



# An examination of the relationship between alexithymia and somatic complaints of mothers and obsessive-compulsive features of children

## Annelerin aleksitimi ve somatik yakınmalar ile çocukların obsesif kompulsif özellikleri arasındaki ilişkinin incelenmesi

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### Abstract

**Introduction:** The study aims to determine the relationship of alexithymic features and somatization levels in their mothers to obsessive-compulsive features in children.

**Methods:** The sample of our research is composed of 173 mothers and 173 children who are in high school in Osmaniye province.

**Results:** Sociodemographic data form developed by the researcher, Symptom Check List (SCL-90 -R) (Somatisation subscale), Maudsley Obsessive Compulsive Questionnaire (MOCQ), and 20-item Toronto Alexithymia Scale (TAS-20) is used as a data collection tool.

**Discussion and Conclusion:** It was found that there was a strong positive correlation between MOCQ total scores of children with SCL-90's ( $r=0,776$ ) Somatization subscale scores and Alexithymia Total scores ( $r=0,613$ ) of mothers. Also, all Subscales of MOCQ scores are correlated with TAS-20 subscales and SCL-90 (Somatization subscale) except rumination subscale of MOCQ scales.

**Keywords:** Alexithymia; mothers; somatic complains; obsessions.

### Özet

**Amaç:** Çalışma, annelerinde aleksitimik özellikleri ve somatizasyon düzeylerinin, çocuklarda obsesif kompulsif özelliklere olan ilişkisini belirlemeyi amaçlamaktadır.

**Gereç ve Yöntem:** Araştırmamızın örneklemini Osmaniye ilinde lisede okuyan 173 çocuk ve onların 173 annesi oluşturmaktadır.

**Bulgular:** Veri toplama aracı olarak araştırmacı tarafından geliştirilen sosyodemografik veri formu, SCL-90-R (Somatizasyon alt ölçeği), Maudsley Obsesif Kompulsif Soru Listesi (MOKSL) ve 20 soruluk Toronto Aleksitimi Ölçeği (TAS-20) kullanılmıştır. SCL-90'lı ( $r=0,776$ ) somatizasyon alt ölçeği ve annelerin aleksitimi toplam puanları ( $r=0,613$ ) çocukların MOKSL toplam puanları arasında güçlü bir pozitif korelasyon olduğunu göstermiştir. Ayrıca, MOKSL puanlarının ruminasyon alt ölçeği hariç tüm alt ölçekleri, TAÖ-20 alt ölçekleri ve SCL-90 (Somatizasyon alt ölçeği) ile korelasyon göstermiştir.

**Sonuç:** Duygusal farkındalık eksikliği ve somatik yakınmaları olan annelerin, çocuklarıyla olan ilişkisi önemli ölçüde etkilenmektedir. Bu ilişki ekseninde, çocuklarda ki obsesif kompulsif özellikler, annelerin duygusal farkındalık eksikliği ve somatik yakınmaları ile pozitif yönde bir ilişki tespit edilmiştir.

**Anahtar Sözcükler:** Aleksitimi; anneler; somatik yakınmalar; obsesyonlar.

Obsessive-compulsive disorder (OCD) is clinically characterized by two symptom dimensions: obsessions that create distress and are often unwelcome, intrusive, repetitive, and unpleasant thoughts that deal with contamination, control or symmetry; and/or compulsive characterization with repetitive and undesirable behaviors, including compulsive

washing, home safety control, and object rearrangement. There are increasing neuropsychological investigations that examines whether or not OCD is related to cognitive deficits, in particular, perseverative thoughts and behaviors of the characteristics of the impairment, resulting from deficits in preventive control of responses.<sup>[1]</sup>



Given the diversity of behavioral phenotypes, it has been difficult to provide a psychological model of an OCD that explains all observed phenomenology. Psychodynamic studies have suggested that obsessions and compulsions are defensive reactions that try to suppress deep conflicts, particularly those involving anger.<sup>[2,3]</sup> Psychodynamic models have rarely been adequately tested because of the wide idiographic approach and the lack of alternative assessment methods for standardized measurement tools. At the same time, they have similar underlying conflicts with disorders that lack of specificity for certain phenomena seen in OCD and manifest with a different behavioral expression. Taylor and Jang<sup>[4]</sup> assessed the role of genetic and environmental factors, behavioral genetics, and contemporary cognitive-behavioral modeling for a biopsychosocial model of obsessions and compulsions (OC). However, they argued that the obsessions and compulsions originate from certain nonfunctional beliefs that the power of reasoning affects the development and severity of the obsessions and compulsions.

