaya çıkışını bildiren annelerin %35,3'i korku ve yalnızlık endişesi ile ilgili belirtilere değinirken, %25'i çocuklarının uyku sorunları yaşadıklarını, %23'ü çocuklarında öfke ve hırçınlık tepkileri gözlemlediklerini ve %17'si bedensel tepkilerle karşılaştıklarını belirtmişlerdir. Araştırma sonuçlarına göre, kapsanamayan ilişki ile çocuklarda belirti ortaya çıkışı arasında anlamlı ve pozitif yönde bir korelasyon olduğu görülmekedir. Kapsayıcı işlevi düşük annelerin umutsuzluk düzeyi ve algıladıkları stres de yüksek olup, yine çocuklarda belirti ortaya çıkışıyla ilişkilidir. Araştırmaya katılan annelerin ruhsal süreçlerini etkileyen en önemli etkenin "sosyal destek" olduğu görülmektedir.

Anahtar sözcükler: Covid-19, koronavirüs, pandemi, çocuk, belirti

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COVID-19 virus has rapidly overtaken the whole world and the situation has been declared as a global pandemic. Isolation measures have been taken in many countries with the spread of the virus. In parallel with these measures, maintaining social distance and isolating individually in the home environment have changed family life styles and habits significantly. The pandemic process, in which children have moved to distance education and parents have begun working from home, undoubtedly has brought new challenges for all family members.

Pre-pandemic studies have shown individuals' anxiety to rise during pandemics (Taylor et al. 2008). During the SARS epidemic, psychological responses such as high levels of stress, helplessness, and post-traumatic symptoms were common (Lau et al. 2005). Current studies point out that emotions such as fear, unhappiness, hopelessness, and despair felt due to the uncertainty of COVID 19 and illness, create an intense strain on the mental processes of individuals and staying at home increases the feelings of depression, health anxiety, financial anxiety and loneliness (Reger et al. 2020, Thunström et al. 2020, Xiao et al.2020). Similarly, increases in the number of cases have been reported to cause individuals to have higher perceptions of fear, anxiety, and stress at increasing levels (Rajkumar 2020).

Children are one of the main groups that have been significantly affected by traumatic events like pandemics and natural disasters (Schonfeld and Demaria 2015). Considering the studies conducted with children and adolescents, it has been shown that children and adolescents who experience extraordinary situations (epidemic, disaster, disaster, etc.) may experience more stress and trauma than adults, due to the lack of appropriate emotional responses and coping methods (Roussos et al. 2005). A study conducted in China applied an online survey to 359 children and 3254 adolescents between the ages of 7-18 during the spread of COVID-19 and reached the conclusion that 22.3% of adolescents showed clinical signs of depression. This percentage is higher than the estimated prevalence of adolescent depression in China (13.2%). According to this research, children's symptomatic levels of anxiety also increased after COVID-19 (Duan et al. 2020). In one study conducted on parents with children between the ages of 3-18 in Italy and Spain during the same period, 85.7% of parents reported their children to have changes in their feelings and behaviors. The most frequently reported changes in children are difficulty in concentrating (76.6%), boredom (52%), irritability (39%), hyperactivity (38.8%), restlessness (38%), loneliness (31.3%), defiance (30.4%), and anxiety (30.1%). Approximately 75% of parents reported feeling stressed about the quarantine situation (Orgiles et al. 2020). A study conducted on 384 parents with children between the ages of 5-15 during the quarantine in Bangladesh drew attention to the deterioration in children's mental health, stating that depression, anxiety, and sleep disturbance are seen in three levels in children: mild (30.5%), moderate (19.3%), and severe (7.2%) (Yeasmin et al. 2020).

