

# Which Psychiatric Symptoms of the Mother are Related with Preschool Child's Emotional and Behavioral Problems?

Selma Tural Hesapcioglu<sup>1</sup>,  
Mehmet Fatih Ceylan<sup>1</sup>,  
Betul Erdogan<sup>1</sup>, Gozde Kandemir<sup>1</sup>,  
Esra Cop<sup>2</sup>

<sup>1</sup>Yildirim Beyazit University, Faculty of Medicine,  
Department of Child and Adolescent Psychiatry,  
Ankara - Turkey

<sup>2</sup>Ankara Child Health Hematology and Oncology Hospital,  
Department of Child and Adolescent Psychiatry,  
Ankara - Turkey

## ABSTRACT

Which psychiatric symptoms of the mother are related with preschool child's emotional and behavioral problems?

**Objective:** In this study, it is aimed to explore mother's which psychiatric symptoms are related to child's internalizing and externalizing problems.

**Method:** The study group consisted of the mothers of 4-6 years old children, who were referred to Yildirim Beyazit University, Yenimahalle Training and Research Hospital, Child and Adolescent Outpatient Clinic. The control group consisted of 4-6 years old children who have never referred to a child and adolescent psychiatry clinic and their mothers. The mothers filled in the Child Behavior Check List 4-18 (CBCL/4-18), and Symptom Check List-90-R (SCL-90-R). The data were compared with the control group.

**Results:** The study sample consisted of 61 children in the case group, age-matched 55 control children and their mothers. The most common referral complaint was delayed speech (34.4%). There were clinically significant internalizing disorders in 29 (49.2%) children from the study group and 5 (9.4%) from the control group and significant externalizing disorders in 18 (30.5%) children from the study group and 3 (5.7%) from the control group. The correlation analysis revealed that all emotional and behavioral problems of the children were significantly related to the psychiatric symptoms of the mothers. Psychiatric symptom scores of the mothers of children with internalizing and externalizing problems were found significantly higher than the scores of the mothers of children without problems.

**Conclusion:** Mother's psychiatric symptoms are seen to be related to internalizing and externalizing problems of the child, independent of Psychiatric diagnosis. The fact that any psychiatric symptom of the mother would have an emotional or behavioral reciprocation on the child has to be taken into account by the clinician.

**Keywords:** Child, externalizing, internalizing, mother, preschool, psychopathology



## ÖZET

Okul öncesi çocuklarda duygusal ve davranışsal sorunlar annedeki hangi psikiyatrik belirtiler ile ilişkilidir?

**Amaç:** Bu çalışmada okul öncesi dönemdeki çocuğun yaşadığı içe yönelim ve dışa yönelim sorunları ile annedeki ruhsal belirtiler arasındaki ilişkinin araştırılması amaçlanmıştır.

**Yöntem:** Yıldırım Beyazıt Üniversitesi Yenimahalle Eğitim Araştırma Hastanesi Çocuk ve Ergen Psikiyatrisi polikliniğine getirilen 4-6 yaşları arasındaki çocuklar ve anneleri araştırma grubunu oluşturmuştur. Daha önce çocuk ve ergen psikiyatrisi başvurusu olmayan yaşça eşleştirilmiş çocuk ve anneleri kontrol grubunu oluşturmuştur. Anneleri tarafından Çocuklar için Davranış Değerlendirme Ölçeği 4-18 yaş (CBCL/4-18) ve Belirti Tarama Envanteri-90-R (SCL-90-R) doldurulmuş elde edilen veriler kontrol grubu ile karşılaştırılmıştır.

**Bulgular:** Yaş açısından eşleştirilmiş 61 olgu ve 55 kontrol olma üzere 116 çocuk ve annesi araştırmanın örneklemini oluşturmuştur. En sık başvuru yakınması konuşma gelişiminde gecikmedir (%34.4). Olgu grubundan 29 (%49.2) kontrol grubundan ise 5 (%9.4) çocukta klinik olarak anlamlı derecede içe yönelim sorunları, olgu grubundan 18 (%30.5) kontrol grubundan ise 3 (%5.7) çocukta klinik olarak anlamlı derecede dışa yönelim sorunları saptanmıştır. Yapılan korelasyon analizinde çocuktaki tüm duygusal ve davranışsal sorunların annedeki psikiyatrik belirtilerle anlamlı derecede ilişkili olduğu görülmüştür. İçe yönelim ve dışa yönelim sorunları sergileyen çocukların annelerinin sergilemeyenlere oranla tüm psikiyatrik belirti puanları anlamlı derecede daha yüksek bulunmuştur.