One of the potential areas for the development of OCD is parenting behavior. Certain types of interactions between parents and children may increase the likelihood of developing conflicting beliefs. Researchers have mentioned that parental approaches such as the application of rigorous rules of conduct (authoritarian parenting) and negligent parenting that may increase the sense of responsibility may lead to obsessive beliefs.<sup>[5]</sup> A potentially relevant component of both authoritarian and neglectful parenting is inadequate parental care. Parental care reflects the warmth, love, and support on children. Some researchers have shown that there is an inverse relationship between loving, understanding parenting and OCD symptoms and personality traits.<sup>[6-8]</sup>

While trying to understand the function of obsessions and compulsions, they began to investigate the role of emotion and inner experience in OCD with emotional awareness, response to arousal symptoms, and studies of control and tolerance in disturbing moods. There are some factors that suggest their investigation; in this population, some are OCD and others are specific to the experience of distress. Other disorders, including obsessions and repetitive behaviors, are associated with deficits in emotional awareness. For example, obsessions and repetitive behaviors are one of the distinguishing features of Autism Spectrum Disorders (ASD)<sup>[9,10]</sup> and ASDs are linked to deficiencies such as defining and expressing internal emotional states.<sup>[11-13]</sup> Some coercive behaviors are parallel to addictive behaviors; for this reason, if it can not be completed by coercion, there will be an obligation to carry out the behavior by increasing tension. Low tolerance of distress is associated with addictive behaviors.<sup>[14,15]</sup> Likewise, distress tolerance difficulty, cannot be controlled by a trigger in the development of compulsive behavior may be contributing to the situation. Also, evidence suggests that compulsive behaviors may serve to prevent increased levels of anxiety after encountering a trigger.<sup>[16]</sup> This suggests that emotion may play a role in some symptoms. Psychodynamic approaches have long empha-

sized the emotional-aversion function of OCD symptoms.<sup>[17]</sup>

Emotion regulation disorders are not defined as a disease. But it can be said that emotion regulation disorders are known to provide basis for many diseases. Taylor<sup>[18]</sup> even advocated the re-conceptualization of alexithymia as well as some disorders associated with difficulties in emotional regulation as "emotion regulation disorder"; which suggests that the interventions should focus more on the challenges of the regulations than on its consequences. Given the limitations of describing and expressing the emotional experience of alexithymia, one can say that one of the possible consequences of alexithymia is interpersonal dysfunction. Various conclusions have emerged concerning the interpersonal relations of alexithymic individuals. These may be mentioned as low level of relationship satisfaction,<sup>[19]</sup> confidence<sup>[20]</sup> and empathic anxiety level for others.<sup>[21]</sup> Grynberg et al.<sup>[21]</sup> emphasize that alexithymia is not only a feature that resides in and affects individuals but also is a characteristic that shapes the social environment.

Alexithymia was placed in the research literature by Peter Sifneos<sup>[22]</sup> forty years ago. Since then, research has been conducted on alexithymia in different areas such as cognitive neuroscience,<sup>[23]</sup> psychiatry<sup>[18]</sup> and psychoanalysis.<sup>[24]</sup> Alexithymic individuals have difficulty in describing their emotional state. These difficulties reflect a disability to cognitively process the emotional experience.<sup>[25]</sup> The further clarification of the relationship between alexithymia and physical symptoms has led to its inclusion in psychosomatic medicine, and it has gained wider scope over time.<sup>[26]</sup> Alexithymic people have complex feelings such as loneliness and anger in their interpersonal relationships, which establishes a structure that also determines the parental characteristics. Studies show that there is a relationship between alexithymia and childhood adverse events.<sup>[27,28]</sup> Furthermore, alexithymia has been associated with insufficient maternal care.<sup>[29,30]</sup> and insufficient social support.<sup>[31]</sup> However, causality is still uncertain. In one sense, alexithymic features may directly reduce social support by preventing the establishment of relationships because of lack of emotional recognition and expression. On the other hand, alexithymic individuals may not be able to provide social support adequately because they can not recognize the feelings of others and respond appropriately to them.<sup>[32]</sup>

It has been suggested that the absence of parental care or the adverse side effects such as intervention and excessive control are related to many psychiatric diseases.<sup>[33,34]</sup> A possible mediating factor in this regard may be alexithymia. Alexithymia is a personality structure that defines emotions, reducing the ability to engage with limited imagination and external oriented thought. Moreover, lower levels of accommodation are associated with the rejection of the patient, family dysfunction,<sup>[35]</sup> a lack of family cohesion,<sup>[36]</sup> as well as poorer relationship functioning.<sup>[37]</sup> These findings further highlight the importance of examining family factors specific to the development and maintenance of OCD in children.