In general, studies have emphasized that isolating at home and changes in lifestyle negatively impact children's mental health when teachers, peers, and family members in particular, do not provide enough emotional support to the children (Sprang and Silman, 2013). This finding underlines that support from people with whom we have close relationships is an important factor in dealing with anxiety. This source of support for the child is basically the person who performs the 'good enough mothering' and 'holding' function (Winnicott, 1962). Undoubtedly a tight link exists between the mother's and the child's mental processes. Winnicott's concept of "holding" and the "containing

function" defined by Bion are concepts used synonymously in the literature (Ogden, 2004). The psychic function of receiving, carrying, and transforming -making difficult emotional experiences tolerable for the child- has been called the mother's containing function (Bion, 1962). By maternal containing function -her ability to transform raw emotions- the child's feelings of discomfort are detoxified and reflected to the child as thinkable and bearable. A mother's emotional deficiency toward her child's anxiety can cause certain psychopathological symptoms. A relationship was found between insecure attachment and deficiency in mother's holding / containing function; and negative self-concept, sensitivity to loss, as well as increased risk of depression in childhood / adolescence (Armsden et al. 1990, Roelofs et al. 2006, Allen et al. 2007, Chorot et al. 2017). In another study, an inverse relationship was found between children's perceived containment and behavioral disorders (Schneider et al.2003).

During the pandemic, parental stress was found to be associated with the emergence of emotional and behavioral symptoms in children (Orgiles et al. 2020). In a recent study conducted during the pandemic, two out of five parents were found to meet the criteria for depression or anxiety disorder. According to the same study, it was reported that children of parents with moderate or severe anxiety had higher levels of anxiety compared to those of parents with mild anxiety. Parents' hopelessness about the future was also found to be positively associated with their children's anxiety levels. It is thought that the stress perceived by the mother during the pandemic period would make difficult for the child to cope with anxiety, and the inner tensions of the child that cannot be calmed by the mother would increase the risk of symptom formation. Conversely, a mother's containing function is based on the hypothesis that it would facilitate the child's ability to cope with anxiety and prevent symptom formation.

The purpose of this study is to examine the relationship between the symptom formation at children due to anxieties triggered during the pandemic period in Turkey, with their mothers' emotional state and the quality of the containing function in the mother-child relationship. For this purpose, post-pandemic symptoms in children were examined, as well as the relationship between mothers' levels of perceived stress, hopelessness and their containing functions. In addition, the effects of social support, home isolation, and socio-economic conditions on these variables were analyzed and comparisons were made.

Method

This research has been designed in accordance with the relational screening model. The study was initiated by obtaining permission from the Ministry of Health and the Maltepe University Ethics Committee (dated May 20, 2020 with decision #2020/04-04). The study group was reached using the snowball sampling method. The sample consists of mothers (N = 744) living in Istanbul whose children observed online distance education during the pandemic. The participants answered the questions with the help of a link containing an invitation that had been sent to them using the snowball method. Fifty-five mothers who filled out the questionnaires but were diagnosed with COVID 19 either by themselves or their first degree relatives are excluded from the sample because it was thought to affect the results. All the participants stated that they had not received nor needed to receive psychological help during this period. The demographic characteristics of the mothers in the study group and the children whose mothers

included them in the research are presented in Table 1.

Table 1. Demographic characteristics of the study group (N = 744)

Variables		N (n=744)	%
Level of Education	Pre/Primary/Middle School	35	4,7
	High School or equivalent	97	13,0
	Associate Degree	62	8,3
	Bachelor Degree	345	46,4
	Master's Degree	205	27,6
Economic Status	Upper	44	5,3
	Upper middle	37	5,0
	Middle	423	56,9
	Lower	275	37,0
Number of Children	Only child	342	46,0
	2 children	335	45,0
	3 children	50	6,7
	4 children	16	2,2
	5 children	1	,1
Children's gender	Girl (average age = 10)	351	47,2
	Boy (average age = 10)	380	51,1
	Unspecified	13	1,7
Child's Age Group	Attending preschool (average age = 4.8)	89	12,0
	Attending primary school (average age = 8.5)	361	48,5
	Attending middle school (average age = 11.6)	127	17,1
	Attending high school (average age = 14.4)	167	22,4
$M_{\text{Mothers' age}} = 41.67$	$\text{Range}_{\text{Mothers' age}} = 23\text{-}67$	$M_{\text{years married}} = 14.24$	

Measures

The personal information form has 99 questions and was created by scanning the relevant literature and taking experts' opinions. The first section of the form involves socio-demographic information, and the second section includes questions about observations of the children during the pandemic period.