**Sonuç:** Annedeki psikiyatrik belirtilerin, çocukta hastalık tanısından bağımsız olarak hem içe yönelim hem de dışa yönelim sorunları ile ilişkili olduğu izlenmektedir. Annedeki her tür psikiyatrik belirtinin, çocuğunda duygusal ya da davranışsal bir karşılığının olduğu, hekimin klinik yaklaşımında üzerinde durması gereken bir konudur.

**Anahtar kelimeler:** Çocuk, dışa yönelim, içe yönelim, anne, okul öncesi, psikopatoloji

Address reprint requests to/ Yazışma adresi:  
Selma Tural Hesapcioglu,  
Yildirim Beyazit University, Faculty of  
Medicine, Department of Child and  
Adolescent Psychiatry, Ankara, Turkey

Phone / Telefon: +90-312-577-2065

E-mail address / Elektronik posta adresi:  
selmahesapcioglu@yahoo.com

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## INTRODUCTION

Psychosocial development of children is achieved through the interaction of biological predisposition and environmental acquisitions. The effect of the nuclear family is predominant in the preschool child rather than friendship and environmental effects (1,2). Especially mother-child interaction is the most important factor in the social and emotional development of the child (3-5). Any disruption in this relation stems from the early childhood psychopathological conditions (6), and may result in the appearance of problematic behaviors in the child (7). Furthermore, negative childhood experiences not only leads to behavioral problems but also increases the occurrence of several psychiatric disorders in the childhood—when the brain development is predominant—and causes permanent neurobiological changes (8,9).

Preschool period is considered to be at 3-6 ages. Preschool children may express their feelings verbally or non-verbally (10). According to Erikson (11), the child's linguistic and psychomotor development allows the child to search more his social and physical environment and to be more sociable. The children in this period are curious. They ask questions, examine the environment. In this period the child's initiatives should be supported, questions should be answered by paying attention, and options—that allow them to make meaningful choices based on their own decisions—should be created. Preschool children whose initiatives are hindered, who are criticized or punished may put themselves on a guilt trip by believing that they are acting wrongly (11,12).

In a period when the child is so sensitive to criticism and punishment, the problems experienced with the most interacting person (the mother) may affect the child's social-emotional and cognitive development (13). Besides the mother's personality traits, her psychological processes are also effective in her interaction with the child. Psychiatric symptoms of the mother may affect her relations with the child and some of them may cause some behavioral problems in the child (14).

The study by Licata et al. (15) has shown that the mother's psychopathology prevented maternal attachment style security and disrupted maternal sensitivity in the mother-child interaction. Focusing on the mother-child interaction can be a guide in understanding preschool children's problematic behaviors. Studies on this topic have usually focused on a certain psychiatric symptom of the mother (14,16,17).

In this study, we aimed to examine the relation of emotional and behavioral problems of preschool children with the psychiatric symptoms of the mother by analyzing psychiatric symptoms of the mother in a large scale. In this way, it will be possible to understand whether a certain psychiatric symptom or overall psychiatric conditions of the mother affects emotional and behavioral problems of the preschool child.

## METHOD

This is a cross-sectional study. The study group comprised 4-6 years old patients and their mothers that referred to Yildirim Beyazit University, Yenimahalle Training and Research Hospital outpatient clinic between September 1<sup>st</sup>, 2015 and February 1<sup>st</sup>, 2016. The control group was formed by Snowball Sampling from 4-6 years old relatives of the study group who have never admitted to child psychiatry clinic and their mothers.

Ethics Committee approval was obtained from Yildirim Beyazit University, Yenimahalle Training and Research Hospital Ethics Committee. Inclusion criteria for the study were the mother's being literate and volunteering to participate in the study. Exclusion criteria were mother's being illiterate. The study was explained to the parents and written consents obtained. The Child Behavior Checklist/4-18 (CBCL/4-18)—to identify emotional and behavioral problems of the children—and Symptom Checklist-90-R (SCL-90-R), to scan mothers' symptoms, were filled out by the mothers who accepted to take part in the study. Sociodemographic data were obtained from the mothers.