In this study, we aimed to investigate the relationship be-

tween alexithymic features and somatic complaints of mothers with their childrens obsessive compulsive characteristics. The effects of mothers' relations with their own feelings on their children were examined.

## Materials and Method

### Participants

The universe of our research is composed of students and their mothers in Osmaniye province. The sample of the study consists of 173 children who were 9<sup>th</sup> year students and 173 mothers of these children in Osmaniye province.

### Research Design

This study was carried out to determine the relationship between the scores of the selected 173 adolescent people in Osmaniye and the scores they got from Maudsley Obsessive Compulsive Questionnaire (MOCQ), TAS-20 and SCL 90-R (Somatization Sub-Dimension) The model of the research is the relational screening. A researcher arrived at the volunteer students in high school in the Osmaniye region. Adolescents gave scales that were sealed in envelope to their mothers. After filling the enclosed envelopes were delivered to the guide teacher through the students. Although 192 students were reached, the mothers were unable to return and the suspicious envelopes were not included in the study. 173 students were administered the MOCQ scale and 173 mothers were given TAS-20 and SCL-90 R (Somatization subscale). Exclusion criteria were, mother's active psychopathology, and the absence of separation. Each questionnaire was completed within 15-25 minutes. The study was approved by local ethics committee of Üsküdar University.

### Measures

#### Sociodemographic Data Form

The universe of our research is composed of students and their mothers in Osmaniye province. The sample of the study consists of 173 adolescents who were studying at high schools and 173 mothers of these adolescents in Osmaniye province.

#### The Maudsley Obsessive Compulsive Questionnaire (MOCQ)

MOCQ was developed by Hodgson and Rachman.<sup>[38]</sup> It aims to determine the level and the type of obsessive-compulsive symptoms. There are five sub-dimensions of the scale. These are control, cleanliness, slowness, suspicion, and rumination. Scores from 0 to 37 are obtained from the scale, and when the scores are increased, obsessive-compulsive symptoms are increased. Turkish adaptation studies were carried out by Erol and Savaşır (1988). It has been determined that the validity and reliability of the analyzes are sufficient. The Turkish version of the questionnaire contains an additional seven questions from the Minnesota Multiphasic Personality Inventory (MMPI) about rumination. Thus, the Turkish version of the MOCQ provides a rumination sub-score, which is not included in the original version.

**Table 1. Socio-demographic characteristics of the mothers**

	Variable	n	%	Total
Mother education level	Uneducated	26	15.0	
	Primary	18	10.4	
	High school	81	46.8	
	College	48	27.7	
Profession	Officer	36	20.8	
	Housewives	70	40.5	
	Teacher	9	5.2	
	Police	2	1.2	
	Private sector	12	6.9	173
	Bank worker	7	4.0	
	Worker	35	20.2	
	Doctor	1	.6	
	Security guard	1	.6	
	Income	Low	59	34.1
Middle		106	61.3	
High		8	4.6	
Place of residence	Metropolis	28	16.2	
	City	89	51.5	
	Town	44	25.4	
	Village	12	6.9	

#### Toronto Alexithymia Scale (TAS-20)

The five-point Likert-type scale consists of 20 items.<sup>[39]</sup> There are subscales of difficulty in defining feelings (TAS-1), difficulty in identifying feelings (TAS-2) and Externally Oriented Thinking (TAS-3). High scores indicate high alexithymic level. Bagby et al. developed the scale.<sup>[39]</sup> Turkish adaptation was made by Güleç et al.<sup>[40]</sup> The total scale was found to be 0.78 for Cronbach alpha and 0.57-0.80 for subscales. According to confirmatory factor analysis results, the alexithymia structure has been shown to provide three factors.

#### Symptom Check List (SCL-90-R)

SCL-90, developed by Derogotis.<sup>[41]</sup> Turkish adaptation work was carried out by Dağ (1991). The aim of the scale development is to measure the level of negative reactions experienced. It consists of 90 items and has nine sub-scales. Validity and reliability were found to be at a sufficient level in the analyzes made (Dağ, 1991). A 12-item somatization sub-dimension was used in our study.