In the study, after all the participants read the consent form and their permission was obtained, the demographic information form, Perceived Stress Scale (PSS), Beck Hopelessness Scale (BHS), and the subscale of uninvolved relations from the Containing Function Scale.

Perceived Stress Scale

Perceived Stress Scale (PSS-14), developed by Cohen, Kamarck, and Mermelstein (1983) and adapted to Turkish by Eskin, Harlak, Demirkıran, and Dereboy (2013), consists of 14 questions in total. Cronbach's alpha of internal consistency of this form was found to be .84 and the test-retest reliability as .87. This study has calculated the internal consistency coefficients for the stress/distress subscale as .82, for the perception of inadequate self-efficacy subscale as .82, and for the overall scale as .86

Beck Umutsuzluk Ölçeği

Beck Hopelessness Scale was developed by Beck et al. (1974) and adapted to Turkish culture by Seber (1991) and Durak and Palabıyıkoğlu (1994). The scale consists of 20

questions and three factors: emotions and expectations about the future, loss of motivation, and hope. Receiving high scores from the subscales and overall scores indicate a high level of hopelessness. Cronbach's alpha of reliability for the scale is .85. The item-total correlation scores range from .31 to .67 (Durak and Palabıyıkoğlu, 1994). This study has calculated Cronbach's alpha of reliability for the total score as .92, for the subscale of emotions and expectations about the future as .74, for the subscale of loss of motivation as .75, and for the subscale of hope as .73.

Parental Child Containing Function Scale

Parent-Child Containing Function Scale is a likert-type scale developed by Zabcı et al. (2018) that allows us to understand parental attitudes while raising children within the scope of psychoanalytic theory. This study uses the subscale of "uncontained relationship". This is because the other subscale of the scale also measure the mother's separation problem with her child, spouse relationship, and prescriptive approaches in a broader context. Since the mother's emotional presence or absence and her ability to transform negative emotions by providing emotional support to the child in the face of the child's anxiety and fear, which is the subject of this study, was questioned in the "uncontained relationship" subscale of this scale, it was deemed appropriate to use only this subscale of the scale in the study. Obtaining high scores for the factor of uninvolved relationships indicate low level of containing. Cronbach's alpha value for the factor was determined as .73. For the sample of this research, Cronbach's alpha value is found to be .79.

Procedure

The research started 1.5 months after the beginning of the pandemic and was conducted for a period of 1.5 months. In the study, parents were invited to the questionnaire by their acquaintances in accordance with the snowball sampling method. Data have been collected by sending a link electronically through Google Docs. It is thought that the implementation time varies between 25-30 minutes for each participant.

Statistical analysis

Data were first transferred from the Google Doc format to the program SPSS 21. Before starting the analysis of the research questions, normality, linearity and homogeneity of sample variances were tested. In the study, parametric techniques were used because the group had a normal distribution. In the process of analyzing the research data, the data were first organized at the participant and variable levels. The pandemic period represents a new era for all of us. Since the demographic characteristics of the sample are considered to include in the literature, firstly, the frequency tables of these variables were made. When the distribution in the frequency table was examined, it was seen that it allowed the comparison of the groups. In this context, the differences of the scale scores between the groups were tried to be determined by Independent t-test applied to the groups with normal distribution. Again, in the study, Pearson analysis, which is used for normally distributed groups, was used to determine the relationship between scale scores in each group (Büyüköztürk, 2002).

Results

Descriptive analysis findings have been prepared for the research variables (see Table 2).

