

PERCEIVED PARENTING STYLES, SELF-AMBIVALENCE, COGNITIVE
AND EMOTIONAL REGULATION IN RELATION TO
OBSESSIVE-COMPULSIVE SYMPTOMATOLOGY

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ABSTRACT

PERCEIVED PARENTING STYLES, SELF-AMBIVALENCE, COGNITIVE AND EMOTIONAL REGULATION IN RELATION TO OBSESSIVE-COMPULSIVE SYMPTOMATOLOGY

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The main objective of this dissertation is to examine the factors contributing to the development and maintenance of general obsessive-compulsive symptomatology (OCS) in a community sample. On the basis of cognitive models (Salkovskis, 1985; Rachman, 1997; Clark, 2004), Guidano and Liotti's model of self-ambivalence, and Gross' (1999) process model of emotion regulation, the present study aimed to investigate the role of perceived parental styles, self-ambivalence, maladaptive appraisals, and emotion regulation strategies in predicting both overall OCS and subtypes of OCD. In line with these purposes, firstly, the Self-Ambivalence Measure (SAM; Bhar & Kyrios, 2007) was translated into Turkish and a pilot study was conducted in order to evaluate the psychometric properties of the instrument. Main study included 877 adults from different regions of Turkey. The factor analysis of the SAM revealed a three-factor solution, labeled as self-worth ambivalence, moral ambivalence, and public-self acceptability.

Additionally, the analyses showed that Turkish SAM had satisfactory psychometric properties. Regression analyses indicated that paternal overprotection, maternal rejection, self-worth ambivalence, public self-acceptability, OCD-related beliefs, and suppression were associated with the overall obsessive-compulsive symptoms. Finally, the results of model-testing analyses showed the mediator roles of self-ambivalence, obsessive appraisals, and suppression as an emotion regulation strategy between parental attitudes and OCS. The results of the current study were discussed in the light of the literature; and clinical implications, limitations, and directions for the future studies were presented.

Keywords: Obsessive-Compulsive Symptoms, Perceived Parental Styles, Self-Ambivalence, Obsessive Appraisals, Emotion Regulation.

ÖZ

ALGILANAN ANNE-BABA TUTUMLARI, BENLİK İKİLEMİ, BİLİŞSEL VE DUYGUSAL REGÜLASYON İLE OBSESSİF-KOMPULSİF SEMPTOMATOLOJİ ARASINDAKİ İLİŞKİ

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Bu tez çalışmasının temel amacı, genel obsessif-kompulsif semptomatolojiye (OKS) yol açan ve bunların devam etmesinde etkili olan faktörlerin toplumsal bir örnekleme incelenmesidir. Bu çalışmada, Obsessif-Kompulsif Bozukluğun bilişsel modelleri (Salkovskis, 1985; Rachman, 1997; Clark, 2004), Guidano ve Liotti (1983) tarafından geliştirilen benlik-ikilemi teorisi ile Gross'un (1999) duygu düzenleme süreçleri modeli temel alınarak algılanan anne-baba yetistirme tutumları, benlik ikilemi, işlevsel olmayan inançlar ve duygu düzenleme yöntemlerinin OKS'yi ve alt boyutlarını yordamadaki rolünün araştırılması amaçlanmıştır. Bu amaçlar doğrultusunda, öncelikle, Benlik İkilemi Ölçeği (BİÖ; Bhar & Kyrios, 2007) Türkçe'ye uyarlanarak, pilot çalışma ile psikometrik özellikleri incelenmiştir. Ana çalışma kapsamında, ilgili sekiz ölçek, Türkiye'nin farklı bölgelerinde bulunan 877 yetişkin örnekleme uygulanmıştır. BİÖ'ye uygulanan faktör analizi sonucunda benlik-değeri ikilemi, ahlaki ikilem ve sosyal

kabul olmak üzere üç faktör elde edilmiştir. Analizler, ölçeğin tutarlı ve güvenilir olduğunu göstermektedir. Yapılan hiyerarşik regresyon analizleri sonucunda, anneden algılanan reddedici tutum, babadan algılanan aşırı koruyuculuk, benlik-değeri ikilemi, sosyal kabul, sorumluluk/tehdit algısı, mükemmeliyetçilik/belirsizlik, düşüncenin önemi/kontrolü ile ilgili inançlar ve duygusal düzenleme yöntemi olarak bastırmanın genel OKS ile ilişkili oldukları gözlenmiştir. Buna ek olarak, algılanan anne-baba tutumlarının OKS ile ilişkisinde benlik ikilemi faktörlerinin aracı rolü ile benlik-ikilemi faktörlerinin OKS ile ilişkisinde obsessif inançlar ve bastırmanın aracı rolü analiz edilmiştir. Son olarak yapılan model testi sonuçları değerlendirildiğinde ise algılanan ebeveyn tutumlarından OKS'ye kadar doğrudan ve dolaylı etkilerin olduğu gözlenmiş ve benlik-ikilemi, obsessif inançlar ve duygu düzenleme yöntemi olarak bastırmanın aracı rolleri saptanmıştır. Sonuçlar, ilgili literatür doğrultusunda tartışılmış, çalışmanın sınırlılıkları belirtilerek bulgular sonucunda klinik uygulamalar ve ileride yapılacak olan çalışmalara yönelik öneriler sunulmuştur.

Anahtar Kelimeler: Obsessif-Kompulsif Bozukluk, Algılanan Ebeveyn Tutumları, Benlik İkilemi, Obsessif Bilişler/Değerlendirmeler, Duygu Düzenleme

To My Beautiful Family

&

To my inner child

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CHAPTER I

INTRODUCTION

Many people may experience any type of unwanted thoughts, images or ideas in their daily lives. For instance, Rachman and Silva (1978) found out that healthy college students had intrusive thoughts with obsessional themes from time to time. However, most people can dismiss these thoughts from their awareness; while others are less likely to ignore them and pay undue attention to them, which cause these thoughts to become more frequent, anxiety provoking, irrepressible, and turn into obsessions. Therefore, such thoughts are an important area of research because of their relatedness with Obsessive-Compulsive Disorder (OCD). Obsessive-Compulsive Disorder (OCD) is a relatively common disorder defined by “the presence of persistent, intrusive thoughts, images or impulses, named as obsessions, and by repetitive or ritualistic actions, named as compulsions” (DSM-V, American Psychiatric Association, 2013). The history of the concepts of obsessions and compulsions can be extended to 14th century. Between 14th and 16th century, it was considered that individuals experiencing obsessive thoughts were possessed by the devil and the treatment involved banishing the evil through exorcism (Aardema & O’Connor, 2007). At the beginning of the 19th century, obsessions and compulsions were described as unusual expressions of melancholia (Berrios, 1989). In the early 20th century, Freud explained obsessive and compulsive symptoms as the “manifestations of unconscious struggle for control over drives that are unacceptable at a conscious level”. In the 1960s, focus shifted to behavioral treatments for OCD with the growing importance of learning theories (Foa, Steketee, & Ozarow, 1985). In the recent past, cognitive factors and maladaptive appraisals received attention for both understanding intrusive thoughts and treating OCD (Frost & Steketee, 2002).

Cognitive models of OCD assumed that intrusions contribute to the development and maintenance of OCD (Wells, 1997). However, rather than the content of intrusions, the misinterpretations of these intrusions is proposed to be related to obsessive-compulsive symptomatology (Rachman, 1997; Salkovskis, 1985). According to cognitive models, OCD is described in terms of maladaptive beliefs about the likelihood of threat, importance and control of thoughts, uncertainty, inflated sense of responsibility, and perfection (Obsessive Compulsive Cognitions Working Group; OCCWG, 1997). Cognitive theories of OCD differ from each other on which schema they kept in the foreground while all describing the roles of cognition in the etiology of OCD. On the other hand, although cognitive models have added important information to the knowledge and treatment of OCD, they have been criticized for focusing largely on maintaining and exacerbating factors, and not paying proper attention to vulnerability factors associated with obsessive-compulsive symptomatology. Thus, this point seems to reveal a gap with regard to the etiology and maintenance factors of OCD. Within this standpoint, the current thesis aims to examine both cognitive, and other potential vulnerability factors in a comprehensive etiological model of obsessive-compulsive symptoms. By getting support from the literature as explained in the following sections, the role of parental attitudes, perception of self as ambivalent, cognitive appraisals of intrusive thoughts, and individuals' emotion regulation strategies on obsessive-compulsive symptomatology are examined.

In this section of the current thesis, literature review on clinical features and etiological theories of obsessive-compulsive disorder (OCD), cognitive appraisals underlying OCD, the role of emotion regulation strategies, self-ambivalence, and perceived parental rearing behaviors in the development of OCD is presented. This section also includes the aims of the study with the proposed model and the hypotheses. In the second chapter, pilot study conducted for the adaptation of the Self-Ambivalence Measure into Turkish is presented. This section follows with the sequence of sample characteristics, research instruments, procedure, results of the psychometric analyses, and the discussion. The third chapter includes the method section of the main study; the sample of the

main research, instruments utilized for the current study, procedure, and the statistical analyses. Then, the results of the statistical analyses are presented. Finally, the fifth chapter includes the discussion of the findings, limitations and clinical implications of the study, and suggestions for future studies.

1.1 Phenomenology of Obsessive-Compulsive Disorder

Obsessive-Compulsive Disorder (OCD) is “a severe, chronic psychiatric disorder that is characterized by the presence of obsessions and compulsions that interfere with functioning in daily life by bringing a great amount of distress to the patient’s life” (APA, 2013). In the Fourth Edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR), American Psychiatric Association included OCD under the anxiety disorders, where it has been categorized since the publication of the DSM-III. However, in the Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V), OCD is grouped as a separate diagnosis with a new chapter named as “Obsessive-Compulsive and Related Disorders” (DSM-V, APA, 2013). Because of having common features such as obsessive preoccupation and repetitive behaviors, in DSM-V obsessive-compulsive disorder was grouped with body dysmorphic disorder, and with conditions previously found in impulse control disorder including trichotillomania, hoarding disorder, and excoriation (skin picking) disorder in a separate and a new chapter (APA, 2013). As Table 1 presents, the DSM-V defines obsessions as “intrusive, unwanted thoughts, images or impulses that evoke distress or anxiety, and a strong motivation to suppress or neutralize their effects”. People having OCD recognize that these thoughts are the product of their own mind; however they are accepted as being ego-dystonic. Compulsions, on the other hand, are “repetitive overt (e.g. washing hands) or covert (e.g. undo or replace a bad thought) behaviors performed to reduce anxiety caused by obsessions or to prevent feared consequences”. Despite having the idea that compulsions are excessive and irrational, individuals with OCD could not resist performing compulsive rituals, and usually feel a loss of control over their compulsions (Clark & Beck, 2010). Although obsessions and compulsions are

related to each other, some patients exhibit only obsessions without compulsions because of internal neutralization strategies (Rachman, Shafran, Mitchell, Trant, & Teachman, 1996).

Table 1 Diagnostic Criteria for OCD (DSM-V; APA, 2013)

A. Presence of obsessions, compulsions, or both:

Obsessions are defined by (1) and (2):

1. Recurrent and persistent thoughts, urges, or impulses that are experienced, at some time during the disturbance, as intrusive and unwanted, and that in most individuals cause marked anxiety or distress.

2. The individual attempts to ignore or suppress such thoughts, urges, or images, or to neutralize them with some other thought or action (i.e., by performing a compulsion).

Compulsions are defined by (1) and (2):

1. Repetitive behaviors (e.g., hand washing, ordering, checking) or mental acts (e.g., praying, counting, repeating words silently) that the individual feels driven to perform in response to an obsession or according to rules that must be applied rigidly.

2. The behaviors or mental acts are aimed at preventing or reducing anxiety or distress, or preventing some dreaded event or situation; however, these behaviors or mental acts are not connected in a realistic way with what they are designed to neutralize or prevent, or are clearly excessive.

B. The obsessions or compulsions are time-consuming (e.g., take more than 1 hour per day) or cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

C. The obsessive-compulsive symptoms are not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.

D. The disturbance is not better explained by the symptoms of another mental disorder

Specify if:

With good or fair insight: The individual recognizes that obsessive-compulsive disorder beliefs are definitely or probably not true or that they may or may not be true.

With poor insight: The individual thinks obsessive-compulsive disorder beliefs are probably true.

With absent insight/delusional beliefs: The individual is completely convinced that obsessive-compulsive disorder beliefs are true.

Specify if:

Tic-related: The individual has a current or past history of a tic disorder.

However, 75 to 91% of the individuals reported having both obsessions and compulsions (Foa & Kozak, 1995). In order to meet the diagnostic criteria (DSM-V) for OCD, obsessions and compulsions should be regarded as time consuming (e.g. more than 1 hour a day) and should also interfere with the person's daily life activities. It is also highlighted that these features are not secondary to another mental disorder (APA, 2013).

The content of obsessive-compulsive symptoms is heterogeneous which means that OCD is composed of multiple symptoms and the clinical demonstration of these symptoms vary widely from one patient to another. Thus, this heterogeneity has led researchers to examine homogeneous subgroups of OCD patients in order to understand the variability in treatment response and to advance etiological models (McKay, Abramowitz, Calamari, Kyrios, Radomsky, Sookman, Taylor, & Wilhelm, 2004; Leckman, Dorothy, Boardman, Zhang, Vitale et al., 1997). Most of the researchers focused on deriving OCD symptom dimensions via factor analysis, using either symptom categories (e.g. Hodgson and Rachman, 1977; Abramowitz, Franklin, Schwartz, & Furr, 2003; Leckman et. al., 1997; van Oppen, Hoekstra, & Emmelkamp, 1995) or individual items (e.g. Pinto, Greenberg, Grados et. al., 2008). Similar results with little variations have been found within both approaches. Recent studies have generally yielded five symptom dimensions, including contamination/cleaning, symmetry/ordering, doubts about harm/checking, hoarding, and unacceptable thoughts related with mental rituals (Pinto, Greenberg, Grados et. al., 2008; Williams, Mugno, Franklin, & Faber, 2013).

Obsessive fear of contamination with washing/cleaning rituals, which is the most common symptom dimension of OCD, can take many forms such as fear of unseen dirt, germs, poisons, or toxins. Patients with contamination obsessions reported either feeling discomfort without fears of harm or with specific fear of harm to self or to others (Feinstein, Fallon, Petkova, & Liebowitz, 2003). The former wash or clean excessively in order to eliminate the feelings of contamination whereas the latter perform washing to prevent perceived danger.

Another common dimension is the harm/aggressive obsessions and checking compulsions. The patient having intrusive thoughts related to harm (e.g. fire, theft, flood) feels responsible for the occurrence of feared events, so performs checking rituals to decrease the perceived responsibility for the likelihood of the feared events, and to prevent damage to self and to others (Sookman & Pinard, 2002; McKay et al., 2004). Therefore, inflated sense of responsibility plays an important role in this type of obsession (Salkovskis, 1985). Somatic obsessions are another common obsession type that are associated with compulsive checking rituals and the need to have reassurance for having serious illness (Rasmussen & Eisen, 1989). Furthermore, McKay et. al. (2004) reported that 25% of OCD patients had obsessions without overt compulsions. Sex, harm/violence, and religion are the common obsessional themes in this category of patients. These patients suffer from fears of committing an unacceptable sexual or aggressive thought/ act towards others, which is accompanied by asking significant others frequently for reassurance, trying to control such thoughts, washing, and checking (Freeston, Leger, & Ladouceur, 2001; Steketee, 1999). Another type of obsessive thoughts include the need for symmetry, order, or exactness (McKay et. al., 2004). These patients try to have objects or events in a certain order, to do certain activities in an exact fashion, or to do things exactly symmetrical. Their anxiety is related to time pressure and their greatest fear is doing something wrong (Rasmussen & Eisen, 1989). Furthermore, minority of OCD patients suffer from hoarding obsessions which is defined as the difficulty of discarding items that are worthless to others. It was suggested that when compared to other OCD patients and other anxiety disorders, patients with hoarding subtype experienced higher anxiety, depression with poorer insight that led to severe psychosocial consequences (Frost, Steketee, Williams, & Warren, 2000). Frost and Hartl (1996) reported that obsessional fear of losing items, excessive attachment to possessions, deficits in decision making and organization, perfectionism, procrastination, and behavioral avoidance were the common features of OCD hoarders. In terms of the prevalence of different OCD symptom subtypes in a patient sample, Ball, Baer, and Otto (1996) found out that 75% of the patients

expressed cleaning and/or checking rituals while only 12% of them showed multiple rituals including symmetry, hoarding, and exactness symptoms. Similarly, Fullana et. al. (2010) reported that harm/checking was the most prevalent dimension among 2804 adults with 8%, followed by somatic obsessions (5%) and symmetry/ordering (3%). Another study investigating the clinical features of obsessive-compulsive disorder in a sample of Turkish patients with OCD using the Structured Clinical Interview for DSM-III-R revealed that the most prevalent obsession themes were dirt contamination themes (53.3%) (Eğrilmez, Gülseren, Gülseren, & Kültür, 1997). These findings were supported by Karadağ, Oğuzhanoglu, Özdel, Ateşçi, and Amuk (2006) showing that the most commonly occurring obsessions were contamination (56.7%), aggression (48.9%), and somatic obsessions (24.1%), followed by obsessions related with religiosity (19.9%), symmetry (18.4%), and obsessions including sexual images (15.6%). In conformity with the findings of Grabe, Meyer, Hapke, Rumpf, Freyberger et al. (2000), it can be concluded that types and frequencies of obsessions and compulsions are consistent across cultures and time.