## Measures

**Socio-Demographic Data Form:** Socio-demographic data of the cases were obtained via a form made up by the authors. This form contained the data regarding the age and gender of the child, the reason for referral to the child psychiatrist and the mother's age.

**The Child Behavior Checklist/4-18 (CBCL/4-18):** This checklist has been formed to assess children's competencies and behavioral problems by the data obtained from parents (18). Erol et al. (19) have performed the study to adapt it for Turkish Children. The scale consists of 118 problem item, defining 20 competencies, behavioral and emotional problems. Problem behaviors are scored as 0, 1, or 2, depending on the frequency in the last six months. Two separate behavioral symptom scores (internalizing and externalizing symptom scores) and a Global problem score is derived from the scale. The internalizing group is made up of "Social Withdrawal", "Somatic Complaints", and "Anxiety/Depression", whereas, the externalizing group is composed of "Delinquent Behavior", and "Aggressive Behavior" subscales. Additionally "Social Problems", "Thought Problems", and "Attention Problems" which are not part of these two groups, are part of the CBCL/4-18. Internal consistency of the scale measured with Cronbach alphas were 0.82 for internalizing, 0.81 for externalizing, and 0.88 for Global Problems. Raw scores of the subscales are converted to T-scores in order to be compared with the scores obtained from the children with the same gender and age range. Cut-off scores for internalizing, externalizing and global problem subscales were measured. T-scores above 64 were considered to be in clinical range (16).

**Symptom CheckList-90-R (SCL-90-R):** SCL-90-R, which contains 90 items related to psychiatric signs and symptoms, has been developed by Derogatis et al. (20). The items are scored on a five-point Likert scale by scoring symptoms from 0 to 4. The scale is composed

of "Somatization" (12 items), "Obsessive Compulsive Signs" (10 items), "Interpersonal Sensitivity" (9 items), "Depression" (13 items), "Anxiety" (10 items), "Hostility" (6 items), "Phobic Anxiety" (7 items), "Paranoid Ideation" (6 items), "Psychoticism" (10 items) and an additional 7 item scale mainly related with sleep and nutritional problems. Global symptom score is measured by dividing total score by a number of items. The studies regarding the validity and the reliability of the scale in Turkey have been performed by Dag (21). The reliability of Turkish version ranges 0.63–0.83.

## Statistical Analysis

Data of the study were analyzed on SPSS 17.0 (IBM, Armonk, New York, USA) At first, Kolmogorov Smirnov test was utilized in order to check whether the continuous variables were normally distributed or not. The ages of the case and control group children and mother ages were compared with Mann Whitney U test, and genders with Chi-square test. Referral complaints were presented as number and percentage. CBCL/4-18 scores of the case and control group children, and mothers' SCL-90-R subscale scores were compared with Mann Whitney U test. Pearson and Spearman correlation analyses were used to examining the children's CBCL/4-18 emotional and behavioral problem scores. The difference between internalizing and externalizing symptom scores of case and control groups was compared with Chi-square test. In case if internalizing, externalizing, or global scores reached clinical significance than Mann Whitney U test was used to compare SCL-90-R mean subscale scores.  $p < 0.05$  was considered as statistically significant.

## RESULTS

Age-matched 61 case and 55 control, totally 116 children and their mothers formed the study sample. Mean age was  $50.4 \pm 13.3$  months for the case group and  $53.4 \pm 10.9$  months for the control group. There was no significant difference between case and control group children regarding the age ( $p = 0.28$ ;  $z = -1.068$ ), and gender ( $p = 0.57$ ;  $\chi^2 = 0.310$ ), whereas mother ages

were statistically different ( $p < 0.001$ ;  $z = -4.421$ ). Mean age was 29.3 years for case group mothers, and 33.0 years for control group mothers.