Table 2. Descriptive analyses of the used scales

	n	Min.	Max.	*M*	*SD*
PCCFS subscale of uninvolved relationships	742	6.00	29.00	14.3895	4.89959
PSS Inadequate self-efficacy	701	7.00	32.00	16.9101	4.57342
PSS Perceived Stress	703	7.00	35.00	20.6927	5.13932
PSS Total score	694	14.00	67.00	37.6455	8.46031
BHS Total score	717	.00	18.00	3.9205	3.76482
BHS Subscale of feelings and expectations about the future	717	.00	5.00	2.1911	.65675
BHS Loss of Motivation	717	.00	8.00	1.8842	1.66100
BHS Subscale of Hope Level	717	.00	7.00	5.6597	1.66586

PCCFS: Parent-Child Containing Function Scale; PSS: Perceived Stress Scale; BHS: Beck Hopelessness Scale

The mothers who participated in the study were asked their views on the symptoms that emerged in children; these views are presented in Table 3 by gathering the given answers under four groups. Of the parents, 57.5% (n = 428) stated observing various symptoms in their children compared to before the pandemic, and 42.5% (n = 316) shared that they did not observe any symptoms. Of mothers with preschool children (n = 89), 63% (n =56) stated their children had different symptoms; of the mothers with primary school-aged children (n = 361), 59% (n = 213) stated the same; of the mothers with middle school-aged children (n = 127), 58% (n = 73) stated the same; and of mothers with high school-aged children (n = 167), 52% (n = 86) also stated these symptoms. The children's age groups did not cause a significant difference among the mothers' scores on the scales.

The participants who mentioned symptoms had emerged, 35.3% (n = 151) mentioned these symptoms to be related to fear and loneliness, 25.2% (n = 108) stated their children had experienced sleep problems, 22.7% (n = 97) had observed anger and irritable responses in their children, and 16.8% (n = 72) stated they encountered somatic reactions. Of the mothers who participated in the study, 57.7% (n = 56) indicated that they directly observed anger and irritable reactions (e.g., shouting, hitting). Other symptoms were grouped under the heading of "anger and irritable reactions" are opposing attitudes (22.7%, n = 22), stubbornness (10.3%, n = 10), and difficulty in obeying rules and getting along with siblings (9.3%, n = 9).

Under the heading of "sleep problems"; difficulty in transition to sleep (45.4%; n = 49), desire to sleep with parents (28.7%; n = 31), waking up at night (12%; n = 13), waking up too early (7.4% ; n = 8) and nightmares (6.5%; n = 7). "Under the heading of "symptoms of fear and anxiety", symptoms such as fear of illness (29.1%, n = 44), boredom (19.9%, n = 30), fear of death and asking questions about death (11.9%, n = 18), lack of attention (7.3%, n = 11), difficulty in separation from parents (7.3%, n = 11), fear of the dark (6.0%, n = 9), willingness to follow the same order (6.0%, n = 9), inability to stay alone (5.3%, n = 8), feeling sad or crying (4.6%, n = 7), and excessive meticulousness or orderliness (2.6%, n = 4).

Lastly, the heading of "somatic symptoms" contains hyperactivity (36.1%, n = 26), nail biting (26.4%, n = 19), allergies, eczema, constipation, diarrhea, headaches, nausea

(15.3%, n = 11), tics (8.3%, n = 6), eating problems (8.3%, n = 6), thumb sucking (4..2%, n = 3), and enuresis (1.4%, n = 1).

Table 3. Mothers' observations regarding the occurrence of symptoms in their children

Variables		n (=744)	%
Children's symptoms during the pandemic	They experienced emotional problems or behavioral changes	428	57.5
	They did not observe any change	316	42.5
		(*n* = 428)	100
Distributions of observed	Symptoms of Fear/Anxiety	151	35.3
Symptoms	Sleep problems	108	25.2
	Anger and Bad Temper	97	22.7
	Somatic reactions	72	16.8