## Results

According to the demographic characteristics of 173 high school students participating in the survey, 78 (45.1%) were girl, and 95 (54.9%) were boy students (Table 1).

There was a significant positive correlation between the scores of the TAS-20 and MOCQ scores, which measures the obsessive-compulsive properties of children ( $r=.613$ ,  $p<.01$ ); There was a significant positive correlation between scores

**Table 2. Correlation values according to total scores of TAS-20, MOCQ and SCL-90 (Somatization Sub-Dimension) scales**

		TAS-20	SCL-90
MOCQ	Correlation	.613**	.776**
	p	.000	.000

MOCQ: Maudsley Obsessive Compulsive Questionnaire; TAS: Toronto Alexithymia Scale; SCL: Symptom Check List.

from SCL-90 scales (Somatization Sub-dimension) and scores from MOCQ ( $r=.776, p<.01$ ) (Table 2).

There is a significant positive correlation between the children's scores on the MOCQ checking subscale and difficulty in identifying feelings ( $r=.607, p<.01$ ), difficulty in describing feelings ( $r=.555, p<.01$ ), externally-oriented thinking ( $r=.582, p<.01$ ) subscales and SCL-90 (Somatization Sub-dimension) scores ( $r=.460, p<.01$ ) (Table 3).

There is a significant positive correlation between the children's scores on the MOCQ cleaning subscale and difficulty in identifying feelings ( $r=.680, p<.01$ ), difficulty in describing feelings ( $r=.712, p<.01$ ), externally-oriented thinking ( $r=.481, p<.01$ ) subscales and SCL-90 (Somatization Sub-dimension) scores ( $r=.670, p<.01$ ) (Table 3).

There is a significant positive correlation between the children's scores on the MOCQ slowness subscale and difficulty in identifying feelings ( $r=.288, p<.01$ ), difficulty in describing feelings ( $r=.510, p<.01$ ), externally-oriented thinking ( $r=.298, p<.01$ ) subscales and SCL-90 (Somatization Sub-dimension) scores ( $r=.546, p<.01$ ) (Table 3).

There is a significant positive correlation between the children's scores on the MOCQ doubting subscale and difficulty in identifying feelings ( $r=.454, p<.01$ ), difficulty in describing feelings ( $r=.351, p<.01$ ), externally-oriented thinking ( $r=.737, p<.01$ ) subscales and SCL-90 (Sub-dimension) scores ( $r=.508, p<.01$ ) (Table 3).

There is no correlation between the children's scores on the MOCQ rumination subscale and TAS-20 subscales and SCL-90 (Sub-dimension) scores (Table 3).

## Discussion

The relationship between the alexithymic and somatic affinities of the mothers with the obsessive-compulsive features of the students was examined in our study. We found that obsessive-compulsive features in children have a high correlation with mother's Alexithymia and Somatic scores.

The work speaks of the existence of many mechanisms in the formation of obsessive thoughts. In one of them, there is an especially authoritarian family and a neglected family in the pattern of family behavior.<sup>[5]</sup> The authoritarian family structure is represented with very high rejection and control, extreme behavioral rules.<sup>[5]</sup> Families with critical, controller, and rigid discipline may be associated with incompatible perfectionism<sup>[42,43]</sup> and the development of inflated responsibility beliefs.<sup>[5]</sup> Rejection typically refers to low parental warmth, acceptance and response levels.<sup>[44]</sup> Control is concerned with over-restriction / regulation of the child's activities, and at the same time worsens the child's dependence on the parents.<sup>[45]</sup>

Evidence for the presence of emotion regulation deficits in OCD is increasing, and Summerfeldt et al.<sup>[46]</sup> assumed that "incompleteness" could be conceptualized as a interpersonal sensory irregularity in which the integration of these two phenomena deteriorated.<sup>[47,48]</sup> For this reason, symmetry and order-related behavior may be an attempt to alleviate the disturbances caused by difficulties in handling complex external stimuli. Taken together, these data emphasize the need for future research on sensory-emotional processing in OCD.<sup>[49]</sup>

Insecure attachment is a risk factor for many psychopathologies, including depression and anxiety disorders.<sup>[50]</sup> It is possible for insecure attachment to form a framework for parent-child interactions, particularly for the development of obsessive beliefs, and the relationship between the overheating of threat and maladaptive perfectionism. According to attachment theory, a baby will seek proximity and warmth during times of distress.<sup>[51]</sup> Depending on the parent's reaction to the child's search for intimacy, the child will learn what it will expect from this relationship and create a special emotional connection regarding attachment.<sup>[51]</sup>