Most frequent referral reason in the case group was “delayed speech” ( $n = 21$ ; 34.4%). This was followed by “disability report application” ( $n = 14$ ; 22.9%), stubbornness-irritability ( $n = 7$ ; 11.4%), stuttering ( $n = 4$ ; 6.5%), hyperactivity ( $n = 2$ , 3.3%), school medical report applications ( $n = 2$ , 3.3%), hitting head on hard surfaces ( $n = 1$ , 1.6%), picking body hair ( $n = 1$ , 1.6%), picking lips ( $n = 1$ , 1.6%), blinking ( $n = 1$ , 1.6%), staring blankly ( $n = 1$ , 1.6%), wetting the bed ( $n = 1$ , 1.6%), introversion ( $n = 1$ , 1.6%), odd eating ( $n = 1$ , 1.6%), speech sound problems ( $n = 1$ , 1.6%), and frequent masturbation ( $n = 1$ , 1.6%).

When CBCL/4-18 subscale scores of case and control groups were compared, it was seen that the case group had significantly higher scores than the control group (Table 1).

Psychiatric symptom scores derived from SCL-90-R were compared between mothers of case and control groups. All of the mean subscale scores were significantly higher in case group mothers (Table 2).

The correlation analysis revealed that overall emotional and behavioral problems of the entire group of case and control children were significantly related to mothers’ psychiatric symptom scores derived from all subscales of SCL-90-R. The correlation of child’s emotional and behavioral problems with the mother’s psychiatric symptoms is presented in Table 3.

**Table 1: Comparison of mean CBCL/4-18 scores of case and control groups**

	Case		Control		z	p
	Mean	SD	Mean	SD		
Social Withdrawal	61.01	11.0	52.22	3.8	-5.59	<0.001
Somatic Complaints	55.98	9.3	51.13	3.1	-3.54	<0.001
Anxiety / Depression	60.28	10.1	53.86	4.9	-3.80	<0.001
Social Problems	59.42	9.9	51.39	2.7	-5.08	<0.001
Thought Problems	61.22	9.7	55.15	6.5	-3.43	0.001*
Attention Problems	63.00	10.9	53.47	4.8	-4.88	<0.001
Delinquent Behavior	57.55	9.4	53.60	5.4	-2.33	0.02**
Aggressive Behavior	59.72	9.6	53.71	5.2	-3.55	<0.001
Sex Problems	57.18	7.9	51.58	3.7	-4.49	<0.001
Internalizing Problems	61.33	13.2	47.84	11.3	-5.14	<0.001
Externalizing Problems	59.11	12.6	47.94	9.1	-4.82	<0.001
Total Problems	56.45	12.9	47.41	11.4	-3.62	<0.001

Mann Whitney U test is applied, SD: Standard Deviation, \* $p < 0.01$  is statistically significant, \*\* $p < 0.05$  is statistically significant

**Table 2: Comparison of the mean psychiatric symptom scores of the case and control group mothers**

	Case		Control		z	p
	Mean	SD	Mean	SD		
Somatization	0.91	0.75	0.44	0.55	-3.96	<0.001
Obsessive Compulsive	1.05	0.73	0.56	0.84	-4.29	<0.001
Interpersonal Sensitivity	1.07	0.78	0.46	0.81	-4.65	<0.001
Depression	0.99	0.65	0.51	0.60	-4.36	<0.001
Anxiety	0.69	0.62	0.31	0.46	-3.89	<0.001
Hostility	0.75	0.66	0.37	0.45	-3.34	0.001*
Phobic Anxiety	0.49	0.55	0.17	0.34	-3.85	<0.001
Paranoid Ideation	0.76	0.71	0.46	0.54	-2.66	0.008**
Psychoticism	0.43	0.43	0.18	0.27	-3.86	<0.001
Additional Symptoms	0.85	0.68	0.34	0.45	-4.79	<0.001
Global Score	0.82	0.56	0.39	0.44	4.61	<0.001

Mann Whitney U test is applied, SD: Standard Deviation, \* $p < 0.01$  is statistically significant, \*\* $p < 0.05$  is statistically significant

Twenty-nine children in the study group (49.2%) and 5 children in the control group (9.4%) had clinically significant internalizing symptoms ( $\chi^2=20.833$ ;  $p<0.001$ ). Mothers of these children had significantly higher scores in all SCL-90-R subscales than the mothers whose children did not have internalizing symptoms (Table 4).

Eighteen children in the study group (30.5%) and 3 children in the control group (5.7%) had clinically significant externalizing symptoms ( $\chi^2=11.315$ ;  $p<0.001$ ). Mothers of these children

had significantly higher scores in all SCL-90-R subscales than the mothers whose children did not have externalizing symptoms (Table 5).