The results from the independent t-test conducted for determining whether the scale scores of the mothers who participated in the study differentiate with respect to the symptoms their children have. According to the results of the analysis, the scores from the PCCFS's subscale of uninvolved relationships for mothers whose children showed symptoms (χ = 15.2, SD = 4.9) is significantly higher than mothers whose children did not show symptoms (χ = 13.2, SD = 4.6; p < .001). The scores from PSS's subscale of insufficient self-efficacy for mother's whose children show symptoms (χ = 17.78, SD = 4.48) is significantly higher than for mothers whose children showed no symptoms (χ = 15.73, SD = 4.3; p < .001). The scores of the mothers whose children showed symptoms in the stress perception subscale of the PSS (χ = 21.99, SD = 4.96) were significantly higher than mothers of children who did not show symptoms (χ = 18.96, SD = 4.85; p < .001). The total score from the Perceived Stress Scale for mothers whose children showed symptoms (χ = 39.82, SD = 8.28) are significantly higher than those for mothers whose children did not show symptoms (χ = 34.69, SD = 7.78; p < .001). The scores from BHS's subscale of future expectations (χ = 2.25, SD = .67) are significantly higher than those for mothers whose children show no symptoms (χ = 2.10, SD = .625; p < .01). The scores from BHS's subscale of loss of motivation for mothers whose children showed symptoms (χ = 2.13, SD = 1.76) are significantly higher than those for mothers whose children did not show symptoms (χ = 1.54, SD = 1.43; p < .001). The scores from BHS's subscale of hope for mothers whose children showed no symptom (χ = 5.98, SD = 1.46) are significantly higher than those for mothers whose children showed no symptoms (χ = 5.41, SD = 1.76; p < .001). The total scores from BHS for mothers whose children showed symptoms (χ = 4.76, SD = 4.2) are significantly higher than those for mothers whose children show no symptoms (χ = 3.07, SD = 3.06; p < .001).

The study group were also asked questions regarding evaluations of their own mental processes. These questions and answers are summarized in Table 4. According to the one-way ANOVA results performed for examining whether or not mothers' scores from the scales show a difference with respect to their response to the statement "I have sufficient social support," a significant difference is shown for the scores from PCCFS's subscale of uninvolved relationships (p < .01): The scores of mothers who think they completely feel social support (χ = 13.43, SD = 4.69) are lower than the scores from mothers who stated not feeling social support (χ = 16.11, SD = 5.53; p = .001, F = 4.88). The scores from PSS's subscale of insufficient self-efficacy show significant difference (p < .001): The scores of mothers who think they completely feel social support (χ = 14.79,

SD = 4.2) are lower than the scores of mothers who stated not feeling social support (χ = 19.29, SD = 4.42; p = .000, F = 23.2). Again, the scores from PSS's subscale of perception of stress also show significant difference (p < .001): The scores of the mothers who think they completely feel social support (χ = 18.40, SD = 5.57) are lower than the scores of mothers who stated not feeling social support (χ = 23.06, SD = 4.71; p = .000, F = 17.13). A significant difference is seen when looking at the total PSS scores (p < .001): The scores of mothers who think they completely feel social support (χ = 33.2, SD = 8.51) are lower than the scores of mothers who stated not feeling social support (χ = 42.35, SD = 7.8; p = .000, F = 26.72).

Table 4. Information regarding parents' own mental processes during the pandemic

Variables		n(=744)	%
I feel more productive and	I disagree	80	10.8
Hardworking	I sometimes agree	118	15.9
	I agree	209	28.1
	I strongly agree	156	21.0
	I completely agree	179	24.1
	No response	2	.3
I have sufficient social support	I disagree	67	9.0
	I sometimes agree	105	14.1
	I agree	252	33.9
	I strongly agree	169	22.7
	I completely agree	149	20.0
	No response	2	.3
I have a good relationship with my	I disagree	54	7.3
husband/child's father	I sometimes agree	43	5.8
	I agree	143	19.2
	I strongly agree	230	30.9
	I completely agree	272	36.6
	No response	2	.3
I am able to have time to myself	I disagree	132	17.7
at home	I sometimes agree	143	19.2
	I agree	171	23.0
	I strongly agree	159	21.4
	I completely agree	137	18.4
	No response	2	.3
How would you describe your	I have no anxiety	103	13.8
current anxiety level (1st phase	I'm somewhat anxious	349	46.9
of the pandemic)	I'm quite anxious	231	31.0
	I'm overly anxious	61	8.2

Their total scores from the Beck Hopelessness Scale also show a significant difference (p < .001): The scores of mothers who think they completely feel social support (χ = 2.5, SD = 2.6) are lower than the scores of mothers who stated not feeling social support (χ = 5.46, SD = 4.23; p = .001, F = 11.91). Additionally, a significant difference is detected in mothers' scores for BHS's subscale of loss of motivation (p < .000): The scores of mothers who think they completely feel social support (χ = 1.37, SD = 1.2) are lower than the scores of mothers who stated not feeling social support (χ = 2.37, SD = 1.78; p = .001, F = 8.09). No significant difference was found for the other variables, nor was a significant difference found in the other questions among the scales.Correlation analyses

were conducted to determine the relationships among the study's variables. The results are given in Table 5.