Prior to the publication of DSM-III in 1980, the diagnosis of OCD was based on vague clinical judgments and the prevalence of OCD was thought to be as low as 0.05% in the general population (Rasmussen & Eisen, 1992). However, with the development of structured or semi-structured instruments, recent epidemiological studies revealed that it is much more prevalent than previously thought (Karno & Golding, 1991; Fontenelle, Mendlowicz, & Versiani, 2006; Torres & Lima, 2005). In 1988, the Epidemiological Catchment Area Study (ECA) in five U.S. communities reported a lifetime prevalence between 1.9% to 3.3% (Karno, Golding, Sorenson, & Burnam, 1988). Likewise, a cross-national study conducted in seven countries (e.g. USA, Canada, Puerto Rico, Germany, Taiwan, Korea and New Zealand), using DSM-III criteria, estimated the lifetime prevalence of OCD as ranging from 1.9% to 2.5% (Weissmann et. al., 1994). Moreover, a nationally representative survey, using data from National Comorbidity Survey Replication (NCSR), assessed U.S. adults for lifetime OCD with the DSM-IV criteria and reported 2.3% for lifetime prevalence and 1.2% for

annual prevalence. Additionally 28.2% of the participants reported experiencing either obsessions or compulsions at some time in their lives (Ruscio, Stein, Chiu, & Kessler, 2010). Although there are certain concerns about the diagnostic methods and differences between clinic and population-based estimates, these prevalence studies suggest that OCD is not rare in the community.

Surveys with community sample suggested the age of onset of OCD as during early adulthood (Karno & Golding, 1991; Angst et. al., 2004; Ruscio, Stein, Chiu, & Kessler, 2010) while research with clinical samples reported the onset of age as adolescence (Flament, Rapoport, Whitaker, Davies, Kalikow, & Shaffer, 1988; Rasmussen & Tsuang, 1986). For instance, Rachman and Hodgson (1980) reported 65% of their community sample had onset prior to age 25; and in a recent study conducted with U.S. adults mean age of onset was found as 19.5 (NCS-R; Ruscio, Stein, Chiu, & Kessler, 2010). Likewise, Fineberg et. al. (2013) reported that OCD was an illness of late childhood and early to middle adulthood.

In addition to affecting adults, OCD is also observed during childhood. Diler and Avci (2002) reported that 50% of the patients had the onset of symptoms occurring in childhood; while another study revealed that two thirds of the OCD patients had the onset before the age of 15 (Rapoport, 1990). Moreover, Fontenelle, Mendlowicz, and Versiani (2006) suggested that vulnerability to the development of OCD increased during periods of late adolescence. It was suggested that the age of onset of the illness affects the clinical features of OCD and also therapeutic response of the patients. For instance, Sobin, Blundell, and Karayiorgou (2000) compared early onset adult OCD patients with late onset patients. They showed that number, severity, and content of obsessions and/or compulsions were criteria that differed early onset OCD patients from late onset OCD patients. Therefore, researchers agreed on that patients with early onset OCD might show a more severe subtype of this disorder (Fontenelle, Mendlowicz, Marques, & Versiani, 2003). Recently, Ruscio and his colleagues (2010) reported that the majority of the early onset cases include males, with the onset before age 10. Consistent with these findings, being male was suggested to be a risk factor for earlier age of onset, more insidious onset, and greater

chronicity of the course (Wang et. al., 2012; Bogetto, Venturello, Albert, Maina, & Ravizza, 1999). In addition to being male, genetic component was also found to be a risk factor for the early-onset (Walitza et. al., 2010; Busatto et. al., 2001). Gender difference is also apparent in OCD symptom dimensions and the prevalence of the disorder. Epidemiological studies indicated a slightly higher lifetime prevalence rate for female patients (Castle, Deale, & Marks, 1995; Weismann et. al., 1994; Karno, Golding, Sorenson, & Burnam, 1988). On the other hand, in clinical samples, males and females were reported to have an equal lifetime prevalence in terms of OCD (Steketee, 1999). In terms of symptom clusters, female patients were more likely to show contamination/cleaning obsessions, related compulsions and hoarding symptoms (Torresan, Ramos-Cerqueira, Shavitt, Rosario, de Mathis, & Miguel, 2013; Mathis et. al., 2011; Stein, Andersen, Overo, 2007); while male patients were more likely to present sexual/religious subtypes, symmetry obsessions and checking rituals (Torresan et. al., 2013; Karadağ, Oğuzhanoğlu, Özdel, Ateşçi, & Amuk, 2006; Leckman et. al., 1997).

The onset of OCD can be either gradual or acute as a response to a stressor (Clark & Beck, 2010). Traumatic life events (Cromer, Schmidt, & Murphy, 2007); critical/stressful experiences related to changes in demands of life like significant losses (Albert, Maina, & Bogetto, 2000; Salkovskis, Shafran, Rachman, & Freeston, 1990); developmental changes like pregnancy or childbirth (Abramowitz, Schwartz, Moore, & Luenzmann, 2003); and physical illness (Jenike, 2001) can lead to the onset of OCD. Additionally, the content of the obsessions are said to be shaped and worsened by the personal experiences, sociocultural factors, and critical life events (de Silva, 2003; Rachman & Hodgson, 1980).

On the other hand, the course of the illness is variable in a spectrum, ranging from chronic to episodic. Most of the OCD patients reported waxing and waning of symptoms over a lifetime (Clark & Beck, 2010). However, Rasmussen and Eisen (1992) proposed that the course of OCD can be examined in terms of four categories, including “episodic” (at least one circumscribed interval, six

months, free after the OCD onset); “continuous” (stable symptomatology); “chronic” (fluctuating symptomatology; symptoms were waxing and waning without complete remissions); and “deteriorative” (progressive worsening of the illness result in independent existence of the patient). Earlier retrospective follow-up studies of OCD revealed that most of the patients represent a chronic course and very low spontaneous remission rates (Foa & Kozak, 1996; Eisen, Goodman, Keller, Warshaw, DeMarco, Luce & Rasmussen, 1999). Correspondingly, Skoog and Skoog (1999) examined the long-term course of OCD patients with a 40 year follow-up. Results showed that only 20% of them showed complete symptom recovery. They concluded that the likelihood of full remission of OCD is low despite receiving adequate pharmacotherapy and effective psychotherapy. Since in most of the cases patients remain symptomatic, it is not surprising that the illness impairs the quality of life of both patients and their family members. Depending on the severity, occupational, social and marital functioning of patients were negatively and severely affected by obsessive-compulsive symptoms (Adam, Meinschmidt, Gloster, & Lieb, 2012).

Furthermore, the comorbidity with other disorders makes OCD cases even more severe and complex. A substantial body of data from clinical and epidemiological studies revealed that OCD has a significant comorbidity with both Axis I and Axis II disorders. For instance, National Comorbidity Survey replication (Ruscio et. al., 2010) reported that 90% of participants with lifetime OCD met criteria for another lifetime DSM-IV disorder. According to this study, the most common comorbid disorders are anxiety disorders (75.8%), followed by mood disorders (63.3%), impulse-control disorders (55.9%), and substance use disorders (38.6%). Likewise, Klein Hofmeijer-Sevink et. al. (2013) supported these results with a clinical sample showing that 55% of OCD patients suffered from at least one comorbid disorder while 78% suffered from lifetime comorbidity. Anxiety (37%) and mood disorders (24%) were found to be the most prevalent comorbid disorders whereas psychotic disorders, eating disorders, and substance use disorders were less common with a prevalence of 10%. Presence of

depression worsened the obsessional symptoms; therefore reduced the quality of life of the patients (Clark & Beck, 2010).

Additionally, it is also common for OCD patients to have personality disorders. In a study focusing on the comorbidity OCD and personality disorders, 53% of OCD patients met the criteria for a personality disorder, with Cluster C (anxious, fearful cluster) diagnosis was the most common (Matsunaga, Kiriike, Miyata et. al., 1998). In another study, 74% of OCD sample met criteria, based on DSM-IV, for at least one personality disorder. The most prevalent personality disorders in OCD patients was found to be paranoid (35%), obsessive–compulsive (28%), avoidant (27%), schizoid (26%) and schizotypal (25%) (Torres et. al., 2006). Moreover, Ayçiçeği and her colleagues examined the patterns of personality disorder comorbidity in a Turkish OCD sample and found that patients obtained significantly higher scores on Cluster A (odd, eccentric cluster) and Cluster C personality disorders (Ayçiçeği, Dinn, Catherine, & Harris, 2004).

In terms of gender differences regarding comorbidities of OCD, studies revealed that men with OCD were more likely to suffer from social phobia (Bogetto, Venturello, Albert, Maina, & Ravizza, 1999; Tükel, Polat, Geng, Bozkurt, & Atla, 2004), tic disorders (Torresan et. al., 2009), substance use disorders (Bogetto et. al., 1999), and personality disorders including obsessive-compulsive personality disorder, and Cluster A (Torres et. al., 2006) when compared to women. On the other hand, women with OCD were more likely than men to present eating disorders (Bogetto et. al., 1999; Torresan et. al., 2013), major depression (Karadağ et. al., 2006; Labad et. al., 2008), and impulse-control disorders (Bogetto et. al., 1999; Torresan et. al., 2009) as a comorbid condition.

1.2. Etiology of OCD

Although abundant research has been carried out in order to determine the etiology of obsessive-compulsive disorder, the exact cause has not been identified yet. However, there is strong evidence that neurobiological factors (e.g. brain and genetic factors) make certain individuals more vulnerable to the development of OCD (Oltmanns & Emery, 2007). In terms of genetic features, it was suggested

that there was some degree of genetic transmission of OCD within families. Twin studies of adults showed that obsessive-compulsive symptoms were moderately heritable, for instance OCD occurred far more often among monozygotic twins than dizygotic twins and OCD symptoms among immediate family members were higher with 25% (Abramowitz, Taylor, & McKay, 2009; Van Grootheest, Cath, Beekman, & Boomsma, 2005). On the other hand, psychological factors such as faulty learning, distorted beliefs, and catastrophic thoughts were found to be present in most patients, and seemed to play an important role in the appearance and maintenance of symptoms.

In terms of psychoanalytic theory, Freud explained OCD as defensive psychological responses to unconscious impulses (cited in Oltmanns & Emery, 2007). Freud suggested that obsessive-compulsive symptoms occurred as a result of unresolved conflict at the anal stage. Psychoanalytic view of OCD also proposed that OCD patients had weak ego boundaries and obsessional rituals were important defense mechanisms, which help to strengthen these boundaries and to control patient's internal anxiety state.

With an increase in the popularity of behavioral models in 1960s, learning theory was also applied to understanding the etiology of OCD (Steketee, 1999; Salkovskis, 1999). Behavioral models suggested that obsessions were acquired by classical conditioning, which followed either a traumatic experience or informational learning, and they were maintained via operant conditioning (Steketee, 1999). It was suggested that people with OCD associated certain objects, situations, or normal intrusive thoughts with anxiety and learned to avoid those things that triggered anxiety or to perform "rituals" in order to reduce the feared consequences and to escape from obsessional anxiety (Shafran, 2005; Abramowitz, Taylor, & McKay, 2009). However, researchers agreed on some major limitations (e.g. not providing an explanation for the emergence, persistence and the content of obsessions; symptoms may have changed over time; and many OCD patients' not having a history of relevant conditioning experience that result in obsessional fear) related to behavioral models of OCD, which led them to consider cognitive explanations of OCD (Clark, 2004).

Generally, cognitive models of OCD assumed that intrusions play an important role in the development and maintenance of OCD (Wells, 1997). According to cognitive models, OCD is characterized by maladaptive beliefs about the likelihood of threat, importance and control of thoughts, uncertainty, inflated sense of responsibility, and perfectionism (Obsessive Compulsive Cognitions Working Group; OCCWG, 1997). Hypothesized cognitive theories of OCD, explained in the next section, differ from each other depending on which schema they kept in the foreground while describing the roles of cognition in the etiology of OCD. Since this thesis is concerned with the cognitive models of OCD, they will be presented in more detail in the next section.

1.3. Cognitive Theories of OCD

Although different theories have been proposed to clarify the etiology of OCD (e.g. biological, neuropsychological, psychoanalytic, behavioral models etc.), cognitive models of OCD have received a large body of empirical support and have contributed to the development of effective treatments (Franklin, Abramowitz, Jonathan, Kozak, Levitt, & Foa, 2000). The current cognitive models of OCD originated from Carr's (1974) cognitive conceptualization of OCD (cited in Van Oppen & Arntz, 1994). Carr's (1974) model emphasized the unrealistic threat appraisals of obsessive-compulsive patients. According to this model, OCD patients overestimate both the probability and the cost of occurrence of undesired outcomes, as a result of which they experience high degree of threat and perform rituals to reduce this threat. However, this model did not provide any explanation for why OCD patients experience high threat appraisals (cited in Van Oppen & Arntz, 1994).

McFall and Wollersheim (1979) proposed another cognitive model for OCD, which emphasized the factors that influence the irrational estimate of catastrophic outcomes and factors that lead to the performance of compulsions. They suggested that there are two appraisal processes, namely primary appraisal and secondary appraisal that play a crucial role in the occurrence of obsessive-compulsive symptoms. According to this model, threat appraisal is generated

during primary appraisal process where the individual estimates risk of the danger of an event. After anxiety increases, individual evaluates his/her resources to cope with the threat on the basis of secondary appraisals where the consequences of efforts to cope with the threat are evaluated (cited in Van Oppen & Arntz, 1994). Similar to the current cognitive models, McFall and Wollersheim (1979) determined some maladaptive beliefs that influence the primary and the secondary appraisal processes of OCD. For instance, these beliefs for primary appraisal are perfectionistic thoughts, fear of punishment as a result of making mistakes, self-influence on initiating or preventing catastrophic outcomes, unacceptable thoughts and feelings resulting in catastrophe. Moreover, being upset due to dangerous outcomes, preventing feared outcomes via magical rituals, preferring rituals or obsessions over confronting with one's feelings/thoughts, and being afraid to feel uncertainty and loss of control are the ones that are influential in secondary appraisal process according to McFall and Wollersheim (1979) (cited in Van Oppen & Arntz, 1994). As a result of these beliefs, patients feel helpless to cope with the perceived threat and continue to perform rituals to prevent the outcome.

However, the first two cognitive models of OCD (Carr, 1974; McFall & Wollersheim, 1979; cited in Van Oppen & Arntz, 1994) were criticized for being unable to distinguish between threat appraisal in OCD patients and threat appraisal in other patients (Salkovskis, 1999). Salkovskis (1985) proposed another cognitive model that was accepted as the most comprehensive one for the cognitive conceptualization of OCD. This model is based on the idea that not the event nor the thought itself, but the person's appraisal of the thought leads to emotional reaction. According to Salkovskis (1999), obsessional thinking is related to normal intrusive cognitions including ideas, thoughts, images or impulses. As at least 90% of the general population has such intrusions, the difference between normal intrusive cognitions and obsessional intrusive cognitions is important. Despite having similarities in terms of their form and content, clinical obsessions were found to be more intense, longer lasting, more insistent, more distressing and anxiety provoking than unwanted intrusive thoughts (Rachman & de Silva, 1978). Salkovskis (1985) suggested that rather

than the content of intrusions that also occur in the majority of individuals, the meaning of the thought for the person, misinterpretations of the occurrence and uncontrollability of these intrusions as being important, personally significant, and threatening result in obsessional pattern. Additionally, Salkovskis (1985, 1999) made a critical distinction between negative automatic thoughts and unwanted intrusive thoughts. In the cognitive model of OCD, negative automatic thoughts were defined as the interpretations of the intrusive thoughts. For some individuals, intrusions become a persistent source of mood disturbance when they interact with the individual's belief system and lead to negative automatic thoughts. For instance, if the person has dysfunctional responsibility beliefs, and intrusive thought such as "Did I lock the door?" might lead to the appraisals such as "Something bad will happen and it will be my fault" (negative automatic thoughts). Therefore, the affective disturbances were actually caused by the negative automatic thoughts rather than the intrusion itself (Salkovskis, 1985).

In his cognitive model of OCD, Salkovskis (1985) argued that if an appraisal includes an element of harm or danger, emotional reaction will be anxiety. According to this model, not only perceived threat, but also the interpretation of obsessional intrusions as indicating personal responsibility for harm to oneself or others links the intrusive thoughts to the discomfort, and the following neutralizing behaviors. In other words, perception of responsibility results in an increase in discomfort, which in turn leads to rise in attention, focused on intrusive thoughts and/or to stimuli related to them; and in turn makes an increment in the frequency of thoughts. Subsequently, in order to reduce anxiety and intrusive thoughts, and to discard responsibility, individuals engage in neutralizing behaviors (e.g. avoidance, compulsion checking, washing, covert rituals), which are counterproductive, that lead to a vicious cycle of negative thinking, maintenance of negative beliefs and neutralizing acts (Salkovskis, 1985, 1999).

In addition to Salkovskis' (1985) emphasis on personal responsibility, Rachman (1997) proposed that obsessions are caused by catastrophic misinterpretations of the significance of unwanted intrusive thoughts. It was

suggested that obsessions would persist until the misinterpretations will have been weakened. In his model, Rachman argued that when the main content of obsessions such as aggression, sex and blasphemy are important in moral system of the person, this may contradict with the self. Obsessive patients, then exaggerated the significance of their intrusive thoughts, misinterpret these thoughts as revealing hidden parts in their characters hidden, such as being an immoral, unreliable, or sinful person. As a result, these misinterpretations lead them to fear from potential, serious and/or dangerous consequences (e.g. losing control/cause harm, being rejected by other people, or being punished). Accordingly, focused attention increases the range and seriousness of potentially threatening stimuli, therefore, a wide range of neutral stimuli in the environment turn into threat. Moreover, not just the stimuli around but also internal sensations of anxiety (i.e., exconsequential reasoning; Arntz, Rauner & Van Den Hout, 1995) contribute to these transformations. In other words, the catastrophic misinterpretation of one's anxiety (e.g. "If I am anxious, this means there is a danger") can interact to increase the catastrophic misinterpretation of the intrusion. Rachman (1997) suggested that this interpretation of internal sensations or external cues as signs of potential threat leads to avoidance behavior, which leaves the catastrophic misinterpretation unchallenged, increases the range of internal sensations or internal stimuli, and hence, the frequency of the obsessions remains high. On the other hand, if the catastrophic misinterpretation is reduced or replaced by a benign interpretation, the frequency of the obsessions will decline due to the re-conversion of threat stimuli back to neutral stimuli.