When mean SCL-90-R subscale scores of the mothers whose children had clinically high Total Problem scores in CBCL/4-18 were compared, significant difference was observed in obsessive compulsive, interpersonal sensitivity, depression, anxiety, paranoid ideation and additional symptom scores (Table 6).

**Table 3: The correlation analysis of child's emotional and behavioral problems with mother's psychiatric symptoms**

	Somatization	Obsessive Compulsive	Interpersonal Sensitivity	Depression	Anxiety	Hostility	Phobic Anxiety	Paranoid Ideation	Psychoticism	Additional Symptoms	Global Score
Social Withdrawal	0.37**	0.43**	0.44**	0.39**	0.34**	0.41**	0.31*	0.28*	0.39**	0.39**	0.44**
Somatic Complaints	0.23*	0.24*	0.29*	0.24*	0.30*	0.19*	0.28*	0.28*	0.26*	0.29*	0.30*
Anxiety / Depression	0.40**	0.46**	0.44**	0.46**	0.35**	0.38**	0.27*	0.39**	0.38**	0.42**	0.47**
Social Problems	0.25*	0.29*	0.31*	0.26*	0.25*	0.25*	0.22*	0.17	0.24*	0.24*	0.30*
Thought Problems	0.39**	0.34**	0.37**	0.36**	0.39**	0.39**	0.34**	0.37**	0.39**	0.35**	0.42**
Attention Problems	0.41**	0.39**	0.37**	0.36**	0.40**	0.41**	0.31*	0.31*	0.35**	0.44**	0.43**
Delinquent Behavior	0.22*	0.28*	0.27*	0.23*	0.24*	0.27*	0.21*	0.23*	0.27*	0.32*	0.29*
Aggressive Behavior	0.28*	0.30*	0.32*	0.30*	0.26*	0.26*	0.14	0.28*	0.25*	0.28*	0.33**
Sex Problems	0.27*	0.24*	0.31*	0.29*	0.29*	0.23*	0.21*	0.27*	0.28*	0.27*	0.31*
Internalizing Problems	0.42**	0.41**	0.47**	0.45**	0.44**	0.41**	0.33**	0.38**	0.40**	0.40**	0.48**
Externalizing Problems	0.38**	0.40**	0.41**	0.42**	0.37**	0.37**	0.31*	0.34**	0.35**	0.34**	0.44**
Total Problems	0.29*	0.32**	0.37**	0.34**	0.32**	0.31*	0.26*	0.32*	0.31*	0.31*	0.37**

\* $p<0.05$  is statistically significant, \*\* $p<0.001$  is statistically significant, Pearson and Spearman correlation analyses are applied

**Table 4: Comparison of the children with and without clinically significant internalizing symptoms in terms of mothers' mean SCL-90-R subscale scores**

Clinically Significant Internalizing Symptoms	No		Yes		z	p
	Mean	SD	Mean	SD		
Somatization	0.52	0.58	1.07	0.82	-3.721	<0.001
Obsessive Compulsive	0.60	0.59	1.31	1.05	-4.041	<0.001
Interpersonal Sensitivity	0.57	0.60	1.27	0.84	-4.153	<0.001
Depression	0.58	0.58	1.17	0.72	-4.172	<0.001
Anxiety	0.38	0.48	0.82	0.67	-3.682	<0.001
Hostility	0.43	0.47	0.91	0.73	-3.528	<0.001
Phobic Anxiety	0.27	0.41	0.52	0.60	-2.193	0.028*
Paranoid Ideation	0.46	0.52	0.98	0.80	-3.485	<0.001
Psychoticism	0.22	0.29	0.53	0.48	-3.663	<0.001
Additional Symptoms	0.48	0.58	0.92	0.65	-3.928	<0.001
Global Score	0.46	0.44	0.97	0.61	-4.287	<0.001

Mann Whitney U test is applied, SD: Standard Deviation, \* $p<0.05$  is statistically significant

**Table 5: Comparison of the children with and without clinically significant externalizing symptoms in terms of mothers' mean SCL-90-R subscale scores**