Table 5. Intercorrelations of the dependent and independent variables

Variables	PCCFS	PSSIS	PSSPS	PSS	BHS	BHSEoF	BHSLM	BHSH
PCCFS	1							
PSSIS	.223**	1						
PSSPS	.292**	.515**	1					
PSS	.297**	.854**	.886**	1				
BHS	.186**	.389**	.404**	.455**	1			
BHSEoF	-0.018	.129**	.131**	.149**	.408**	1		
BHSLM	.187**	.364**	.345**	.405**	.853**	.418**	1	
BHSH	-0.139**	-0.309**	-0.331**	-0.368**	-.880**	-.271**	-0.557**	1

PCCFS: Parent-Child Containing Function Scale- Subscale of uninvolved relationships; PSSIS: Perceived Stress Scale's Subscale of insufficient self-efficacy; PSSPS: Perceived Stress Scale's Subscale of perception of stress; PSS: Total score from the Perceived Stress Scale; BHS: Total score from the Beck Hopelessness Scale; BHSEoF: Beck Hopelessness Scale's Subscale of expectations of the future; BHSLM: Beck Hopelessness Scale's Subscale of loss of motivation; BHSH: The Beck Hopelessness Scale's Subscale of hope

As can be seen in Table 5, a positive moderate correlation (r = .30) exists between PCCFS's subscale of parent's uninvolved relationships and the total score from the Perceived Stress Scale and a positive weak correlation (r = .20) between PCCFS's subscale of parent's uninvolved relationships and the Beck Hopelessness Scale.

Discussion

The coronavirus pandemic has brought about closure of schools, social distancing, and home isolation. This situation is included among the variables that can cause high levels of psychological distress and anxiety in children and adolescents (Liu et al. 2020). It is stated that not being aware of the mental needs of children and adolescents, who make up 42% of the world population, may cause psycho-social problems in the long term (Dalton et al. 2020). This research examines the relationships between mothers' mental processes and the emotional and behavioral symptoms that can develop in children. The study is based on the hypothesis that the children will be affected more negatively by the pandemic process and will show more symptoms when the mother-child-containing relationship is deficient and the mother's perceived stress and hopelessness are high compared to the children whose anxieties are contained. Research findings support this hypothesis.

The results of the research, conducted in the three-month period after the beginning of the pandemic, indicate that some emotional and behavioral symptoms that were not observed before appeared in this period in approximately 58% of the children and adolescents. This high rate is similar to the findings in other studies conducted with children and adolescents during the pandemic process (Liang et al. 2020, Zhou et al. 2020).

Although approximately 65% of the mothers who participated in the research stated being sufficiently involved with their children, emotional and behavioral problems in children appeared at a higher-than-expected rate (58%). It is seen that the source of this finding is the quality of this care and that there is a significant and positive correlation between the children who were deprived of sufficent maternal containment and symptom formation in pandemic. The fact is well-known that children's ability to bear and overcome psychological difficulties is related to mothers' mental processes and

containing function. It is also known that the ability level of caregivers' coping with anxiety is among the most important factors determining children's reactions to crisis and / or trauma (Schonfeld and Demaria 2015). The mother who breaks down, gives aggressive reactions or leaves the child alone within an anxious state (e.g., time-out) in the face of emotional problems with which the child cannot cope with and gives negative reactions (e.g., behavioral maladjustment, crying, irritability, etc.), exposes the child to a uncontained relationship (Pedersen et al. 2014). Many studies emphasize the disadvantages of avoiding emotion-focused conversations in the home environment. Indeed, if these are encouraged, children can be prevented from trying to cope with negative emotions alone, and thus would not hesitate to share their feelings with their environment (Dalton et al. 2019, 2020). Additionally, some studies have indicated that parents often ignore the psychological problems their children experience during the pandemic (Pfeerbaum and North 2020).