Besides avoidance behaviors, the other reaction to obsessions is neutralizing acts (Rachman, 1997). Neutralizing behaviors are performed either to neutralize the perceived negative consequences of the obsessions or to neutralize the feelings of distress, anxiety or guilt that are emerged after catastrophic misinterpretations. Neutralizing behaviors can be either overt (e.g. washing or checking compulsions) or covert (e.g. mental arguments, thinking a "good" thing after having a "bad" thought). Rachman (1997) stated that despite having some similarities with compulsions, neutralizing behaviors are not identical to

compulsions. Unlike compulsions, many neutralization acts are chosen as tactics used to deal with particular obsessions. Reassurance seeking, accepted as one of the neutralizing behaviors, used to discard responsibility. Patients having aggression or harm obsessions try to reduce feelings of responsibility and anxiety by making others know via reassurance seeking. Moreover, neutralization behaviors leads to significant reductions in anxiety/discomfort and are not followed by punishment, because of which the person attributed the non-occurrence of the feared consequences to the neutralization behavior. Thus, these activities are said to be reinforced and strengthened in the short run (Rachman, 1997). However, in the long run, they paradoxically contribute to the confirmation of the belief, and hence maintenance of the obsessions. In other words, neutralization provides a relief in the short run; it is unadaptive in the long run (Rachman, 1997).

Therefore, the strategies (e.g., overt or covert compulsive behaviors) used to prevent or suppress intrusive thoughts are claimed to be counterproductive which means that they increase the likelihood of intrusive thoughts, along with levels of anxiety and distress in the long run (Rachman, 1997; Salkovskis, 1985). By supporting this explanation, it was reported that patients with OCD were less successful in terms of controlling the intrusive thoughts compared to non-clinical group (Ladoceur, Leger, Rheume, & Dube, 1996; Tolin, Abramowitz, Hamlin, Foa, & Synodi, 2002).

Clark and Purdon (1993) have elaborated on these ideas and suggested that main problematic situation in OCD is the efforts for the control of intrusive thoughts and/or obsessions. Consistent with previous cognitive models of OCD, Purdon and Clark (1999) stated that patients with OCD interpret intrusions as threatening and contradicting with their personality, and they also believe that their thoughts can and should be controlled. According to this recent cognitive model, failures in thought control, appraised as being dangerous and/or one has a personal responsibility, lead to a more negative mood state, which in turn further reduces thought controllability. It was found out that frequency of related thoughts was paradoxically increased when participants were instructed not to think about a

“white bear” (Wegner & Pennebaker, 1993). Based on this finding, Rachman (1997) suggested that OCD patients’ attempts to suppress or control the unwanted intrusive thoughts may lead to a paradoxical increase in the frequency of obsessions, and contributes to the maintenance of the whole process. Similarly, Purdon and Clark (2002) showed that perceived failure in thought control would have led to an increment in frequency and salience of thoughts. Experiencing a failure in suppressing certain behaviors when appropriate was evaluated as the characteristics of emotion dysregulation, which was found to be related with OCD (Tien, Pearlson, Machlin, Bylsma, & Hoehn-Saric, 1992).

In conclusion, according to the cognitive models of OCD, dysfunctional belief domains and misinterpretations of the intrusions are the core features of OCD and contribute to the maintenance of the disorder. However, although cognitive models of OCD have enhanced the knowledge and treatment of the disorder, they have been criticized for focusing largely on maintaining factors. What is less clear from the cognitive models of OCD is the reason why OCD sufferers develop these beliefs, why only certain thoughts are appraised as threatening (Doron & Kyrios, 2005; O’Kearney, 2001), and why some patients find one phenomenon more severe than the other (Arts, Hoogduin, Schaap, & Haan, 1993). It is crucial to figure out the importance of not being responsible, not allowing immoral thoughts to occur or not failing to live up to perfectionistic standards. Accordingly, agreed on the idea that traditional cognitive models of OCD generally neglect the developmental issues (e.g. attachment and parenting styles), individual’s perception of self, world, and others, and their roles in the development and maintenance of maladaptive appraisals (Guidano & Liotti, 1983; Bhar & Kyrios, 2000). Accordingly, although there are theoretical advances, it remains unclear why obsessional symptoms are associated with poorer treatment outcomes than compulsive symptoms (Abramowitz, 1998; Freeston, Rheaume, & Ladouceur, 1996). Therefore, it is important to examine both cognitive and other vulnerability factors in the development of both general obsessive-compulsive symptoms and different subtypes of obsessions and compulsions.

1.4. Vulnerability Factors in the Development of OCD

In this section, vulnerability factors for the development of obsessive-compulsive symptoms are considered. Firstly, cognitive distortions related to OCD are discussed as cognitive vulnerability to OCD. This is followed by a discussion of the role of other developmental factors including emotion regulation strategies, perception of self and perceived parenting styles.

1.4.1 The Role of Obsessive-Compulsive Cognitions/Belief Domains

It was suggested that there were some dysfunctional and maladaptive belief domains that are assumed to function as vulnerability in the development of OCD (Clark, Purdon & Wang, 2003; OCCWG, 1997; Rachman, 1997; Salkovskis, 1999). Salkovskis (1999) and Rachman (1997) proposed that identification of critical cognitive factors in OCD and the modification of these maladaptive appraisals have been an important focus of treatment of OCD.

A group of international researchers, called The Obsessive Compulsive Cognitions Working Group (OCCWG) (1997) identified six main schemas related to OCD, including (1) inflated sense of personal responsibility, (2) overestimation of threat, (3) intolerance for uncertainty, (4) perfectionism, (5) the need to control thoughts, and (6) over-importance of thoughts. Additionally, the group also developed two instruments, namely Obsessive Beliefs Questionnaire (OBQ) and Interpretations of Intrusions Inventory (III). OBQ was designed for the the assessment of general dysfunctional beliefs, while III was used to evaluate immediate interpretations of unwanted, intrusive thoughts, images and impulses. In the present study, OBQ was used in order to assess maladaptive appraisals. Accordingly, the large majority of studies have been conducted to search for links between maladaptive cognitions and OCD support that such a relation do exist (e.g. Yorulmaz, Baştuğ, Tüzer, & Göka, 2013; Konkan, Şenormancı, Güçlü, Aydın, & Sungur, 2012)

In the following part, these cognitive distortions related to OCD will be described and discussed separately.

1.4.1.1 Inflated Sense of Responsibility

The inflated responsibility has been operationally defined by Salkovskis, Rachman, Ladouceur, and Freeston (1995) as the belief of having a pivotal power either to cause or prevent subjectively crucial negative outcomes (cited in Salkovskis, Shafran, Rachman, & Freeston, 1999). They proposed that the consequences might be in the real world (e.g. accident) and/or at a moral level (e.g. unacceptable thoughts as being a bad person). Examples of OBQ items in this domain include: “For me, not preventing harm is as bad as causing harm,” and “I often believe I am responsible for things that other people do not think are my fault.”

As mentioned in the previous section, Salkovskis (1985) proposed that the interpretation of the occurrence and the content of the intrusive thoughts are critical factors for OCD patients. Individuals with OCD are thought to believe themselves equally responsible for both the acts of omission and the acts of commission (Wroe & Salkovskis, 2000). In other words, OCD patients hold the view that having any influence over outcome is equal to having responsibility for the outcome. Salkovskis’ assertion on personal responsibility was recently supported by the findings of Barrera and Norton (2011). They found out that presence of high responsibility beliefs and/or distress about intrusive thoughts resulted in a rise in OCD symptoms, particularly when intrusions were frequent. There are many other supporting studies of the relationship between excessive responsibility and OCD in both clinical and non-clinical sample. For instance, many clinical studies reported observing the presence of inflated sense of responsibility in obsessive-compulsive patients (Ladouceur, Leger, Rheaume, & Dube, 2000; Tallis, 1994; Van Oppen, de Haan, van Balkom, Spinhoven, Hoogduin, & van Dyck, 1995). Similarly, studies using self-report measures revealed that OCD patients score higher on responsibility dimension when compared to control subjects (Foa, Sacks, Tolin, Preworski, & Amir, 2002). Additionally, Lopatko and Rachman (1995) carried out the first experimental study to examine the effects of the inflated sense of responsibility on OCD

symptoms, by manipulating the level of perceived responsibility in 30 compulsive checkers diagnosed with DSM-III criteria. Results showed perceived responsibility was lower in the low responsibility condition. Similarly, perceived responsibility scores were higher in the high responsibility. To explore further the relationship between OCD and inflated responsibility, another study compared non-anxious control participants, anxious control participants with generalized social phobia, and OCD patients with checking behaviors in terms of written scenarios; high-risk, low-risk, and non-risk scenarios (Foa, Amir, Bogert, Molnar, & Preworski, 2001). Results showed that compared to non-anxious and anxious control groups, obsessive checkers reported more urges, distress, and personal responsibility in low-risk situations and OCD-relevant situations; no significant group differences were found for high-risk situation.

Moreover, treatment efficacy studies also revealed that therapies focusing on changing maladaptive appraisals about inflated sense of responsibility induced a significant change in obsessive-compulsive symptoms even without using any behavioral techniques (Ladouceur, Leger, Rheume, & Dube, 2000). These findings consistently supported the hypothesis that inflated sense of responsibility plays an important role in OCD, and individuals with OCD desire to gain control to avoid or prevent perceived threat (Moulding, Kyrios, & Doron, 2007).

1.4.1.2 Overestimation of threat

It was hypothesized that beliefs related to threat were not unique to OCD. Cognitive models of anxiety disorders, including OCD, share common features involving overestimation of threat (Wells, 1997; Clark & Beck, 2010). Overestimation of threat includes beliefs about the probability and cost of aversive events (Woods, Frost, & Steketee, 2002; Foa & Kozak, 1996; Salkovskis, 1985). Examples are “Bad things are more likely to happen to me than other people” or “Even ordinary experiences in my life are full of risk” (OBQ; OCCWG, 2001). It has been proposed that people with OCD symptoms tend to have unrealistic threat appraisals, perceive situations as dangerous, until proven safe, and to overvalue the risk of negative consequences (Salkovskis, 1985;

Sookman & Pinard, 2002; Van Oppen & Arnzt, 994). Lazarus (1966) stated that in addition to primary appraisal of threat, perceived coping skills in the face of threat are also important in terms of obsessive-compulsive symptoms. He proposed that underestimation of the capacity to cope with threat or danger leads to anxiety, uncertainty, fear of loss of control, which in turn results in repetitive thinking and rituals to reduce discomfort. Additionally, in his cognitive model, Rachman (1997) also stressed the importance of threat appraisal in the development and persistence of obsessive-compulsive symptoms. As explained in the previous section, he proposed that as a result of catastrophic appraisals, neutral stimuli turn into threats by expanding range of stimuli around. Sookman, Pinard, and Beck (2001) proposed that some vulnerability schemas might lead OCD patients to focus selectively on threatening stimuli and to underestimate their coping ability. They described four belief domains, namely “perceived vulnerability” (i.e., excessive sense of susceptibility to danger), “view of/response to unpredictability, newness and change” (i.e., excessive need for routine, inflexibility, intolerance for uncertainty) “view of strong affect” (i.e. beliefs about strong feelings and one’s capacity to tolerate), and “need for control” (i.e., excessive control) and included these domains in a self-report measure called Vulnerability Schemata Scale (VSS). They also reported that these beliefs, especially perceived vulnerability, distinguished OCD patients from other anxiety disorder patients and controls. Consistently, findings of Moritz and Pohl (2009) showed that OCD was not related with a knowledge deficit regarding OCD-related events; on the other hand, patients felt personally more vulnerable than nonclinical controls.

In addition to OCD models implying overestimation of threat, several studies provided evidence for the relationship between threat appraisals and OCD. For instance, in a study, healthy participants scoring high on a measure of contamination fears were found to display a significantly enhanced sense of vulnerability and probability of harm for different contamination scenarios (e.g. going into a dirty gas station bathroom) (Riskind, Abreu, Strauss, & Holt, 1997). However, in this study, it was not clear whether participants’ ratings differ for

general probability of negative events or just their personal incidence probability. Moreover, in another study, Woods, Frost and Steketee (2002) asked both OCD patients and students to rate the probability, severity estimation and their anticipated coping ability. They showed that increased severity estimation and decreased coping ability were correlated with OCD symptomatology in both groups. However, increased probability estimation was correlated with OCD symptoms in only the student sample, not in the group of OCD patients. In order to explain this discrepancy, researchers suggested that clinical samples may have underreported their true probability ratings to provide the ‘right’ answer, or severity overwhelms probability. The latter possibility implies that cognitive misappraisals other than probability overestimation (i.e., severity overestimation and coping underestimation) are likely to be important in the treatment of OCD. Similarly, Jones and Menzies (1998a) reported that therapeutical interventions aiming at decreasing danger expectancies lead to significant reductions in OCD symptomatology among patients having washing compulsions. These treatment procedures do not include exposure, response prevention, or procedures attacking inflated personal responsibility (Jones & Menzies, 1997, 1998a). These findings are consistent with the Carr’s (1974) claim that treatment procedures for OCD must aim to decrease excessive danger beliefs (cited in Van Oppen & Arntz, 1994).

1.4.1.3 Intolerance of Uncertainty

Intolerance of uncertainty is defined in terms of mainly three beliefs; (1) necessity of being certain about everything; (2) poor capacity to cope with unpredictable change; and (3) difficulty to function adequately in inherently ambiguous situations (OCCWG, 1997). Example items from Obsessive Beliefs Questionnaire (OBQ) include; “If I am not absolutely sure of something, I’m bound to make a mistake,” and “I need the people around me to behave in a predictable way” (OCCWG, 2001).

Patients with OCD have long been described as having difficulty tolerating ambiguity and difficulty in coming to decision (Tolin, Abramowitz, Brigidi, &

Foa, 2003; Guidano and Liotti, 1983). Additionally, Beech and Liddell (1974) hypothesized that OCD patients performed rituals not only to reduce discomfort, but also to meet the need for certainty. Support comes from studies showing that uncertainty leads OCD patients to seek reassurance by repeated checking in response to normal doubts. Subsequently, repeated checking may paradoxically increase uncertainty as shown by a great number of studies (Boschen & Vuksanovic, 2007; Dek, van den Hout, Giele, & Engelhard, 2010). Consistently, Toffolo, van den Hout, Engelhard, Hooge, and Cath (2013, 2014) found out that even in mildly uncertain situations, individuals with subclinical OCD used more checking behavior. The association of intolerance of uncertainty with anxiety, especially with obsessive-compulsive symptoms, has been consistently demonstrated in a variety of samples (Fergus & Bardeen, 2013; Norton, Sexton, Walker, & Norton, 2005; Dugas, Gosselin, & Ladouceur, 2001).

However, there have been mixed findings on the relationship between intolerance of uncertainty and obsessive-compulsive symptoms after controlling other related variables (i.e. trait anxiety, negative affect, or other anxiety disorders). Steketee, Frost, and Cohen (1998) reported that individuals with OCD were more intolerant of uncertainty than individuals with other anxiety disorders and non-anxious controls. On the other hand, other studies showed either no significant differences between obsessive-compulsive symptomatology and generalized anxiety disorder in terms of degree of uncertainty intolerance (Gentes & Ruscio, 2011; Holaway, Heimberg, & Coles, 2006), or differences only with specific obsessive-compulsive symptoms (Sarawgi, Oglesby, & Cogle, 2013; Tolin, Abramowitz, Brigidi, & Foa, 2003). In a clinical OCD sample, although intolerance of uncertainty was not found to be related with the obsessions, it was significantly correlated with symptoms of washing, and ordering (Abramowitz, Wheaton, & Storch, 2008). Likewise, Tolin et. al. (2003) revealed that OCD patients with checking compulsions showed higher levels of intolerance of uncertainty when compared to OCD non-checkers and non-anxious samples. Compulsive checkers were found to underestimate their ability of distinguishing memories of real and imagined events, which resulted in increased checking

behavior to reduce his/her uncertainty over whether a previous behavior actually occurred or merely was thought to occur (Dar, Rish, Hermesh, Taub, & Fux, 2000). Tolin and his colleagues (2001) showed that when OCD patients were repeatedly exposed to threat-related stimuli, their level of confidence in remembering these stimuli paradoxically decreased (Tolin, Abramowitz, Brigidi, Amir, Street & Foa, 2001). Therefore, it can be concluded that OCD patients suffer from memory deficits only for threat related stimuli instead of suffering from general memory deficits. This claim was supported and extended by the findings of Radomsky, Rachman, and Hammond (2001). They showed that positive memory bias for threat-relevant information was only present when feelings of responsibility were inflated. Therefore, responsibility beliefs affected individuals' confidence on their memory that resulted in repeated checking. Van den Hout and Kindt (2003) suggested that need for certainty and an attitude towards memory performance become problematic or abnormal when the patient begins to challenge the memory distrust by repeated checking behaviors, which leads to a vicious cycle.