Clinically Significant Externalizing Symptoms	No		Yes		z	p
	Mean	SD	Mean	SD		
Somatization	0.58	0.65	1.15	0.75	-3.45	<0.001
Obsessive Compulsive	0.67	0.64	1.46	1.17	-3.57	<0.001
Interpersonal Sensitivity	0.68	0.71	1.26	0.72	-3.41	<0.001
Depression	0.66	0.61	1.23	0.78	-3.18	<0.001
Anxiety	0.44	0.54	0.84	0.66	-2.85	0.004
Hostility	0.49	0.54	0.93	0.75	-2.69	0.007
Phobic Anxiety	0.29	0.45	0.58	0.58	-2.49	0.013
Paranoid Ideation	0.53	0.61	1.00	0.75	-3.03	0.002
Psychoticism	0.27	0.36	0.52	0.42	-2.98	0.003
Additional Symptoms	0.55	0.62	0.92	0.63	-2.85	0.004
Global Score	0.53	0.50	1.01	0.60	-3.52	<0.001

Mann Whitney U test is applied, SD: Standard Deviation

**Table 6: Comparison of mothers' mean symptom scores in terms of CBCL/4-18 total problem score**

Clinically Significant Total Problem Score	No		Yes		z	p
	Mean	SS	Mean	SS		
Somatization	0.63	0.68	0.92	0.77	-1.83	0.067
Obsessive Compulsive	0.72	0.68	1.20	1.17	-2.16	0.031*
Interpersonal Sensitivity	0.68	0.70	1.18	0.81	-2.79	0.005**
Depression	0.68	0.63	1.10	0.75	-2.60	0.009
Anxiety	0.45	0.55	0.74	0.63	-2.21	0.027*
Hostility	0.51	0.53	0.84	0.79	-1.79	0.073
Phobic Anxiety	0.31	0.45	0.49	0.61	-1.06	0.289
Paranoid Ideation	0.52	0.58	1.00	0.80	-2.85	0.004**
Psychoticism	0.28	0.36	0.45	0.46	-1.67	0.095
Additional Symptoms	0.55	0.62	0.89	0.63	-2.77	0.005**
Global Score	0.55	0.51	0.89	0.62	-2.61	0.009**

Mann Whitney U test is applied, SD: Standard Deviation, \*p<0.05 is statistically significant, \*\*p<0.001 is statistically significant

## DISCUSSION

In this study, it was aimed to investigate, which psychiatric symptoms of the mother are related to the emotional and behavioral problems of preschool children. As the research was designed in a cross-sectional structure, rather than setting up a cause-effect relationship, it was revealed how the psychological symptoms of mother and pre-school child affected each other.

It was observed that all SCL-90-R subscales and general symptom mean scores of the mothers of children with clinically significant internalizing symptoms such as social withdrawal, somatization, anxiety-depression, or externalizing symptoms such

as, disobedience, aggressive behaviors were significantly higher compared to other children. Previous studies have shown that mother's depressive symptoms, somatization, eating disorders, psychoticism, and anxiety lead to internalizing and externalizing problems in children (14,16,17). In this study, it is seen that there is a strong positive correlation between all the signs in SCL-90-R and the child's internalizing and externalizing problems.

One of the conclusions of the study is, mothers who have referred to the child psychiatry clinic for any reason related to the child at the ages of 4-6, are more likely to have any sign of mental disorder. This finding has been shown in previous studies (16). Mothers who cannot cope with the behavioral problems of the child due to

their own psychiatric complaints may need more professional help. Either the internalizing symptom scores—consisting of social withdrawal, somatic complaints, anxiety and depression subscales—or externalizing symptom scores, composed of suicidal and aggressive behaviors, of the children in the case group are higher than the control group children. The adverse effects of environmental risk factors and/or genetic predisposition may be more prevalent in these children.

It is seen in our study that the child's internalizing and externalizing symptoms are correlated with the mother's psychiatric symptoms severity. It has been reported that psychotherapy to mothers has been beneficial for the functionality of children at 7-18 years (22). In a follow-up study, it was shown that the child's internalizing behavior problems supported the positive parenting, which in turn contributed to the decrease of the internalizing symptoms, whereas the externalizing behavior problems hampered the positive parenting (23). Externalizing problems of the child disrupt the quality of parental care (24). Besides the basic needs of the child, the quality of the child-mother relationship affects the child's social, emotional and cognitive development for years (13,25). Therefore it looks necessary to identify children at risk at the earliest period as possible and to develop appropriate intervention programs which would include the parents as well. Studies indicate that the mother-child interaction, which is important in the child's psychological development, begins in the mother's womb. For example, mothers with a high level of anxiety are more likely to have babies who are hyperactive, irritable, at low birth weight, having eating and sleeping problems than mothers with low levels of anxiety (10).