According to the research results, hopelessness level and perceived stress of mothers with low containing function are also significantly higher. The negative effect of the pandemic on the mental processes of the mothers is thought to be evident in the study. The percentage of mothers who answered "I am not worried at all" during this period was only 14%. With reference to the findings of the study, it is seen that mother's level of hopelessness and perceived stress also increase the risk of symptom formation in children. According to many studies, parents' depressive affect and stress are known to cause many behavioral and psychopathological symptoms in children (Deater-Deckard 1998, Cummings et al. 2000, Baker et al. 2003).

A recent study emphasizes that the pandemic period worsens the mood in families (Ravens-Sieberer et al. 2020). The same study pointed out that 27% of the children and adolescents and 37% of the parents have increased the frequency of their disagreements at home. Another study found that parents' levels of anxiety and perceived stress have increased during the pandemic. The study also indicates that this situation increases the anxiety of the child and the risk of symptom formation (Yaesmin et al. 2020, Lee et al. 2021).

The most important factor affecting the mental processes of the mothers who participated in the study is the social support. The research has determined insufficient social support to cause insufficient self-efficacy. This has additionally been detected to cause an increase in perceived stress and hopelessness and a decrease in loss of motivation and containing function. Individuals staying away from social relationships or feeling deficient in terms of social support during the pandemic are thought to have put themselves into a more psychologically risky position (Karal and Gülbiçer 2020, Kaya 2020). In this study group, factors such as being able to take time for oneself, spousal relations, and feeling productive does make a significant difference.

When the symptoms reported by the mothers in the study were examined, no significant relationships between boys and girls or age groups were found. In addition, the emergence of negative emotional and behavioral changes in children is independent of the parents' economic status, education level and the number of children they have.

The most frequent emerging symptoms are fear, separation anxiety, attention deficit, sleep problems, anger and irritability, and somatic reactions (e.g., hyperactivity, thumb sucking, tics). In other studies examining the reactions of children in the pandemic, pre-school children were stated to commonly develop symptoms such as reluctance, attention deficit, thumb sucking, enuresis, and separation anxiety (Imran et al. 2020). In school-

age children, a marked increase is observed in symptoms of fear and anxiety, sibling rivalry, restlessness, aggression, psychosomatic symptoms, irresponsibility, attention deficit, sleep problems, and introversion (Olness et al. 2015, Imran et al. 2020, Jiao et al. 2020).

According to the research results, 35% of the negative symptoms that occur during the coronavirus pandemic is directly related to fear and anxiety: Fear of illness and death, inability to stay alone, crying, urge to follow the same order, excessive boredom, orderliness, and lack of attention. Similar findings have also been reported in other studies conducted during the pandemic (Jiao et al. 2020, Imran et al. 2020). Based on these findings, the pandemic period can be said to intensely trigger concerns about death and loss/loneliness in children and adolescents. Urge to follow the same order (e.g., wearing the same clothes, eating the same food, doing the same activity at the exact time) is considered as the cautions taken against the uncanny feelings created by uncertainty. Based on this, the urge for sameness and orderliness can be said to serve as a defense against uncertainty. Pandemics negatively affect children due to the fear of losing relatives and having to abandon their routines. This process causes children to feel more fragile and creates a need for certainty. In this context, researchers state that continuing routines in the same way relaxes children and makes them feel safe (Olness et al. 2015). In addition, the relationship between boredom, lack of attention and depressive anxiety (loss anxiety) is a prominent finding in the literature (Marcelli 1985). When all mental energy is invested in anxiety, children's level of concentration decreases and cognitive functions are also negatively affected by this increased anxiety (Chagnon 2006).