1.4.1.4 Perfectionism

Perfectionism, a personality trait, was generally defined as the tendency to set high standards and employ extremely critical self-evaluations. It is said to become pathological when the individual is intolerant of making mistakes or failing to keep certain standards, and thus feels not being good enough (Frost, Marten, Lahart & Rosenblate, 1990). The distinction between normal/functional perfectionism and neurotic/dysfunctional perfectionism is important for understanding its relatedness with psychological problems such as depression (Hewitt, Flett, Gordon & Ediger, 1996), eating disorders (Bulik, Tozzi, Anderson, Mazzeo, Aggen, & Sullivan, 2003), social phobia and panic disorder (Juster, Heimberg, Frost, Holt, Mattia, Facenda, 1996; Saboonchi, Lundh, Öst, 1999). Dysfunctional perfectionism has also been found to play a key role in OCD. In other words, individuals who get high scores on dysfunctional perfectionism perceived the consequences more negatively and also exhibited more obsessive-

compulsive symptoms (Frost & Steketee, 2002; Rheume, Freeston, Ladouceur, Bouchard, Gallant, Talbot, & Vallieres, 2000). OCCWG (1997) defined OCD-related perfectionism as struggling for the perfect solution to every problem, inability to tolerate imperfection, and believing that even minor mistakes will cause serious outcome. The OBQ assess perfectionism in relation to external stimuli, and examples for the items include “I must work to my full potential at all times,” “There is only one right way to do things” (OCCWG, 1997).

Various empirical studies provide support for the relationship between dysfunctional perfectionism and OCD symptoms. For instance, two studies using correlational methodology showed that participants with OCD tendencies were more perfectionist than both non-compulsive and non-anxious controls (Frost, Steketee, Cohn, & Griess, 1994). Another experimental study showed that when compared to functional perfectionists, dysfunctional perfectionists scored higher on the Padua Inventory that was used to assess OCD symptoms (Rheume, Freeston, Ladouceur, Bouchard, Gallant, Talbot, & Vallieres, 2000).

Since the link between perfectionism and OCD received empirical support, the conceptualization of OCD in terms of perfectionism includes inconsistent hypotheses. Some theories viewed perfectionism as the need for control over environment to feel safe (Mallinger, 1984). On the other hand, other theorists including Guidano and Liotti (1983) described perfectionism as a need for certainty, rather than the need for control (OCCWG, 1997). They suggested that lack of certainty increases doubts about correct action; hence perfectionism can be seen as an attempt to avoid unpleasant, serious consequences (i.e. criticism, disapproval) (Hewitt & Flett, 2002). Since it is impossible to establish a perfect state or to establish certainty, Yorulmaz, Karancı, and Tekok-Kılıç (2006) hypothesized that appraisal of causing serious consequences, namely personal responsibility may have been triggered by perfectionistic tendencies. Consistent with these claim, they showed that responsibility appraisals mediated the relationship between perfectionism and obsessive-compulsive symptoms including checking and cleaning. Similarly, as a result of an experimental design, Bouchard, Rheume and Ladouceur (1999) reported that high perfectionistic

tendencies have predisposed individuals to overestimate their responsibility for negative events. Thus, it is obvious that perfectionism could play a catalytic role in the perception of responsibility. Therefore, it can be concluded that dysfunctional beliefs are thought to interact with one another in such a way to trigger each other, which in turn results in OCD (Bouchard, Rheaume and Ladouceur, 1999).

1.4.1.5 Importance of Controlling Thoughts

Another belief domain in OCD is the excessive concern about the importance of controlling one's intrusive thoughts, images, and impulses. Example items in the OBQ include "I would be a better person if I gained more control over my thoughts", "Having control over my thoughts is a sign of weird character", and "To avoid disasters, I need to control all the thoughts or images that pop into my mind" (OCCWG, 1997). Individuals with OCD have a belief that complete control is both necessary and possible (OCCWG, 1997). It was found out that OCD patients have a tendency to suppress their thoughts (Abramowitz, Whiteside, Kalsy, & Tolin, 2003). Consistently, cognitive-models of OCD proposed that failures to control and/or suppress intrusive thoughts might have formed the basis of frequency and nature of obsessional problems (Salkovskis, 1999; Rachman, 1997).

Wegner's (1994) study on the paradoxical effect of thought suppression has considerable impact on cognitive conceptualizations of various psychological problems, including depression (Dalglish & Yiend, 2006), generalized anxiety disorder, posttraumatic stress disorder (Meiser-Stedman, Shepperd, Glucksman, Dalglish, Yule, & Smith, 2014), and obsessive-compulsive disorder (Purdon & Clark, 2001). Wegner's "Ironic Process Theory" of mental control suggested that attempts of controlling or suppressing thoughts may result in ironic increase of the frequency of target thoughts both during suppression process (named as "immediate enhancement effect") and after the suppression efforts have been terminated (named as "rebound effect") (Wegner, 1994). However, empirical support for the role of suppression in the persistence of thoughts has been mixed.

Some studies have supported Wegner's "rebound" effect, while other studies have showed an immediate effect of suppression, and other studies have reported no effect of suppression on thought frequency (Purdon & Clark, 2001).

The relationship between psychopathology and thought suppression is explained through two different conceptualizations (Wenzlaff and Wegner, 2000). The first one, based on the correlations between suppression and clinical problems, suggesting that people attempt not to think unwanted symptoms when they are confronted with them. On the other hand, the second explanation is based on the evidence that suppression plays a key role in the development and maintenance symptoms. In line with Wegner's model, Rachman (1997) suggested that suppression prevented the habituation to intrusive thoughts that means that they become the focus of attention and result in an immediate hypervigilance to "threatening stimuli". Furthermore, Salkovskis (1989a) proposed that meta-cognitive beliefs about controlling thoughts have an impact on the appraisal of intrusive thoughts, which leads to the development and maintenance of OCD. For instance, Janeck, Calamari, Riemann and Heffelfinger (2003) showed that "too much thinking about thinking" is distinguished OCD from generalized anxiety disorder (GAD).

Despite its central role in cognitive models of OCD, the relationship between thought suppression and OCD remains unclear. A number of studies have failed to identify thought suppression as a predictor for increased intrusive phenomena. For instance, Purdon and Clark (2001) randomly assigned 211 nonclinical subjects into two groups receiving either suppress or not suppress a neutral, obsessional or positive thought instruction. They found no paradoxical effect of suppression on frequency for any type of thought, whereas suppression of obsessional thoughts was related with subsequent discomfort and a more negative mood state than suppression of positive or neutral target thoughts. The heightened emotional response after suppression efforts may be due to the prime expectations that negative intrusive thoughts can and should be controlled. As Purdon and Clark (1999) proposed that individuals with OCD have a tendency to believe that failure to control obsessional thoughts represents mental weakness

that lead to an increased distress. Consistent with this argument, Kelly and Kahn (1994) reported that suppression instructions might have resulted in a performance demand that subjects expected themselves to meet. Likewise, Tolin, Abramowitz, Hamlin, Foa, and Synodi (2002) showed that OCD patients were more likely to attribute their suppression failures to internal factors, such as being weak, when compared to control subjects.

Wells and Davies (1994) identified five different thought control strategies used for unwanted thoughts, including “distraction”(i.e. thinking other pleasant thoughts); “social control” (e.g., reassurance on normality of thoughts); “worry” (i.e. focusing on potential outcomes); “punishment” (e.g., getting angry at self, slapping self); “re-appraisal” (i.e., attempts to reanalyze thought or to re-interpret thought). Amir, Cashman and Foa (1997) examined control strategies in OCD patients and found that OCD patients mostly used worry, punishment and reappraisal; while distraction was the least utilized type of strategy as compared to non-anxious controls. Consistent with these findings Abramowitz, Whiteside, Kalsy and Tolin (2003) showed that in OCD patients who completed psychotherapy, the use of distraction increased and the punishment decreased. Recently, Moore and Abramowitz (2007) conducted a research with non-clinical participants and found out that overestimation of threat and responsibility, beliefs about the significance and need to control intrusions, need for perfection and certainty, and scrupulosity were associated with the use of punishment, but not with worry as thought control strategies. Additionally, OCD-relevant beliefs were found to mediate the relationship between obsessive-compulsive symptoms and the use of punishment as a thought control strategy (Moore & Abramowitz, 2007). These findings are consistent with recently hypothesized cognitive conceptualization of OCD by Clark and Purdon (1993).

In addition to the attempts of controlling intrusive thoughts, it was proposed that OCD patients also appraised their thoughts as important and meaningful. In the next section, the last belief domain, identified by OCCWG (1997) and named as “overimportance of thoughts” is explained in terms of its relatedness with OCD.

1.4.1.6 Overimportance of Thoughts

“Overimportance of thoughts” is another belief domain, which refers to the occurrence of a thought makes those thoughts as important and meaningful (OCCWG, 1997). Example OBQ items are; “The more I think of something horrible, the greater the risk it will come true”, and “Having an unwanted sexual thought or image means I really want to do it” (OCCWG, 1997). Cognitive models of OCD also emphasized the importance of thoughts. As it was stated in earlier sections, when normal intrusions are interpreted as a sign for harm, responsibility, and having significant implications in real life, they turn into abnormal intrusions/obsessions (Rachman, 1997).

Beliefs related to thought-act fusion (TAF) and magical thinking are included in this domain and exemplify the overimportance of thoughts. Magical thinking is defined as the belief that certain behaviors and thoughts have causal influences on outcomes. Since magical thinking is not specific to OCD, it remains largely at the periphery of the OCD literature; other related construct of thought action fusion has been widely examined.

Thought-Action Fusion (TAF) which has two components, namely moral TAF and likelihood TAF defined as the tendency to overvalue the significance and consequences of thoughts (Shafran, Thordarson, & Rachman, 1996). In other words, TAF refers treating thoughts and actions as equivalents. TAF-Moral refers to the moral equality of thoughts to actions (i.e. “Thinking about committing adultery is as bad as actually doing it”), while TAF-Likelihood means that thoughts can increase the probability of negative events occurring (i.e. “I can make an accident happen by thinking about it”) (Abramowitz, Whiteside, Lynam, & Klasy, 2003). Shafran, Thordarson, and Rachman (1996) proposed that both probability and morality dimensions of TAF were associated with obsessive-compulsive symptoms.

For instance, Rassin, Merckelbach, Muris, and Spaan (1999) experimentally induced TAF by telling participants that thinking about an apple would cause delivery of shock to another person and found out that experimentally induced TAF increased intrusive thinking, discomfort, resistance,

responsibility, and neutralization. Similarly, Yorulmaz, Karancı, Baştuğ, Kısa, Göka (2008) revealed that thought-action fusion in morality and likelihood were critical and distinctive factors for OCD. Moreover, many other studies supported the impact of TAF on obsessive-compulsive symptomatology (Berman, Wheaton, & Abramowitz, 2013; Yorulmaz, Yılmaz, & Gençöz, 2004). TAF is also closely associated with other dysfunctional beliefs. Shafran, Thordarson, and Rachman (1996) stated that the presence of TAF might cause an increased sense of responsibility. It was proposed if the person has such an inflated sense of responsibility, TAF would cause more distress and anxiety than for the persons who does not have inflated responsibility.

1.4.1.7 Relationship between Obsessive Belief Domains and Symptom Dimensions

Many studies have been conducted to establish and support the link between maladaptive cognitions and OCD. For instance, in their study, Jakobi, Calamari, and Woodward (2006) found out that responsibility and threat estimation were common predictors of OCD symptoms in both adolescents and their parents. Likewise, Altın and Karancı (2008) showed a significantly positive relationship between responsibility attitudes and general obsessive-compulsive symptomatology. Additionally, in another study examining the revised Obsessional Beliefs Questionnaire (OBQ-44) showed that OCD patients scored higher than anxious control patients on responsibility/threat estimation and importance/control of thoughts dimension, but not on Perfectionism/Certainty (OCCWG, 2005). On the other hand, Tolin, Worhunsky, and Maltby (2006) found that OCD patients differed from anxious controls on beliefs about perfectionism/intolerance of uncertainty and importance/control of thoughts, but not on beliefs about threat estimation and inflated responsibility. A comparison study of OCD patients and healthy controls, in Iran, revealed that OCD patients scored significantly higher than healthy sample on OBQ-44 and its subscales. In addition, perfectionism/ intolerance of uncertainty explained the most significant differences between two groups (İzadi, Asgari, Neshatdust, & Abedi, 2012).

These inconsistent findings on the association of belief domains and OCD symptoms question the extent to which obsessive beliefs are specifically relevant to OCD.

Therefore, there is an increasing interest on establishing the association between belief domains and OCD symptoms. For example, Julien, O'Connor, Aardema, and Todorov (2006) found out that discrete obsessive beliefs were associated with specific OCD symptom dimensions. Specifically, rumination symptoms were more related to the subscale of Importance/Control of Thoughts while checking and doubting symptoms were predicted by intolerance for uncertainty and overestimation of threat. Moreover, symmetry was found to be related to perfectionism/certainty domain. Taylor, McKay and Abramowitz (2005) supported the impact of perfectionism/uncertainty in checking symptoms of the OCD patients, and responsibility/threat estimation in contamination. Viar, Bilsky, Armstrong, and Olatunji (2011) supported the association between perfectionism/certainty and symmetry symptoms. Additionally, they reported that threat estimation and responsibility predicted obsessions about harm. Furthermore, in a clinical sample washing symptom was found to be predicted by responsibility/threat estimation beliefs while checking was not predicted by any obsessional beliefs (Tolin, Brady, and Hannan, 2008). Obsessions about harm was found to be predicted by importance/control of thoughts and perfectionism/certainty beliefs; while ordering was predicted by only perfectionism/certainty beliefs. Similarly, another study with a clinical sample showed a relationship between contamination symptoms and responsibility/threat estimation beliefs; between symmetry symptoms and perfectionism/certainty beliefs; and between unacceptable thoughts and importance/control of thoughts (Wheaton, Abramowitz, Berman, Riemann, & Hale, 2010). Although there are inconsistent results on the relationship between obsessional beliefs and different symptom dimensions of OCD, it is clear that belief domains play a crucial role in the clarification of OCD symptom subtypes. The differences between studies may be due to the sample type used (OCD vs. non-clinical), rationally vs. empirically

derived belief domains, and different questionnaires (Julien, O'Connor, Aardema, & Todorov, 2006).

It can be concluded that maladaptive appraisals have played a crucial role in the development and the maintenance of obsessive-compulsive symptoms. Moreover, specific belief domains were found to be related with certain obsessive-compulsive symptoms. In addition to cognitive appraisals, current thesis also interested in the association between emotion regulation strategies and the obsessive-compulsive symptoms.

1.4.2 The Role of Emotion Regulation Strategies

Recently, researchers have focused on the relationship between emotion regulation and psychological disorders (e.g. Cisler, Olatunji, Feldner, & Forsyth, 2010; Cole & Deater-Deckard, 2009). Difficulties in emotion regulation have been found to be associated with depression, anxiety, borderline personality disorder, and eating disorders (Aldao, Nolen-Hoeksema, & Schweizer, 2010; Campbell-Sills & Barlow 2007). In terms of OCD, the dysregulation of emotions was proposed to play a crucial role in the development and maintenance of obsessive-compulsive disorder.

Emotion regulation refers to the individual's ability to influence emotional responses (Gross, 2010). For many years, emotion regulation has been studied under different concepts. For instance, Folkman and Lazarus (1980) emphasized the relationship among emotion, appraisal and coping strategies. According to their theory, individuals did not only deal with the demands of the situation itself, but also should have coped with the emotional consequences that are created with a stressful situation. Therefore, the effectiveness of the efforts to overcome the stressful situation is dependent on individual's ability to regulate his/her emotions.

Additionally, according to Gross (1999), emotion regulation composed of both conscious and unconscious strategies that are used to increase, decrease or maintain the emotion, which is made up of feelings, behaviors, and physiological responses. Among several researchers studying emotion regulation, Gross' (1998a) model is based on the idea that specific emotion regulation strategies can

be differentiated during the occurrence of emotional response. Therefore, it has been accepted that evaluation of emotional cues have occurred before the emotion is fully experienced (John & Gross, 2004). Gross and Thompson (2007) proposed a sequence of emotion regulation beginning with the situation that is attended to in various way which leads to appraisal of the situation in terms of familiarity, value, and relevance. Appraisals, then, result in response tendencies.

There are two major emotion regulation strategies, namely antecedent-focused and response-focused strategy, according to Gross' (1998a) process model of emotion regulation. The strategies are distinguished from each other based on their impact on emotion-generative process (Gross, 2001). Antecedent-focused strategies refer to the things done before the response tendencies have become fully activated and influenced the behavior, whereas response-focused strategies refer to the things done after response tendencies have been formed when an emotion is about to occur (Gross, 2001). Gross (1998a) stated that an emotion can be regulated at various stages in the process of emotion regulation and identified five kinds of emotion regulation processes under two major strategies; (a) situation selection, (b) situation modification, (c) attentional deployment, (d) cognitive change, and (e) response modulation.

“Situation selection” is defined as choosing or avoiding situations in order to experience desirable emotions in most situations. In “situation modification”, selected situation is tailored based on the individual’s needs and desired emotional impacts (Gross, 2001). Moreover, “attentional deployment” is defined as selecting the most preferable aspects of the situation and focusing on them. It was stated that distraction and concentration are two strategies that can be used for attentional deployment. In “cognitive change”, the emotional aspect of the situation is reevaluated and the alternative meaning to the situation is produced. The last process of emotion regulation is “response modulation” which is experienced after response tendencies have occurred (Gross, 2001). Emotion expressive behavior, which is one of the strategies used for response modulation, includes both hiding and expressing emotions overtly (Gross, 2001). Among these strategies, situation selection, modification, attentional deployment and cognitive

change are grouped as antecedent-focused emotion regulation strategies; on the other hand response modulation is perceived as response-focused strategies (Gross, 2001).