Preschool children need routines for their care. They want constant routines in their environment. Thus the world becomes less frightening for them (26). Preschool children show their reactions to the changes in their lives as irritability. At the same time they appear to be active and out of control. Some adults perceive this as opposition. In fact, the uneasiness that the child exhibits stems from the increased anxiety of his inner world. These concerns adversely affect his play, school,

home life, and friendship (26). In this study, psychiatric symptoms are significantly higher in mothers of children with higher internalizing and externalizing symptom scores. Anxiety, depression, obsessions, or other psychiatric problems may have prevented the mother to supply a safe, routine environment for the child. Perhaps since the outset, these may be disturbing the quality of the relationship, and thus the child's mental balance, by preventing a safe mother-baby bond (15). Additionally, it is suggested that mothers with mental illnesses perceive the behavioral problem of their children more than it really is (27,28).

In this study, psychiatric symptoms in the mothers of children with externalizing problems are significantly higher. Externalizing problems of aggressive behavior and opposition seen in preschool children are out presentation of the aggression. In preschool children aggression may arise as a response to inhibition. The roots of aggressive behavior in children stems from genetic transmission, early experience, and behaviors learned from parents and teachers. Aggressive behavior may address the needs and wishes of pre-school children. Children with low speech skills express themselves more with aggression. Others may see aggression as a way of communication which makes it easier to reach the goal. For pre-school children aggression helps to express their independence as well (26).

In fact, most of the time, with the aggression that children express; rather than harming others, in the first place they aim to have their needs met. The important thing is what parents understand in this situation and what they do in response to this behavior (29). Mothers who are not mentally healthy are usually nervous, irritable, and intolerant to events (30). When children receive aggression from their parents in return for the aggression they exhibit, they learn it and this behavior consolidates, they satisfy their anger with anger. On the contrary, if they receive an effort to understand themselves in return for the aggression then, their ability to express themselves grows (29). Needleman et al. (31) reported that children of depressed mothers had 3 times more bursts of anger than the children of mothers with no depression.

The mother's depressive affect can change the child's behavior directly affecting the child's emotions. Depression can indirectly affect a child's behavior by disturbing the communication between the mother and the child. It has been shown that depressed mothers are more critical, have less approving and supportive approaches, and use strict disciplinary methods in their relations with their children (32,33).

Similarly, in our study in the mothers of children with clinically significant higher CBCL/4-18 total problem scores, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, and paranoid ideation subscale scores were found to be higher. This may indicate that mothers with obsessive, depressive, anxious, paranoid symptoms may have not tolerated the slightest disturbing behavior in their children or that they tend to control their behavior more.

The cross-sectional nature of this study inhibits the cause-and-effect relationship between the mother's psychiatric symptoms and the child's emotional and behavioral problems. Besides, the psychiatric symptoms of the father being not evaluated in the study is another limitation. A strong side of the study is the fact that the psychiatric examinations of the children have been made by child psychiatrists and they have not been evaluated just with scales. The

interview with the mother focused on the symptoms and no structured diagnostic interviews were conducted. In the study, symptoms were evaluated rather than the diagnoses.

In conclusion, for the children referring to the outpatient clinic with behavioral problems, mother and child together should be evaluated in terms of psychopathology. In this context, the need to address the importance of the mental health of the mother in terms of social mental health is once again acknowledged.

Contribution Categories	Name of Author
Development of study idea	S.T.H.
Methodological design of the study	S.T.H., M.F.C.
Data acquisition and process	S.T.H., M.F.C., B.E., G.K., E.C.
Data analysis and interpretation	S.T.H., B.E., G.K., E.C.
Literature review	S.T.H., M.F.C.
Manuscript writing	S.T.H., M.F.C.
Manuscript review and revision	S.T.H., M.F.C., B.E., G.K., E.C.

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