A 25% rise in sleep problems was observed in children who developed a symptom in this period; although sleep problems appear as a peculiar condition, they are closely related to the symptoms of fear and anxiety. The need to bond with parents increases in times of crisis, and children avoid being left alone (Schlack 2020). In many studies, sleep problems, which are usually considered as anxiety and depression symptoms, are reported among the prominent symptoms during the pandemic period (Jiao et al. 2020, Imran et al. 2020).

23% of the symptoms stated by mothers were behavioral problems such as anger and irritability, stubbornness, disobedience, failure to comply with the rules, and difficulties in getting along with siblings. Most of the research conducted during the pandemic has indicated that school-age children often exhibit behaviors such as having problems with siblings, anxiety, and aggression (Olness et al. 2015, Imran et al. 2020). Since their cognitive and social-emotional development has not yet been completed, children often express their inner tension by crying, resenting or hitting their parents, or acting aggressively towards the environment (Dyregrov 2008). Many researchers indicate that symptoms in children such as behavioral disorders, crises of anger (temper tantrums), running away from home, repeated incidents, and not recognizing rules are oftenly equivalents of depression (Arbisio 2003). From this point of view, it can be said that children whose anxieties are not sufficiently contained by their mother during the pandemic, manifest their lack of affect regulation by externalisation; temper tantrums, irritability and behavioral problems.

17% of the children who developed a symptom during the pandemic manifested somatic symptoms such as nail biting, thumb sucking, enuresis, constipation, diarrhea, headach, stomachache, nausea/vomiting, hyperactivity, eating problems, and tics. Similar

somatic symptoms emerged in children during the pandemic period have also been reported in other studies (Jiao et al. 2020, Duan et al. 2020). The relationship of mental processes with the body and the somatic expression of psychological concerns through the body has been an accepted approach for many years (Anzieu 1985). Many different somatic and functional disorders in children (e.g., headaches; sleep, digestive, and nutritional disorders; enuresis, hyperactivity) often emerge as a result of an underlying depressive anxiety (Arbisio 2003). This finding suggests that anxieties which overwhelm the self and are not contained are often expressed somatically.

In studies examining the symptoms that emerge in children during the pandemic period, it is recommended for parents to closely monitor their children's reactions during this period, be aware of reactions such as sleep problems or frequent nightmares and show positive psychological attitudes towards reducing the inner tension of the child by recognizing negative emotions (Jiao et al. 2020). In this context, it is stated in the literature that families need "behavioral vaccination", an additional support for how to regulate their children's emotions during the COVID-19 outbreak (Szabo et al. 2020, Usher et al. 2020).

Conclusion

As a result, this study has shown the pandemic process to have significantly affected the mental processes of children and adolescents. Conducted with a large population, this study indicates that 58% of children manifested previously unobserved emotional or behavioral symptoms during the pandemic, which is quite a high percentage. Significant relationships between the perceived stress, hopelessness level, and containing function of the mothers and the relative increase in anxiety / symptoms in children draw attention to the importance of the mother's mental processes and her capacity for a containing function during this period. Although anxiety and depressive symptoms showed an increase in %58 of children during the pandemic period, the fact that many children did not develop any symptom is thought to be related to the mental processes and the support of the parents (Lee et al. 2020). More research is needed to examine the effects of the pandemic period on children concerning the mother-child relationship in Turkish culture. In the light of the findings obtained from this study, the importance of supporting parents for the healthy psycho-social development of the child has emerged, especially in the case of maternal stress and hopelessness. It is believed that specialists working in the field of mental health have important responsibilities in this regard.

This study has several limitations. It is conducted using an online survey and the convenience sampling method. The lack of a structured face-to-face assessment was a limitation; only parents with internet access could participate in the study. It is also recommended to make arrangements to include parents with limited or no internet access in future studies. Furthermore, the study was carried out as a cross-section and the participants could not be monitored, thus any changes concerning of the study within the process could not be evaluated. Finally in this study, the effects of the coronavirus pandemic on children were examined only in connection with the mental processes of the mother; it would be beneficial if the samples of the studies planned to be carried out in future were composed of children and adolescents. Additionally, having study groups including also fathers is suggested, as well as comparative studies to evaluate the nature of anxiety among various age groups.

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