In order to test the difference between antecedent-focused and response-focused strategies, two specific strategies were determined by Gross (2001). “Cognitive reappraisal” refers to reevaluating the situation and changing the way individual thinks in order to decrease the emotional impact (i.e. thinking about the situation in a manner such that one does not respond emotionally). However, “Suppression” has been defined as the inhibition of ongoing emotion expressive behavior. Cognitive reappraisal is a type of cognitive change while suppression is determined as response modulation (John and Gross, 2004). John and Gross (2004) reported that efforts to suppress feelings may create discrepancy between one’s feelings and behaviors, which results in a negative view of self. Hsieh and Stright (2010) supported this idea by showing that suppression was associated with lower self-concept, while cognitive reappraisal was associated with higher self-concept in adolescents. Likewise, Nezlek and Kuppens (2008) found out that cognitive reappraisal of positive emotions was associated with an increment in self-esteem and psychological adjustment, whereas suppressing positive emotions was linked with decreased self-esteem and increased negative emotions. Consistently, Gross (1998a) conducted a research by evoking the feelings of disgust and showed that participants using suppression were less expressive, but reported experiencing higher physiological activation than other participants. Additionally, reappraisal was found to be related with higher levels of life satisfaction and lower levels of negative affect and depression whereas suppression was found to be related with higher levels of negative affect and depression (Haga, Kraft, & Corby, 2009).

In terms of obsessive-compulsive disorder, Allen and Barlow (2009) explored the link between emotion regulation skills and obsessive-compulsive symptoms. They showed that teaching participants ways for dealing with emotional avoidance when faced with non-specific OCD-related cues led to a decrement in thought suppression and an increment in acceptance of thoughts and

feelings. According to another study, individuals having maladaptive perfectionism were more likely to experience distress because of their problematic emotion regulation (Aldea & Rice, 2006). Furthermore, Bardeen and Fergus (2014) examined the association between emotion regulation and obsessive-compulsive symptoms in a community adult sample. They reported that suppression, having difficulties in inhibiting impulsive behaviors when experiencing negative emotions, and lack of clarity of emotions were three emotion regulation strategies that were found to be associated with overall obsessive-compulsive symptoms, and also with symptom dimensions of contamination, responsibility for harm, unacceptable thoughts, and symmetry. Likewise, Aka (2011) showed that the more the individuals used suppression as an emotion regulation strategy, the more they reported obsessive-compulsive symptoms. Consistently, another study comparing youth (aged between 7-12) with OCD and youths with other anxiety disorders (e.g. social phobia, generalized anxiety disorder, and separation anxiety disorder) revealed that OCD group showed lower levels of emotion regulation than the other group. In other words, participants with OCD were more likely to use ineffective emotion regulation strategies (e.g. suppression) for distressing emotions because of having lower tolerance for emotional experiences (Jacob, Morelen, Suveg, Jacobsen, & Whiteside, 2012). Likewise, many other researchers found that lower distress tolerance was associated with obsessions, but not other OCD symptoms including washing, checking, and ordering (e.g. Macatee, Capron, Schmidt, & Cogle, 2013; Cogle, Timpano, Fitch, and Hawkins, 2011). Based on these findings, it can be concluded that cognitive reappraisal resulted in better outcomes on well-being than suppression (Schutte, Manes, & Malouff, 2009).

In the light of these findings, rather than studying all emotion regulation processes at once, the present thesis also aimed to evaluate the roles of two specific emotion regulation strategies, namely cognitive reappraisal and suppression, on obsessive-compulsive symptoms.

1.4.3 The Role of Self-Ambivalence

In addition to obsessive belief domains and emotion regulation strategies, recent research has focused on the significance of self-perception for the development of obsessive-compulsive symptomatology (Bhar, 2004; Bhar & Kyrios, 2005; Doron & Kyrios, 2005). Harter and Whitesell (2003) proposed that individuals with negative self-concept are more vulnerable to develop maladaptive beliefs and interpret their environment in a harmful way. Although the link between maladaptive self-perception and a range of psychological disorders such as depression, post-traumatic stress disorder, and social anxiety has been supported, few researchers have applied the idea that there may be a dysfunctional self-concept in individuals with OCD as well (Bhar, 2004; Bhar & Kyrios, 2005; Doron & Kyrios, 2005; Guidano & Liotti, 1983). On the other hand, cognitive models of OCD emphasized self-perceptions as leading to dysfunctional responses to situations. To illustrate, Purdon and Clark (1999) hypothesized that obsessions were increased when an individual appraises a thought as inconsistent with his/her sense of self. In other words, if the content of intrusions contradicts with specific aspects of self, distress related to the intrusions increases. Likewise, Rachman (1997) proposed that neutral intrusive thoughts turn into obsessional problems when they are appraised as revealing important, hidden aspects of their self (i.e. being evil, dangerous, unreliable, uncontrollable).

However, the reason why individuals with OCD make such negative self-judgments about their mental intrusions is not fully understood. In order to clarify this issue, in their model of self-ambivalence, Guidano and Liotti (1983) suggested that individuals with OCD are highly ambivalent about personal characteristics; hence, they perceive negative mental intrusions as evidence of internal failure. They added that the less ambivalent the individuals, the more the distraction from the intrusive thoughts.

Guidano and Liotti (1983) proposed a developmental model of OCD in which they emphasize the notion of self-ambivalence as a vulnerability factor. They suggested that individuals with OCD had incompatible representations of

themselves as a result of which they experienced difficulty reaching a union about their self-worth and continuously question whether they are lovable, moral, and worthwhile. Therefore, according to the model of Guidano and Liotti (1983) patients with OCD appraise their thoughts and behaviors as important criteria to solve this confusion by clinging to moral dictates enforced by early family learnings, and by avoiding disapproval by others. Specifically, obsessions are developed based on the appraisals of intrusive thoughts as threats to one's ideal image of self, and internalized standards of morality and social approval. On the other hand, compulsions are the mechanisms to resolve self-ambivalence and to restore distorted moral and social ideals (Guidano & Liotti, 1983).

According to Guidano and Liotti (1983), self-ambivalence was based on three related features of self, namely contradictory beliefs about self (i.e. "I tend to move from one extreme to the other in how I think about myself"), uncertainty about personal attributes (i.e. "I question whether I am morally a good or bad person"), and a chronic preoccupation in verifying one's self-worth (i.e. "I constantly worry about whether I will make anything of my life"). It was proposed that in self-ambivalence, evaluation of self fluctuates from one extreme to another. The self is seen as either positive or negative without reaching a "harmonic unity." Rather, as it was proposed self-ambivalence can be also defined as a tendency to engage in all-or-none thinking. Additionally, Guidano and Liotti (1983) stated that due to incompatible self-image, the person cannot be sure about his/her self-worth and struggle to find out the truth about his/her morality, lovability, and self-worth. Moral ambivalence refers to dichotomous views of the self as good or bad, while lovability is described as individuals' insecurity about being loved, being accepted, and approved by others. Additionally, self-worth ambivalence is defined as having conflicted evaluations of the self and his/her worth as a person.

As a result, the person tries to meet certain criteria (e.g. approval, success in tasks, morality), worries about one's sense of self, and looks for signs or clues in the outside or internal world about one's true worth (Guidano & Liotti, 1983). Consistently, Tisher, Allen and Crouch (2014) argued that the more the

individuals were comfortable with and accepted themselves, the less they were preoccupied with other people's approval. Therefore, the individual solves uncertainty in the self-concept by fulfilling early parental expectations and attitudes about duty, responsibility, and ethics (Guidano & Liotti, 1983).

However, it is important to emphasize the difference between self-ambivalence and self-esteem, while the latter is defined as an attitude toward the self as a whole, (Rosenberg, 1965), self-ambivalence does not concern whether the self is regarded as positive or negative. Bhar and Kyrios (2007) proposed that although self-ambivalence and self-esteem are both associated with interpretations and appraisals of self-worth, self-ambivalence refers to the preoccupation with dichotomous views of self and the lack of certainty. Therefore, the concept of self-ambivalence refers to certainty of self-worth, whereas self-esteem refers to the valence of evaluations of self (Guidano & Liotti, 1983).

Doron and Kyrios (2005) suggested that cognitive-affective structures, including impaired internal representations of self and the world, are important determinants of cognitive vulnerability to OCD. As a result of cognitions and feelings that damage person's self-worth, and lead to overestimation of threat, and as a result unwanted intrusions are heightened and obsessions are developed (Doron and Kyrios, 2005; Mikulincer & Shaver, 2007). It was suggested that appraisals of intrusions that contradict with the person's self-view result in the most distressing and reactive experiences (Teachman, Woody & Magee, 2006). Ferrier and Brewin (2005) supported the relation between insecure appraisals about self and OCD symptoms. They showed that individuals with OCD were more likely to have feared self-characteristics like dangerousness and immorality when compared to anxious controls. Moreover, Ruegg (1994) reported that patients with OCD were more ambiguous about their self-beliefs than non-clinical controls. Likewise, Doron, Kyrios, and Moulding (2007) showed that individuals who were sensitive and felt incompetent in domains of morality, job, scholastic competence, and social acceptability showed symptoms of OCD and OCD-related maladaptive beliefs. Additionally, after comparing OCD patients with anxious and normal controls on self-esteem measures, Ehntholt, Salkovskis and Rimes (1999)

found that OCD group scored lower than non-clinical group, but did not differ from anxious group in terms of their self-esteem levels. Bhar (2004) also investigated the relationship between OCD and the ambivalent sense of self. They showed that individuals with OCD had higher scores on Self-Ambivalence Measure (SAM) than nonclinical university students and community controls. However, SAM did not discriminate between individuals with OCD and those presenting with other anxiety disorders. These findings support the idea that an ambivalent sense of self is associated with obsessive-compulsive symptoms, but may not be specific to OCD (Bhar, 2004). Consistently, Frost, Kyrios, McCarthy, and Matthews (2007) found that self-ambivalence and uncertainty about self and others were associated with compulsive hoarding and compulsive buying, and related constructs.

On the other hand, in addition to OCD symptoms, self-ambivalence is correlated with OCD-related belief domains (Guidano & Liotti, 1983; Bhar & Kyrios, 2007). For instance, Guidano and Liotti (1983) explained this issue as:

“These kinds of beliefs work as a sort of protective belt, preventing criticism... These beliefs guide obsessionals’ representational models of reality toward a rigid dichotomisation of the reality data in order to avoid mistakes and danger and to find the “perfect” solution” (p.263).

They proposed that perfectionism occurs as a strategy in an attempt to maintain self-worth as worthwhile and lovable. Additionally, belief about the importance of controlling unwanted thoughts also said to emerge in order to protect sense of self-worth. Likewise, Beck (1976), Salkovskis (1985) and Rachman (1997) proposed that maladaptive obsessional appraisals are influenced by beliefs and assumptions about the self, world and others, which are said to be shaped by the early life experiences, such as attachment style and parenting behaviors.

Recently, a research instrument was developed for studying conflicting views of self in the context of obsessive-compulsive symptoms, that is Self-Ambivalence Measure (SAM; Bhar & Kyrios, 2007). Although there are several

other questionnaires (e.g. The Splitting Index; Rumination-Reflection Questionnaire; Self-Clarity Scale) that assess dimensions of self-ambivalence. It is argued that SAM has some advantages over the other scales (Bhar, 2004). First of all, none of these scales measure all three dimensions of self-ambivalence, they only address some features of self-ambivalence (Bhar, 2004). Besides, SAM is the only questionnaire specifically developed to measure self-domains (e.g. social and moral approval domains of self-worth) of vulnerability in OCD based on Guidano and Liotti's multidimensional model of self. The third advantage of SAM over other scales is that it demonstrates discriminant validity in relation to measures of self-esteem and broader decision-making difficulties, despite assessing indecision about self-worth (Bhar, 2004). For instance, in Riketta and Ziegler's (2006) self-ambivalence measure, self-ambivalence was defined as the co-existence of both positive and negative self-evaluations that are argued to be related to self-esteem. Additionally, during the development process of this measure, as Tisher, Allen and Crouch (2014) argued, researchers did not attempt to understand the relationship between self-ambivalence and obsessive-compulsive symptoms. For the foregoing reasons, it was decided to use Self-Ambivalence Measure in the current thesis. Therefore, prior to investigation of the main hypotheses, a study demonstrating the applicability of this scale in a Turkish sample deemed to be necessary. Moreover, since Turkish culture has different cultural characteristics from the Western culture, the current study also evaluates the universal properties of the concept of self-ambivalence.

1.4.4 The Role of Parenting Styles

In order to better understand the psychopathology, developmental trajectories should be addressed. In addition to genetic and biological theories that are emphasized in the etiology of OCD, parental child-rearing patterns and the specific type of relationship between parents and their children may have proposed to contribute to the development of self-ambivalence, obsessive beliefs, and obsessive-compulsive symptoms in vulnerable subjects (Alonso et. al., 2004). However, Doron and Kyrios (2005) stated that there has been a neglect of

developmental issues including early attachment patterns and parenting attitudes and their role in the development and maintenance of the dysfunctional beliefs and symptoms related to OCD (O'Kearney, 2001).

The concept of attachment, an emotional bond, involves seeking out of a specific attachment figure to use as a secure base in the cases of danger or need (Bowlby, 1969). The pattern of attachment behavior which is classified as either “secure” or “insecure” is said to display relative stability over lifespan (Bowlby; 1969). According to attachment theory, the nature of interaction between the attachment figure and the infant during childhood period determines the security of attachment in adults, which affects social, psychological, and biological capacities via the construction of internal working models of self and others. Essentially, an “internal working model” determines the child’s way of handling present and future attachment relationships (Bowlby, 1969). Secure attachment behavior is linked with sensitive, responsive caregiving; on the other hand insecure attachment behavior is associated with inconsistent, neglectful, and intrusive caregiving (Bowlby, 1969). It was reported that secure individuals could construct an internal working model as being “lovable and competent”, and they have the capacity to tolerate negative emotions and derive comfort from others, therefore they show comfort with intimacy and depend on others without the fear of abandonment (Waters & Cummings, 2000). On the contrary, insecurely attached individuals have negative expectations about interactions with other people, show avoidance from significant relationships to avoid pain of loss or rejection, and have emotion dysregulation. They may fail to find inner representations of security or external sources of support, and may experience distress-exacerbating mental processes that result in emotional disorders (Waters & Cummings, 2000). It was proposed that insecure attachment is related to dysfunctional perceptions of self, others, and the world and classified into two groups, namely avoidant and anxious attachment (Doron & Kyrios, 2005). Individuals with avoidant attachment have negative self-view, experience distress during separation and avoid closeness due to distrust in others’ intentions, while individuals with anxious attachment have a negative self-view, but positive view

of others and depend on others for affection and affirmation (Bartholomew & Horowitz, 1991). Anxiously attached individuals exaggerate the negative consequences of the aversive experience and ruminate on these negative events. On the other hand, people with avoidant attachment tend to suppress distress-eliciting thoughts and negative self-representations, which perpetuate threat overestimation and exacerbate unwanted thought intrusions (Mikulincer & Shaver, 2007). Thus, it is obvious that attachment system affects adults' way of approaching close relationships, coping with and regulating distress and anxiety. Although secure attachment are linked with healthy developmental processes, insecure attachment was found to be associated with anxiety disorders, depression, and conduct problems in adulthood (Kesebir, Kavzoğlu, & Üstündağ, 2011).

Beck, Emery and Greenberg (1985) proposed that anxious individuals have a tendency to exaggerate threats from both external and internal sources, and underestimate their tendency to cope with them. Based on this vulnerability, theorists have considered the effect of attachment in the genesis of anxiety disorders (Myhr, Sookman, & Pinard, 2004). In terms of OCD, the theoretical link between adult attachment insecurities, self-perceptions and vulnerability to OCD has been supported (Doron, et. al., 2009; Doron & Kyrios, 2005). However, there has been surprisingly little empirical research examining the association between attachment and obsessive-compulsive symptoms. For instance, Myhr, Sookman, and Pinard (2004) compared three groups (individuals with OCD, with depression and with no psychiatric disorder) on a self-report measure of attachment. The results showed that both OCD and depressed patients scored higher on relationship anxiety sub-scale, which suggests an insecure self-model in patients. Similarly, Doron, Sar-el, and Mikulincer (2012) reported that individuals with OCD showed higher attachment anxiety when compared to control group, meeting the criteria for other anxiety disorders. By using a non-clinical sample, Doron et. al. (2009) showed that self-reported attachment insecurities are linked with OCD symptoms and cognitions. Based on these results, it can be concluded

that individuals having anxious or avoidant attachment styles are more vulnerable to OCD (Doron, Moulding, Kyrios, Nedeljkovic, & Mikulincer, 2009).

Additionally, it was proposed that stressful life events mediate the relationship between attachment patterns and psychopathology. Individuals having insecure attachment styles are more likely to perceive events more threatening (Pielage, Gerlsma, & Schaap, 2000). In fact, attachment insecurities have been found to be linked with cognitive processes of OCD, such as appraisal of threat, difficulty in suppressing thoughts, and underestimating one's coping ability in threatening situations (Doron, Sar-el, & Mikulincer, 2012).

However, in the case of individuals with OCD, these coping responses may further increase the occurrence of unwanted intrusions and the "feared self" cognitions (e.g., I'm bad/ I'm unworthy). Mikulincer and Shaver (2007) stated that attachment insecurities can disrupt the process of coping with experiences that challenge the perception of self and thereby contribute to OCD. Additionally, the disrupted coping process of people with insecure attachments results in intensifying expressions of distress, increased doubts about his/her lovability, anger due to not receiving enough support and a fear of being abandoned due to bad nature of self (Mikulincer & Shaver, 2007). Therefore, it is important to note that the sense of attachment security may play a protective role against OCD-related processes of the activation of feared self-cognitions and dysfunctional beliefs following events that challenge self-domains (Doron, Moulding, Kyrios, Nedeljkovic, & Mikulincer, 2009). Consistent with these findings, Vogel, Stiles, and Nordahl (2000) found out that individuals with OCD have exaggerated concerns about disapproval and separation from the significant other. It was proposed that those having OCD are vulnerable to separation fears, therefore the symptoms are precipitated by perceived threats to dependence needs (Meares, 2001). Therefore, it can be concluded that OCD-related beliefs mediated the relationship between attachment avoidance and OCD symptoms. For instance, the strategies (e.g. setting unrealistic and rigid personal standards, suppression of undesirable thoughts) adopted by avoidant people in order to deal with personal inadequacies, weakness, and negative self-aspect are accepted as the core

components of OCD-related beliefs, such as perfectionism and importance/control of thoughts.