**Table 3. Correlation values according to subscales of TAS-20, MOCQ and SCL-90 scales (Somatization Sub-Dimension)**

	TAS-20			SCL-90
	Difficulty in identifying feelings	Difficulty in describing feelings	Externally-oriented thinking	
MOCQ				
Checking	.607**	.555**	.582**	.460**
Cleaning	.680**	.712**	.481**	.670**
Slowness	.288**	.510**	.298**	.546**
Doubting	.454**	.351**	.737**	.508**
Rumination	.092	.034	.114	.142

MOCQ: Maudsley Obsessive Compulsive Questionnaire; TAS: Toronto Alexithymia Scale; SCL: Symptom Check List; \*\*  $p<.01$ .

Janet (1904) defined the concept of the incompleteness broader than was defined by current researchers. Janet interpreted the incompleteness to include a range of experiences that included a person's sense of self, thoughts, feelings, actions, and ambiguities about the environment. Janet's conceptualization encompasses concepts that are known as alexithymia, depersonalization, derealization, and impaired psychological mindedness. "Deficiency" is defined as "sensory perfectionism".<sup>[52]</sup> Indeed, the template presented by the settled state and situational anxiety models<sup>[53]</sup> suggests a way of conceptualizing the relationship between persistent deficiencies and non-temporal experiences.<sup>[52,54]</sup>

It is a multidimensional structure that captures the capacity of an individual to distinguish and verbally express the inner state associated with the feeling of emotion. There are also difficulties in using the representational or symbolic forms of mental functions, as forced to understand and express the emotions of alexithymic individuals, which means "words for emotions".<sup>[18,55]</sup> For this reason, language and situations tend to have full meaning and limited imagination or fantasy life. Both can cause functional impairment. Difficulties in distinguishing somatic changes associated with emotional reactions make it difficult to detect the signal value of the emotions, called "somatic determinants," by Damasio<sup>[56]</sup> to describe patterns in everyday life and inform decision-making. Life becomes unpredictable, and the same difficulties may repeat, for example, emotional signs that point to danger, threat and fear cannot be easily distinguished. The limited capacity for symbolic thinking, imagination, and fantasy may intensify the feeling as if all experiences are real.<sup>[57]</sup>

Our study is important for the first time to study the relationship between alexithymic and somatic characteristics of the families and the obsessive features of children. Our results showed that the obsessive features of children are highly related to their mother's alexithymia and somatic characteristics. When we look at the relation of subscales, it is observed that all subscales of children's MOCL scale except for Rumination Subscale are in a medium-high relationship with their Alexithymic and Somatic subscales. It can be reached that the definition and expression of the feelings of the parents play an important role in the understanding of their feelings. Especially regarding the reasons for the increasingly important concepts of "incompleteness" and "incomplete experience", the mother may be an answer to the processes of recognizing the children's feelings, understanding them and showing their intimacy. Among the early childhood needs of the child are the main actors of realizing their feelings and coping with them. The basic structure that will enable them to do this is the ability to understand and distinguish the feelings of oneself and the child. If the children cannot distinguish their feelings and cannot make sense to them properly, it will cause the children's needs in this period not to be met. This may lead to emotions that cannot be understood later as "incomplete" and "incomplete experience" in itself. Thus, the use of ritualistic behaviors by children to cope with these feelings may cause

some defenses to overcome, rather than solving the problem.

There are various methodological limitations of this study. There was no comparison group. The cross-sectional nature of the data does not allow the causal nature of relationships. It is a limitation that it is done with healthy controls and not done with childhood OCD. Studying the emotional awareness of caregivers in understanding the causes of childhood OCD patients may be helpful in understanding the nature of obsessions.

The study we have done for this reason is an important step in the proper understanding of the origins of obsessions.

#### Key Points

- The current study is the first study to work on childhood obsessions and alexithymic features of mothers.
- Our findings show that alexithymic and somatic complaints of mothers are highly correlated with obsessive compulsive features of children. In this sense, understanding the role of sense and caregiver in understanding the developmental stages of obsessions may gain different perspectives.
- The present study supports the role of caregivers in the obsessive compulsive features of children.
- As a result of evaluations of the subscales, Externally Oriented Thinking has been observed in a higher relationship with control and cleanliness in terms of understanding and expressing emotions with suspicion.

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