Perceived characteristics of parental behaviors have been linked to the attachment patterns, perception of self, and the development of OCD. As it was discussed in the previous section, Guidano and Liotti (1983) proposed a theory of self-ambivalence, mostly affected by the attachment theory, about the relationship between parenting styles and OCD. They argued that contradictory communication styles, such as expression of intense interest without an expression of emotional warmth, play a crucial role in the development of obsessive beliefs. Guidano and Liotti (1983) proposed that child's uncertainty about whether s/he is lovable or unlovable; worthy or unworthy leads the child to have an ambivalent self-image, namely self-ambivalence, that needs certainty and perfection. On the other hand, parental behaviors expressing affection and warmth, and avoiding excessive protection, control, and criticism is claimed to play an important role in the development of healthy personality. Therefore, it is hypothesized that if the parents are perceived as emotionally available, responsive, and supportive, the self-model would be constructed as being lovable, worthy, and competent (Guidano & Liotti, 1983). On the other hand, experiences of rejection, emotional unavailability, and lack of support will result in an unlovable, unworthy, and incompetent self-model, which has been found to be related with different psychopathologies, such as depression, anxiety disorders, substance abuse, eating disorders, and specifically OCD (Rapee, 1997, cited in Alonso et. al., 2004).

In the literature, especially three dimensions of parenting styles, emotional warmth, overprotection, and rejection, were mentioned as playing an important role in the construction of self, development of emotion regulation strategies, and OCD symptoms. Although many instruments have been developed for assessing these three parenting styles, *Egna Minnen Beträffande Uppfostran (EMBU)* (Perris, Jacobsson, Lindstrom, von Knorring, & Perris, 1980) which is a widely used measure of an adult's perceptions of his/her parent's rearing behaviors in childhood (Alonso et. al., 2004) will be used in the current study. "Emotional

warmth” refers to parents’ expressiveness of positive regard and their responsiveness to child’s emotional and behavioral needs (Fauber, Forehand, Thomas, & Wierson, 1990). According to Morris, Silk, Steinberg, Myers, and Robinson (2007) maternal warmth contributes positively to the development of emotion regulation during childhood. Therefore, parental warmth plays a crucial role in terms of providing support, accepting negative emotions, and weakening negative arousal when the child is emotionally dysregulated (Davidov & Grusec, 2006). “Overprotection” which includes both behavioral and psychological attitudes, reflects the level of parental control and intrusions such as being fearful and anxious for the child’s safety (Arrindel et. al., 1999). A moderate level of behavioral control was found to be related with emotional and behavioral adjustments in children (Barber, Stolz, & Olsen, 2005). However, harsh or careless parental control was associated with emotion dysregulation (Manzeske & Dopkins Stright, 2009). Furthermore, Laible and Carlo (2004) proposed that high levels of psychological control contributed to low self-esteem, high levels of anxiety, depression, and externalizing problems. Ayçiçeği, Harris, and Dinn (2002) proposed that psychological control was related with guilt and resulted in the development of perfectionistic characters, and contributed to the development of OCD. It was reported that parents’ overprotection might model fearfulness and avoidance and might foster threat appraisals, so the self is perceived as incompetent to deal with such dangers, which resulted in obsessive-compulsive symptoms (Salkovskis, Shafran, Rachman, & Freeston, 1999). Salkovskis, Shafran, Rachman, and Freeston (1999) proposed that overprotection leads to OCD symptoms through inflated responsibility. In other words, he argued that individuals who are exposed to strict rules about morality and religion in the family would have acquired assumptions about responsibility that in turn is associated with obsessive-compulsive symptoms in adulthood (Salkovskis, Shafran, Rachman, & Freeston, 1999). Consistently, Hacıomeroglu and Karanci (2014) stated that mother’s overprotection, which impaired the boundary of self, predicts the obsessive-compulsive symptoms through the mediator role of responsibility attitudes. In addition to parental warmth and control, “Rejection” is

another dimension of parental attitudes mentioned in the literature. Perceived parental rejection refers to rejection of the child as an individual, being punitive, shaming, abusive, favoring siblings over the child, and rejection through criticism (Arrindel et. al., 1999). It was suggested that individuals were more likely to develop perfectionism because of excessive criticism, high standards and conditional approval from parents (Frost, Lahart, & Rosenblate, 1991). Additionally, Gunnar (2000) stated that high levels of rejection lead to high levels of stress, which can adversely affect the development, and functioning of neurobiological systems that are responsible for the regulation of stress and negative emotions. Consistently, it was reported that negative and coercive parenting styles would have increased adolescents' emotional distress and made them to avoid rather than understanding and appropriately expressing their negative emotions (Cummings & Davies, 1996; Eisenberg, Cumberland, & Spinrad, 1998). On the other hand, Klimes-Dougan and Zeman (2007) proposed that if parents are available and responsive to the needs of the adolescents, the adolescents would feel more comfortable with their negative emotions and able to express healthy strategies. Therefore, these studies provide support for impact of parental rearing styles on emotion regulation of individuals.

However, there are various discussions about the link between parental attitudes and obsessive-compulsive symptomatology. Rachman and Hodgson (1980) hypothesized that cleaning/contamination symptoms may have been related with overprotection and over control, while checking symptoms may have been linked to overcritical and rejecting parenting styles. With sub-clinical obsessive-compulsive subjects, Cavedo and Parker (1994) found that obsessive-compulsive subjects have perceived their parents as more rejecting, overprotecting, and less emotionally warm than normal control subjects. Similarly, Yoshida, Taga, Matsumoto, and Fukui (2005) reported significantly higher paternal protection scores in the OCD patients group than the control group. They added that paternal controlling and interfering attitudes were linked to both the development of OCD and depression with obsessive traits because of that fathers may have become the ideal image with own style of controlling

emotions, and striving to keep discipline. On the other hand, Alonso et. al., (2004) compared OCD patients and healthy controls in terms of perceived parental rearing styles, and reported no significant difference between these two groups in parental overprotection dimension. However, OCD patients reported perceiving their fathers as more rejecting when compared to healthy controls. Additionally, they did not find any association between specific OCD symptoms and parental rearing styles, except hoarding which was predicted by low emotional warmth (Alonso et. al., 2004). On the other hand, Smari, Martinsson, and Einarsson (2010) reported a significant association between washing symptom and overprotection as a parental rearing style, and as well as inflated responsibility.

Based on these findings it can be concluded that parents of individuals exhibiting obsessive-compulsive symptoms are generally overprotective, critical and employ guilt induction with their styles. Styles expressing hostility, criticism, and overprotection play a role in the development of self-perceptions, obsessive beliefs and consequently in OCD. Based on these parenting styles, the child develops ambivalent sense of self: “I am bad/ unworthy” vs. “I am a good person” (Kempke & Luyten, 2007). In order to reject the negative self and overemphasize the positive self, the child develops specific schemas including perfectionism, need for certainty, or inflated responsibility, which is accepted as the core vulnerability in OCD. Additionally, these schemas are reinforced by the inflexible and controlling attitudes of parents concerning morality and responsibility (Kempke & Luyten, 2007). Another strategy used by the person to decrease awareness of ambivalence is to ignore his/her feelings and emotions (cited in Kempke & Luyten, 2007). Likewise, it was proposed that actions of OCD patients such as repetitive hand washing temporarily, serve to regulate affect and removes inner feelings of distress (cited in Carpenter & Chung, 2011). The observation that OCD patients experience more intense symptoms at times of stress and high arousal would support these findings, suggesting that it is important to help people with OCD to learn to tolerate and elaborate awareness of their emotional selves, and expressing them to reduce self-reliance.

In conclusion, the investigation of the literature showed that parental attitudes including rejection and/or overprotection are important vulnerability factors that predispose individuals to develop psychopathology, including OCD. So, as the sections shows maladaptive obsessive appraisals, suppression as an emotion regulation strategy, self-ambivalence as a self-concept, and perceived parenting styles empirically predict both the development and the maintenance of the obsessive-compulsive disorder.

1.5 Aims of the Current Study

Regarding the summarized literature in the previous section, it can be concluded that each model of OCD has emphasized different vulnerability factor contributing to the development and maintenance of OCD. Additionally, factors affecting the development of different subtypes of obsessions and compulsions have been still unclear. Since, to our knowledge, there has been no study testing all factors together, it would be fruitful to examine cognitive, emotional, and developmental domains associated with obsessive-compulsive symptoms in one single study. Another gap in the relevant literature is that recent cognitive models of OCD do not pay enough attention to self-concept as a vulnerability factor of OCD. Although Guidano and Liotti's theory of OCD received empirical support from various studies in terms of OCD, the relationship between self-ambivalence and OCD-related belief domains, and specific obsessive-compulsive symptom dimensions have not been examined in Turkey yet. Therefore, in Turkish culture, little is known about the concept of self-ambivalence, and about the pathways through which it maintains obsessive-compulsive symptoms. One of the reasons of this gap might be the absence of a specific instrument that measures self-ambivalence in Turkey. Additionally, the knowledge about the relatedness of cognitive belief factors, emotion regulation strategies, and self-concept might increase the effectiveness of treatment strategies and interventions that are used to prevent relapse. Moreover, effective emotion regulation strategies of patients would be utilized as sources in psychotherapy interventions.

In the light of the literature review and the gaps presented above, in the current study a comprehensive model of OCD is proposed to examine the conceptually relevant variables in the development and maintenance of OCD, hypothesized by cognitive models (Salkovskis, 1985; Rachman, 1997; Clark, 2004), and Guidiano and Liotti's (1983) model. Additionally, these models will be extended with Gross' (1999) model proposing the effect of emotion regulation strategies. Figure 1 presents the proposed model.

Accordingly, the goals of the current study are (a) to adapt and examine the psychometric properties of the original version of Self-Ambivalence Measure (Bhar & Kyrios, 2007) in a Turkish sample; (b) examine whether perceived parenting styles (e.g. emotional warmth, overprotection, rejection), self-ambivalence factors, OCD-related appraisals, and emotion regulation strategies predict general obsessive-compulsive symptoms and subdimensions of OCD; (c) to include both cognitive and emotional vulnerability factors of both general obsessive-compulsive symptoms and different subtypes of OCD in one single study; (d) to assess the pathways through which perceived parenting styles and self-ambivalence maintain obsessive-compulsive symptoms.

To sum up, the present study aims to investigate the relationship among perceived parenting styles, self-ambivalence, obsessive-compulsive beliefs, emotion regulation strategies; and their possible effects on obsessive-compulsive symptomatology.

1.5.1 Hypothesis of the Study

The hypotheses of this study are grouped in four main categories and are;

Group 1: Adaptation of the Self-Ambivalence Measure

Hypothesis 1: Turkish version of the Self-Ambivalence measure is expected to be psychometrically reliable and valid

Group 2: Predictors of Obsessive-Compulsive Symptoms

Hypothesis 2: Perceived parenting styles, self-ambivalence, cognitive appraisals, and emotion regulation strategies will be correlated with both each other and with OCD Symptoms.

Hypothesis 3: Perceived parenting styles, self-ambivalence, cognitive appraisals, and emotion regulation strategies will predict the level and different types of (checking, contamination, grooming, obsessional thoughts, obsessional impulses) obsessive-compulsive symptomatology. Specifically,

3.1 Higher levels of perceived rejection and overprotection from parents will be associated with higher levels of obsessive-compulsive symptoms; while higher levels of perceived emotional warmth will be associated with lower levels of obsessive-compulsive symptoms;

3.2 Higher levels of self-ambivalence factors will be associated with higher levels of obsessive-compulsive symptoms;

3.3 Increased use of cognitive appraisals, including responsibility/threat estimation, perfectionism/uncertainty, importance/control of thoughts, will exhibit higher levels of obsessive-compulsive symptoms, and specific beliefs will be associated with specific forms of obsessive-compulsive behavior;

3.4 Increased use of suppression as an emotion regulation strategy and the decreased use of cognitive reappraisal will be associated with higher levels of obsessive-compulsive symptoms.

Group 3: Predicting Obsessive-Compulsive Symptoms via Role of Mediators

Hypothesis 4: Perceived parenting styles will predict OCD symptoms through the mediator role of self-ambivalence factors. Specifically,

4.1 The effects of higher levels of perceived rejection and overprotection, and lower levels of perceived emotional warmth from parents on overall level of obsessive-compulsive symptoms will be mediated by higher levels of self-ambivalence factors;

Hypothesis 5: Self-ambivalence factors will predict OCD symptoms through the mediator role of obsessive belief domains and emotion regulation strategies. Specifically,

5.1 The effects of self-ambivalence factors on overall level of obsessive-compulsive symptoms will be mediated by the increased use of obsessive appraisals, including responsibility/threat estimation, perfectionism/uncertainty,

importance/control of thoughts, and increased use of suppression as an emotion regulation strategy;

5.2 The effects of self-ambivalence factors on overall level of obsessive-compulsive symptoms will be mediated by decreased use of cognitive reappraisal as an emotion regulation strategy;

Group 4: Proposed Comprehensive Model of OCD Symptoms

Hypothesis 6: Higher levels of perceived rejection and overprotection, and lower levels of emotional warmth from parents will increase self-ambivalence, which in turn will increase the individuals' maladaptive obsessive appraisals. Obsessive beliefs are expected to further increase the use of suppression, and decrease the use of cognitive reappraisal as an emotion regulation strategy, and in turn will predict obsessive-compulsive symptomatology.

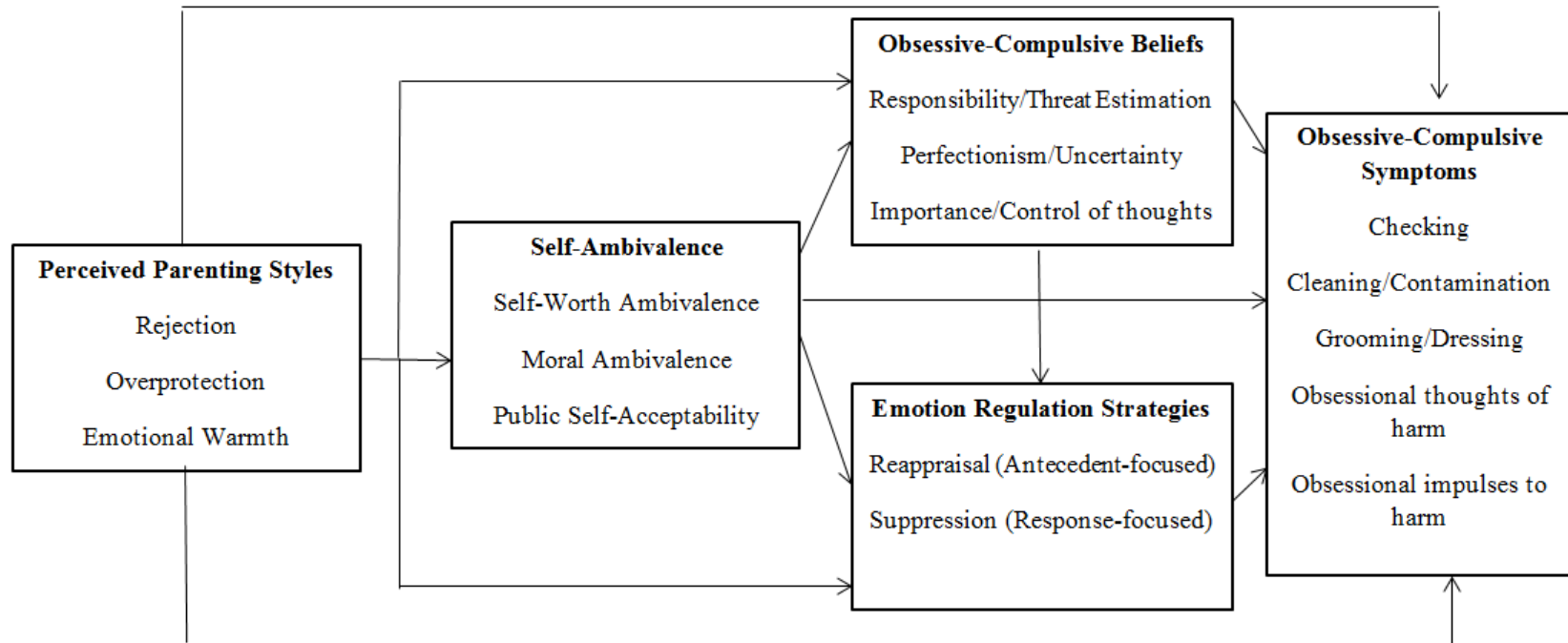


Figure 1 Hypothesized Conceptual Model of OCD

CHAPTER II

PILOT STUDY

2.1 Overview

The purpose of this section was to evaluate the preliminary findings about the psychometric properties of the Turkish language version of the Self-Ambivalence Measure (SAM-T). There are three main sections in this part. First, the sample characteristics; measures including the properties of the SAM, descriptions and psychometric properties of other instruments; and the procedure of the study is given. Then, results of the analyses performed to examine psychometric properties, including reliability, criterion and concurrent validity with associated measures of self, anxiety, and depression, of the SAM are presented.

2.2 Method

2.2.1 Sample

A total of 280 university students from different departments of the Middle East Technical University participated in the current study. Table 1 shows the participant's sociodemographic characteristics.

Among participants 174 (62.1%) were females; 105 subjects were males (37.5%) and one subject did not report sex. The ages of the participants ranged between 18 and 33 ($M = 20.8$, $SD = 1.73$). 162 (57.9%) participants reported big cities as the place where they have spent most of their lives, while 89 (31.8%) participants lived in cities, 18 (6.4%) in towns, and 6 (2.1%) in villages.

In terms of the home environment of the participants, 122 (43.6%) of the subjects stated that they are still living with their family, whereas 117 (41.8%) of

them reported living at dormitories, 30 (10.7%) reported living with a homemate, and 7 (2.5%) living alone.

As for mother's education, 5 (1.8%) were illiterate, 12 (4.3%) were literate, 62 (22.2%) were graduate of primary or secondary school, 94 (33.6 %) were graduate of high school, and 105 (37.5%) were graduate of university or post-graduates. Furthermore, for father's education level, one (0.4%) was illiterate, 2 (0.7%) were literate, 60 (22.4%) were graduate of primary or secondary school, 60 (21.4%) were graduate of high school, and 153 (58.6%) were university or post-graduates.

In addition to these, the participants' mental health history was examined; 30 (9.5%) participants reported a psychiatric problem, among them 9 (2.9%) participants were under psychiatric medication and 8 (2.6%) of the participants were under psychological treatment. Subjects with any known psychiatric diagnosis; taking any kind of medication that might interfere with their ability to fill the questionnaires or has undergone any kind of psychological interventions were excluded from the study. Therefore, the analysis were conducted with a total of 280 participants.

2.2.2 Instruments

In order to validate the Turkish form of Self-Ambivalence Measure; Rosenberg Self-Esteem Scale, Beck Depression Inventory, Beck Anxiety Inventory, Eysenck Personality Questionnaire-Revised & Abbreviated, and Short-EMBU (Egna Minnen Beträffande Uppfostran- My Memories of Upbringing) were administered to participants (see Appendix A).

2.2.2.1 The Socio-demographic Information Form

The Socio-demographic Information Form has been developed in order to obtain some basic information about the participants' demographic characteristics (age, sex, education level, place of living) and psychiatric problems (if yes; type of treatment, and current treatment) (see Appendix A).

Table 2 Demographic Characteristics of the Sample (N= 280)

Variables	Frequency (%)	Mean (SD)
Age		20.83 (1.75)
Gender (1 missing)		
Female	174 (62.1%)	
Male	105 (37.5%)	
Marital Status (3 missing)		
Single	277 (99%)	
Education Level		
Undergraduate	280 (100%)	
Family Income Level		
Low	13 (4.6%)	
Moderate	246 (87.9%)	
High	15 (5.4%)	
Hometown		
Metropolitan	162 (57.9%)	
City	89 (31.8%)	
Town	18 (6.4%)	
Village	6 (2.1%)	
Residential Status		
With Family	122 (43.6%)	
With Homemate	30 (10.7%)	
Alone at Home	7 (2.5%)	
At Dormitory	117 (41.8%)	
Mother's Education Level		
Illiterate	5 (1.8%)	
Literate	12 (4.3%)	
Primary School	43 (15.4%)	
Secondary School	19 (6.8%)	
High School	94 (33.6%)	
Undergraduate	89 (31.8%)	
Graduate	16 (5.7%)	
Father's Education Level		
Illiterate	1 (0.4%)	
Literate	2 (0,7%)	
Primary School	34 (12.1%)	
Secondary School	26 (9.3%)	
High School	60 (21.4%)	
Undergraduate	132 (47.1%)	
Graduate	21 (7.5%)	

Table 2 (Continued)

Variables	Frequency (%)	Mean (SD)
Sibling Number(s) (3 missing)		2.34 (1.08)
Sibling Order (3 missing)		1.70 (0.98)
Psychiatric Problem		
No	280 (90.3%)	
Yes	30 (9.6%)	
If Yes, Treatment Type		
Medical Treatment	9 (30%)	
Psychotherapy	8 (26.6%)	

2.2.2.2 Self-Ambivalence Measure (SAM)

Self-Ambivalence Measure is a recently developed research instrument in the study of conflicting views of self in the context of obsessive-compulsive symptoms (SAM; Bhar & Kyrios, 2007).

The SAM (Bhar & Kyrios, 2007) is a 19-item self-report measure designed to measure one's experience of uncertainty, conflict and preoccupation associated with the self, in line with Guidano and Liotti's concept of self-ambivalence (Guidano, 1987; Guidano & Liotti, 1983). It uses a five-point Likert type scale, ranging from 0 (*not at all*) to 4 (*totally agree*). Only item 2 is reverse coded while rest of the items are coded straightforward, and higher scores represent greater self-ambivalence. The items include statements about uncertainty ("I doubt whether others really like me"); self-dichotomy ("I tend to think of myself in terms of categories such as "good" or "bad"); and self-preoccupation ("I think about my worth as a person").

Bhar (2004) described the development process of the initial version of the SAM in detail in his doctoral thesis, the aim of which was to investigate the relationship between self-ambivalence and obsessive-compulsive disorder. The initial pool comprising of 52 items was formed on the basis of clinical observations of patients and theoretical views of self-concept in OCD patients. In order to enhance the validity of SAM, 31 items were removed from the pool due to different reasons. For instance, 10 items referring to self-esteem protective

behaviors (e.g. perfectionism, obsessionality, dependency, and/or hostility); eight items relating to occupational or academic competency; seven items capturing beliefs about body image; six items lacking clarity were excluded from the item-pool (Bhar, 2004). 21-items were subjected to a principal component factor analysis. Items that had loadings greater than .30 were retained. As a result, the final 19-item version of the SAM was obtained, with a Cronbach's alpha coefficient of .91 for the student controls and .92 for the clinical sample with OCD.

Apart from the original development study of the SAM, Bhar & Kyrios (2007) analysed the factor structure of the SAM with two samples; a non-clinical sample and a clinical sample, and identified two factors in both samples; Self-worth Ambivalence (SA) and Moral Ambivalence (MA). The SAM has been associated with good internal consistency in both non-clinical (Self-Ambivalence factor $\alpha = .88$; Moral Ambivalence factor $\alpha = .85$) and clinical samples (Self-Ambivalence factor $\alpha = .88$; Moral Ambivalence factor $\alpha = .86$). Subscales of the SAM were also found to be stable over a time interval (SA, $r = .44$, $p \leq .001$; MA, $r = .57$, $p \leq .001$). High correlations between the subscales of SAM and various measures of self-evaluation demonstrated an acceptable convergent validity. For instance, the subscales of SAM correlated significantly with Self-Concept Clarity Scale (Campbell et al., 1996), (SA, $r = .82$, $p \leq .001$; MA, $r = .53$, $p \leq .001$), with Self-splitting subscale of the Splitting Index (Gould et al., 1996), (SA, $r = .78$, $p \leq .001$; MA, $r = .42$, $p \leq .001$) and with Rumination subscale of the Rumination–Reflection Questionnaire (Trapnell & Campbell, 1999), (SA, $r = .67$, $p \leq .001$; MA, $r = .35$, $p \leq .001$). The instrument has been shown to discriminate OCD patients from normal controls, but it has failed in differentiating OCD patients from individuals with other anxiety disorders.

However, another study assessing the factor structure of the SAM with a non-clinical sample using exploratory (EFA) factor analyses yielded a three-factor structure, namely Self-Worth Ambivalence, Moral Ambivalence, and Public Self-Consciousness (Tisher, Allen, & Crouch, 2014). Confirmatory factor analysis (CFA) also supported the view that a three-factor model of the SAM fits

the data. In terms of reliability, all scales showed very good internal consistency ($\alpha = .75$ or above). In addition, high correlations between the subscales of SAM and splitting, rumination and self-uncertainty showed promising convergent validity, whereas no correlation between subscales of the SAM and self-reflection has provided support for the divergent validity (Tisher, Allen, & Crouch, 2014). The scale is presented in Appendix A.

2.2.2.3 Rosenberg Self-Esteem Scale (RSES)

The scale was designed to achieve a unidimensional measure of global self-esteem by Rosenberg (1965). It is composed of 10 items rated on a 4-point Likert-type scale ranging from (1) “strongly agree” to (4) “strongly disagree”. Items 3, 5, 8, 9, 10 are reverse coded while rest of the items are coded straightforward. Higher scores on the scale reflect higher levels of self-esteem. Many studies showed satisfactory psychometric properties of RSES (Sinclair, Blais, Gansler, Sandberg, Bistis, & LoCicero, 2010; Swenson, 2003).

The scale was translated into Turkish by Çuhadaroğlu (1986). In the Turkish version, test-retest coefficient of .71 was found to be satisfactory. Additionally, the validity of the scale was supported by different studies (Tuğrul 1994). Reliability analysis depicted Cronbach alpha value of .92 for the current study. The scale is presented in Appendix A.

2.2.2.4 The Beck Depression Inventory (BDI)

The scale which is a self-report inventory developed to measure cognitive, emotional, and motivational symptoms of depression by Beck, Rush, Shaw, and Emery (1979). It is composed of 21 items for each of which participant rate him/herself on a 4-point scale. The scores for each item range from 0 to 3. Higher scores indicate higher levels of depressive symptoms and high scores above 17 were found to indicate clinical depression (Hisli, 1988). The possible highest total score is 63. In terms of reliability of BDI, mean coefficient alpha yielded .86 for clinical groups and .81 for non-clinical samples (Beck, Steer, & Garbin, 1988).

The scale was adapted into Turkish by Hisli (1988). The reliability of the scale BDI was found to be .74 (Hisli, 1988). Different studies also supported satisfactory validity results for the scale (Hisli, 1988; Şahin, Şahin & Hepner, 1993). The present study revealed Cronbach alpha value of .87 for the scale. For the inventory, see Appendix A.

2.2.2.5 Beck Anxiety Inventory (BAI)

The scale was developed by Beck, Epstein, Brown, and Steer (1988). It is a 21-item, 3-points Likert type scale used to assess cognitive and somatic symptoms of anxiety. The score for each item ranges from 0 (*not at all*) to 3 (*seriously*). Higher scores indicate higher levels of anxiety experience. The possible highest total score is 63.

The internal consistency and test-retest reliability of the scale has been shown to be satisfactory in both clinical and non-clinical samples (Beck, Epstein, Brown, and Steer, 1988; Chapman, Williams, Mast, & Woodruss-Borden, 2009). In terms of concurrent and convergent validity, the BAI was found to be moderately correlated with anxiety ($r = .36$ to $.69$) and depression ($r = .25$ to $.56$) in psychiatric patients (Beck, Epstein, Brown, & Steer, 1988) and student samples (Osman, Kopper, Barrios, Osman, & Wade, 1977).

The scale was adapted into Turkish by Ulusoy, Şahin, and Erkmen (1998). Item-total correlation coefficients ranged from .45 to .72. Test-retest reliability of the scale is reported to be .57, which was comparable with the original values (Ulusoy, Şahin, & Erkmen, 1998). In the current study, the alpha coefficient of the scale was found to be .93. The scale is presented at Appendix A.

2.2.2.6 Short-EMBU (Egna Minnen Beträffande Uppfostran- My Memories of Upbringing)

The Short-EMBU was developed from the original 81-item version developed by Perris, Jacobsson, Lindstrom, von Knorring, and Perris (1980). Because of its time-consuming nature and misunderstandings of some items, the original form was firstly revised and reduced to 64 items. The new form, named

as Short-EMBU, was developed by Arrindell et. al. (1999). The Short EMBU was said to be functionally equivalent to the original EMBU, since Arrindell et. al. (1999) developed it based on factor loading and content sampling. The Short-EMBU was designed to measure individuals' perceptions of their parents' child rearing behaviors, and parental attitudes. It has 23 items rated for both mothers' and fathers' behaviors separately, on 4-point Likert type scales ranging from 1 (*never*) to 4 (*most of the time*). The scale consists of three subscales; namely, rejection, overprotection, and emotional warmth. Subsequently, six subscale scores, 3 for mothers and 3 for fathers, are calculated for the scale. Parenting attitudes of acceptance, support, and valuing are indicators of emotional warmth, and overprotection refers to parents' excessive fear for a child's safety, whereas rejection is defined as a critical and judgmental parenting style. The three subscales of the short 23-item EMBU were found to be reliable and valid across national samples (Arrindell, et al., 1999; Arrindell & Engebretsen, 2000; Li, Wang, Zhang, 2012).

The scale was adapted into Turkish by Dirik, Karanci, and Yorulmaz (2015). Cross-national study, including non-Western countries (e.g. Arab countries, Croatia, and Turkey) showed satisfactory psychometric characteristics (Karanci et., al., 2006). Moreover, another study examining the Turkish form of the scale showed the same factor structure as the original scale (Dirik, Karanci, & Yorulmaz, 2015). Cronbach alpha coefficients were found to be .64, .75., and .72, respectively for mothers' rejection, emotional warmth, and overprotection. Additionally for fathers' rejection, emotional warmth, and overprotection, alpha coefficients were shown to be .71, .79, and .73, respectively. Results also supported satisfactory concurrent validity of Short-EMBU by examining its subscales' correlation with relevant factors of Parental Behavior Inventory (PBI). The 6-factor version of the scale was used in the current study revealing Cronbach alpha values of .72 for mother's rejection, .83 for father's rejection, .76 for mother's emotional warmth, .82 for father's emotional warmth, .79 for mother's overprotection and .82 for father's overprotection. For the inventory, see Appendix A.

2.2.2.7 Eysenck Personality Questionnaire-Revised & Abbreviated (EPQR-A)

The abbreviated version of EPQR (Francis, Brown, & Philipchalk, 1992), with 24 items, was developed from the original 100-items version (Eysenck, Eysenck, & Barrett, 1985). The original 100-item version of the scale was designed in order to assess personality in terms of psychoticism, extraversion, with also lie scale on the basis of Eysenck Personality Theory. Because of the need for the shorter version, Eysenck Personality Questionnaire Revised-Abbreviated Form (EPQR-A 48) was refined (Eysenck, Eysenck, & Barrett, 1985). Another version of EPQR-A (short form) contains 24 items. The abbreviated version of the scale has the similar response options as “yes” or “no”. It has three main subscales, namely “psychoticism”, “extraversion”, and “neuroticism”, with six items each. Moreover, “lie” dimension is also added in order to assess validity of responses and social desirability (Eysenck, Eysenck, & Barrett, 1985). Different studies showed satisfactory reliable and valid values for three subscales (Francis, Brown, & Phillipchalk, 1992; Shevlin, Bailey, & Adamson, 2002). In their study, Francis, Brown, and Philipchalk (1992) found out satisfactory alpha coefficients for all subscales in the short form in university students from four different countries (e.g. England, Canada, America, and Australia). Alpha coefficients for the short form extraversion and neuroticism scales was reported as ranging from .78 to .87 and .79 to .83, respectively, in the four samples. However, psychoticism dimension was found to have low ($\alpha = .33-.52$) internal reliability.

EPQR-A was adapted into Turkish by Karanci, Dirik, and Yorulmaz (2007). The same factor structure with the original scale was found in a group of university students in Turkey. Cronbach alpha coefficients were found to be .78, .65., and .64, respectively for extraversion, neuroticism, and lie subscales. Similar to the original study (Francis, Brown, & Philipchalk, 1992), psychoticism dimension was found to have a lower reliability value ($\alpha = 0.42$). Moreover, in terms of validity analyses, Turkish version of the EPQR-A was also shown to have promising findings. The current study revealed Cronbach alpha values of .82

for Extraversion, .72 for Neuroticism, .31 for Psychoticism, and .54 for Lie subscales. Due to low reliability, psychoticism was excluded from the analyses. For the inventory, see Appendix A.

2.2.3 Procedure

Initially, application was submitted to The Applied Ethics Research Center of Middle East Technical University (METU) and was granted. Besides, permission for translation and adaptation, and the latest version of the scale was requested from the owner of the scale.

During the adaptation of the Turkish version of SAM, translation and back-translation method (cited in Brislin, 1980) was used. Firstly, the original of the scale was translated into Turkish by two independent researchers, one of which was from psychology field and the other from a different field. The translated and the original items were examined and rated suitability on 10-point scale by two independent judges. Based on these scores, the original and the translated items were compared and gathered into one form by the researcher and her advisor, and then another independent judge conducted the back translation into English. Finally, again the present researcher and her advisor compared the originals and back-translated form and finalized the Turkish version of the scale (see Appendix A). Then, the comprehensibility and grammar structure of the new Turkish form was also examined by a group of instructors from the Department of Turkish Language in Middle East Technical University.

The tests were randomly ordered for every participant before the administration in order to control for the possible sequence effect. The cover page included a brief explanation about the study and an informed-consent form. The instruments were administered during regular class hours to the participants who got credit for their participations. The total administration time for the instruments was approximately 20 minutes.

Three weeks after the first administration, 50 of the participants were re-administered the SAM in order to analyze the test–retest reliability of the scale.

2.3 Results

2.3.1 Screening of the Data

Prior to analysis, the data were examined for the accuracy of data entry, missing values, fit between their distributions, and for the univariate and multivariate outliers. Totally, 280 cases were examined in the analyses.

2.3.2 Descriptive Statistics

Since this is a pilot study, the primary goal is to translate and adapt the scale into Turkish, and to examine the preliminary findings of the psychometric properties. The original two-factor structure of Self-Ambivalence Measure (SAM), developed by Bhar (2004), was analyzed in terms of reliability and validity within the current sample.

Additionally, in order to test whether there were any differences between men and women on the total score and subscales of the SAM, Independent sample *t*-tests were performed. Results showed a statistically significant difference between men and women in self-ambivalence, ($t(277) = 1.73, p < .05$). As it was shown in Table 3, Women ($M = 27.00$) have higher scores than men ($M = 24.77$) on self-worth ambivalence. However, gender had no main effect neither on total SAM score nor moral-ambivalence scores of individuals.

Table 3 Means (Standard Deviations) and Mean Differences on SAM

Variables	Men ($N = 105$)	Women ($N = 174$)	<i>t</i> -value	<i>df</i>
SAM-Total	1.89 (0.67)	2.04 (0.70)	1.73	277
Self-worth Ambivalence	1.91 (0.64)	2.08 (0.64)	2.17*	277
Moral-Ambivalence	1.89 (1.00)	1.97 (0.97)	0.70	277

Note. SAM= Self-Ambivalence Measure. * $p < .05$

2.3.3 Psychometric Properties of the Turkish Version of the Self-Ambivalence Measure (SAM-T)

2.3.3.1 Factor Structure of the Turkish Version of Self-Ambivalence Measure (SAM-T)

A confirmatory factor analysis (CFA) was then performed through LISREL 8.51 on the items of the Self-Ambivalence Measure (SAM). A two factor model of self-ambivalence, Self-Worth Ambivalence and Moral Ambivalence is hypothesized based on the model suggested by Bhar and Kyrios (2007). Items 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 15, 19 serve as indicators of Self-Worth Ambivalence; while items 9, 11, 13, 16, 17, 18 serve as indicators of Moral Ambivalence. The two factors are hypothesized to covary with one another.

The hypothesized model is presented in Figure 2 where circles represent latent variables, and rectangles represent measured variables. Absence of a line connecting variable implies no hypothesized direct effect. In the figure, each indicator has two arrows leading to it. A one-way arrow shows linear structural correlations between a latent variable and its indicators from a latent variable leading to its indicators. All of the errors in the model are assumed to be uncorrelated with each other and one-way arrows to indicators represent measurement errors or residuals of the indicators. Finally, the double-headed arrow between the latent variables represents the correlations between these variables.

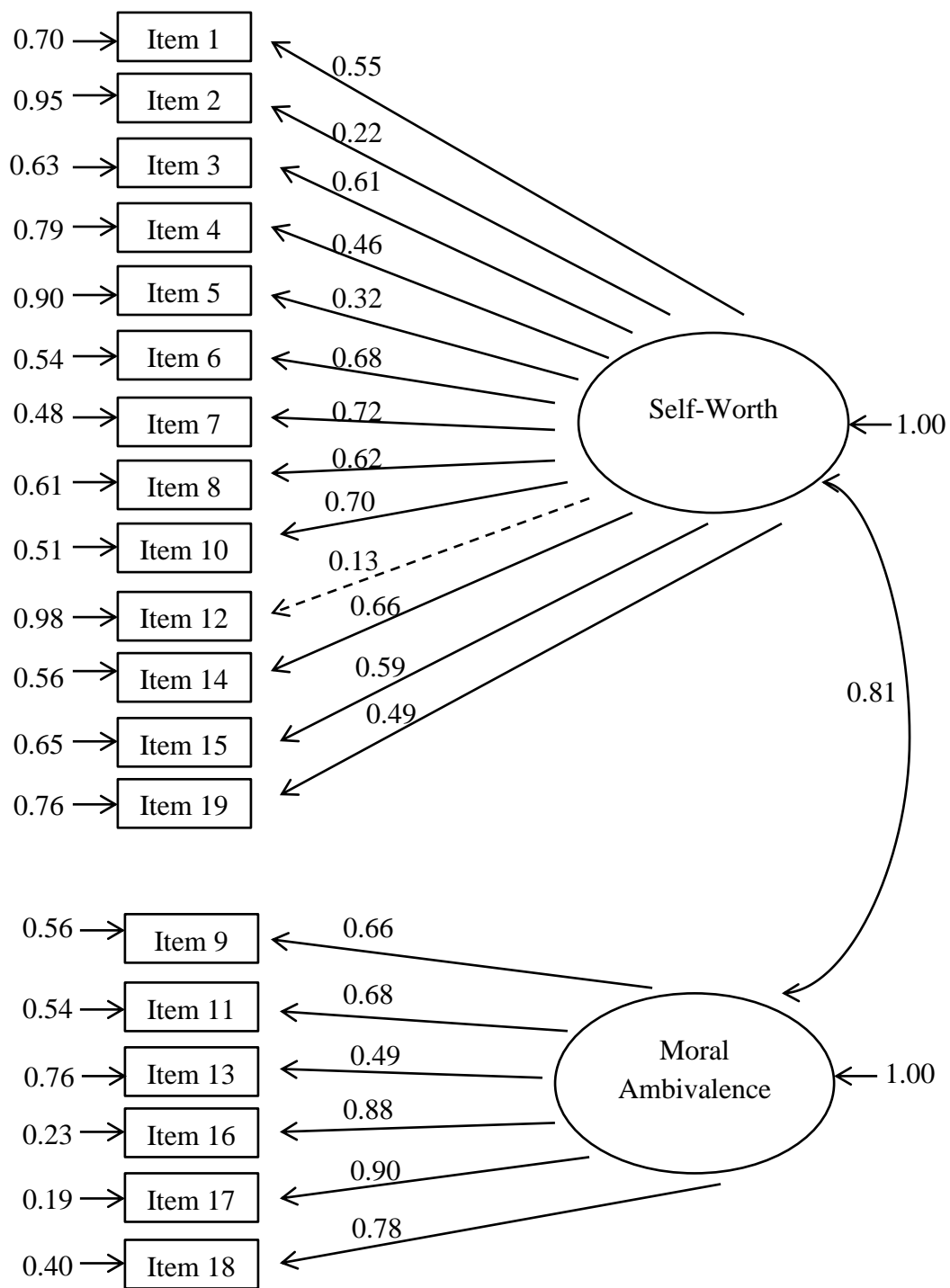
Covariance matrix and maximum likelihood estimation was employed to estimate all observed variables and was assessed by means of data fit indices such as χ^2 , ratio of χ^2 to degree of freedom (df), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Non-Normed Fit Index (NNFI), as suggested by Tabachnick and Fidell (2007). The acceptable criteria for these indices were proposed as follows: low χ^2 , ratio was below the 5:1 for χ^2 /df, RMSEA between 0.0 and 0.08, values close to 0.90 for the GFI, AGFI, CFI, and NNFI (Bollen, 1986; Tabachnick & Fidell, 2007).

A chi-square test indicated significant differences between the observed and estimated parameters, $\chi^2 (151) = 981.46, p \leq .001$. Goodness of fit statistics also revealed that the model did not fit the data well: GFI = .73; NNFI = .71; AGFI = .66; CFI = .74; and RMSEA = .14.

Investigation of the modification indices suggested that adding error variances between several indicator variables and paths between indicator variables and latent variables would significantly improve the model. Therefore, post-hoc model modifications were performed in an attempt to develop a better fitting model. Error covariances were added one at a time to the model between items of the same latent constructs 18-11 and 6-15. A chi-square difference test indicated that the model was significantly improved by the addition of these two paths, $\chi^2_{\text{diff}} (2) = 292.18, p \leq .001$. However, goodness of fit indices indicated a suboptimal fit for the data, NNFI = .80, GFI = .79; AGFI = .74; CFI = .82, RMSEA = .11 (see Figure 3). Although the chi-square statistic still indicated a significant difference between the observed and estimated parameters, the χ^2/df ratio was below the 5:1 ratio suggested by Bollen (1989).

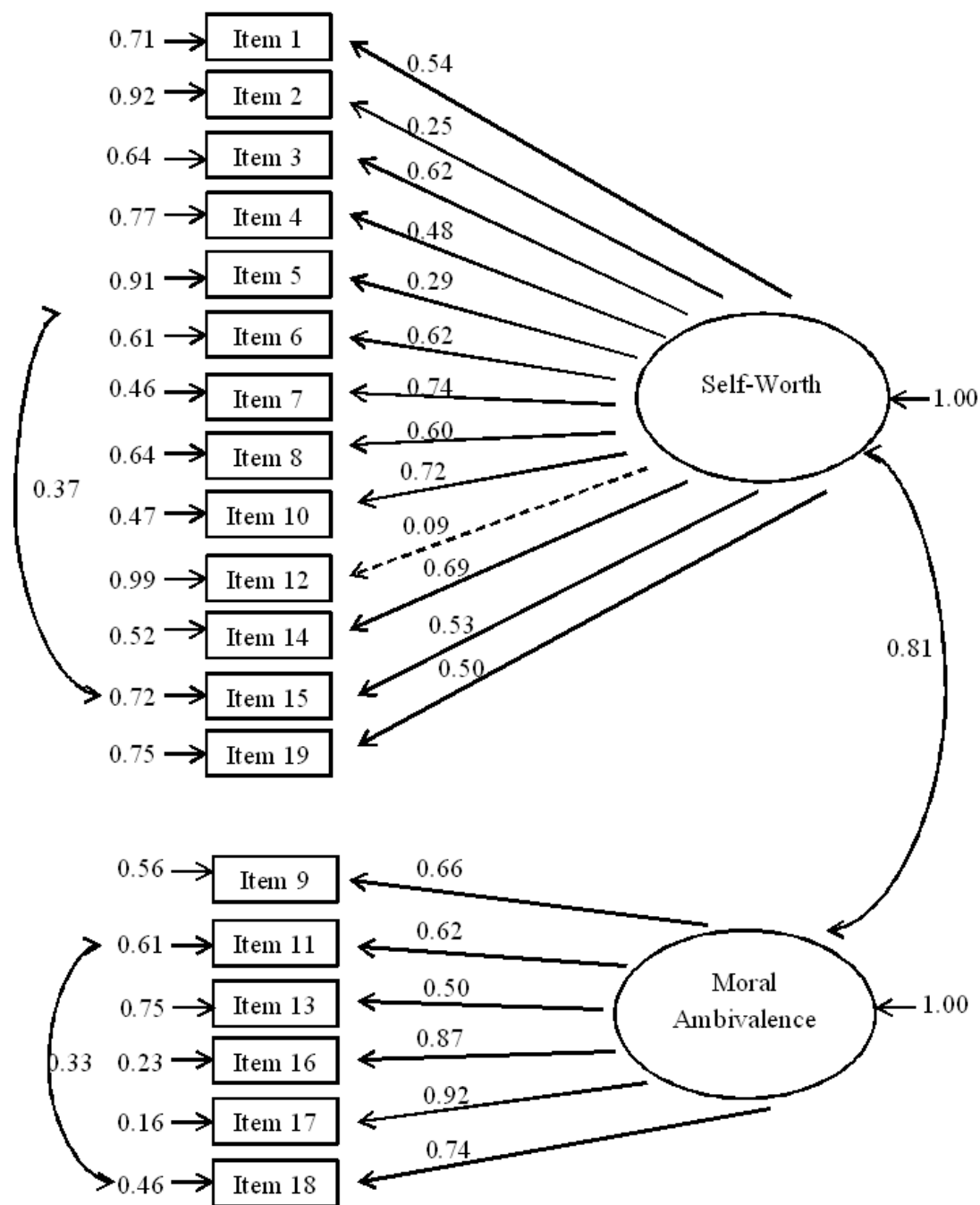
Examination of the structural correlations between the latent variables indicated that self-worth ambivalence and moral ambivalence were significantly correlated ($r = .81, p < .05$). Moreover, path predicting item 12 from Self-Worth Ambivalence was not significant. Other paths predicting items of SAM from Self-Worth and Moral Ambivalence was significant at $p < .05$ with standardized coefficients ranging between .25 and .92.

In sum, the model provided a suboptimal fit to the data. Additionally, examination of path parameters indicated that item 12 did not have a significant loading and item 2 had a loading below .30 which was used as a criterion to determine item structure of these two factors, as suggested by Tabachnick and Fidell (1996). Item 2 is the only reverse coded item within the scale. The results showed that these two items have problems in terms of translation and coding. Therefore, they were reevaluated for content and the coding by thesis follow-up committee, and rewritten for the main study.



Note. Dashes (--) indicate non-significant loading

Figure 2 CFA Model before Modifications with Standardized Coefficients



Note. Dashes (--) indicate non-significant loading

Figure 3 Final Modified CFA Model with Significant Standardized Coefficient

2.3.3.2 Internal Consistency of the Turkish Version of the SAM (SAM-T)

In order to examine the internal consistency of the SAM-T and its factors, Cronbach's alpha coefficients were computed. The whole scale was found to have a Cronbach's alpha coefficient of .88, which was considerably good and similar to the internal consistency of the original version of the scale. The corrected item-total correlations ranged from .13 to .73. The subscales of the SAM also revealed considerably high internal consistency; Self-Worth Ambivalence, and Moral Ambivalence subscales were found to have Cronbach's alpha coefficients of .80 and .85 respectively. The corrected item-total correlations ranged from .10 to .64 for Self-Worth Ambivalence subscale; from .41 to .76 for Moral Ambivalence Subscale Table 4 presents internal consistency and item total ranges of the SAM and its subscales.

Test-retest reliability was assessed via Pearson correlation on a sub-sample of 50 participants. The retest coefficient for the whole scale was found to be .71, and it was .76 for Self-Worth Ambivalence subscale, and .54 for Morality Ambivalence subscale ($p \leq .001$, $N = 50$).

Besides, split-half reliability was also computed for the whole scale and subscales. The scale was randomly splitted into two parts. The Guttman split-half reliability for the SAM was .84, where Cronbach's alpha coefficient for the first part, composed of 10 items, was .81 and it was .78 for the second part which was consisted of 9 items. Guttman split-half reliability for the Self-Worth Ambivalence subscale was .78, where Cronbach's alpha coefficient for the first part composed of 7 items, was .64 and it was .72 for the second part consisted of 6 items. For the Moral Ambivalence subscale, Guttman split-half reliability was .88, where the Cronbach's alpha coefficient for the first part composed of 3 items, was .66 and it was .76 for the second part which was consisted of 3 items.

Table 4 Internal Consistency and Item Total Correlation Ranges of the SAM-T and its Subscales

	SAM	Self-Ambivalence	Moral Ambivalence
Cronbach's alpha coefficient	0.88	0.80	0.85
Item Total Range	0.13-0.73	0.10-0.64	0.41-0.76
Test-retest Reliability*	0.71	0.76	0.54
Guttman Split-Half Reliability	0.84	0.78	0.88

* Pearson correlation, $p \leq .001$, $N = 50$

2.3.3.3 Validity of the Turkish Version of the SAM (SAM-T)

To test convergent validity, zero-order correlations were calculated between SAM-T, its subscales and self-esteem (RSE). As shown in Table 6, there was a negative correlation between total SAM-T and RSE ($r = -.32$, $p < .01$). Additionally, both SA ($r = -.33$, $p < .01$) and MA ($r = -.24$, $p < .01$) were found to be negatively correlated with RSE, which is consistent with the previous research findings.

To investigate the concurrent validity of the SAM-T and its subscales, the correlation coefficients among SAM-T total score, SAM-T subscales, depression (BDI), anxiety (BAI), parental behaviors (EMBU-C subscales), and personality (EPQR subscales) were examined. In line with the findings in the literature, as Table 4 presents, there were positive correlations between total SAM and BDI ($r = .49$, $p < .01$), BAI ($r = .47$, $p < .01$), EPQR-Neuroticism subscale ($r = .48$, $p < .01$), EMBU-Father Rejection ($r = .23$, $p < .01$), EMBU-Mother Rejection ($r = .29$, $p < .01$), EMBU-Mother Control ($r = .40$, $p < .01$), EMBU-Father Control ($r = .23$, $p < .01$). Besides, by assuming correlations greater than .15 as moderate correlations (Tabachnick & Fidell, 2007), results indicated that there were strong

positive correlations among self-worth ambivalence (SA) subscale and EPQR-Neuroticism subscale ($r = .52, p < .01$), and moderate positive correlation between Moral Ambivalence subscale and EPQR-Neuroticism subscale ($r = .32, p < .01$). Additionally, SA subscale exhibited strong positive correlations with BDI ($r = .49, p < .01$), BAI ($r = .51, p < .01$), EMBU-Mother Control subscale ($r = .42, p < .01$) and moderate positive correlations with EMBU-Mother Rejection subscale ($r = .31, p < .01$), EMBU-Father Rejection subscale ($r = .24, p < .01$) and EMBU-Father Control subscale ($r = .32, p < .01$). Moreover, Moral-Ambivalence (MA) subscale showed moderate correlations with BDI ($r = .39, p < .01$), BAI ($r = .33, p < .01$), EMBU-Mother Control subscale ($r = .31, p < .01$) and low positive correlations with EMBU-Mother Rejection subscale ($r = .22, p < .01$), EMBU-Father Rejection subscale ($r = .17, p < .01$) and EMBU-Father Control subscale ($r = .19, p < .01$) (see Table 5).

For a further examination of the criterion validity, three groups were generated based on the participants' BDI scores. The scores were grouped in terms of 33th, 66th, and 99th percentiles and named as "low depressed", "moderately depressed" and "highly depressed", respectively. In the "highly depressed" group, there were 89 participants, whose BDI scores ranged from 16 to 45 ($M = 21.99, SD = 6.46$). In the "moderately depressed" group there were 88 participants and for this group BDI scores ranged from 8 to 15 ($M = 10.88, SD = 2.11$). In the "low depressed" group, there were 103 participants and for this group BDI scores ranged from 0 to 7 ($M = 4.04, SD = 2.25$). As criterion validity, subscales of SAM were expected to be significantly different for these groups. To observe the possible differences between groups, MANOVA was conducted. Results revealed significant BDI main effect, *Multivariate F* (4, 552) = 20.20, $p < .001$; *Wilk's Lambda* = .76; $\eta^2 = .13$.

Table 5 Correlations of Self-Ambivalence and Moral-Ambivalence Subscales with Other Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Self-Worth Ambivalence	1.00	.69**	.49**	.51**	-.33**	.52**	-.053	.041	.31**	.24**	.42**	.32**	-.046	-.13*
2. Moral Ambivalence		1.00	.39**	.33**	-.24**	.32**	-.12*	.042	.22**	.17**	.31**	.19**	-.091	-.109
3. BDI			1.00	.57**	-.40**	.51**	.014	.024	.42**	.33**	.40**	.34**	-.19*	-.22*
4. BAI				1.00	-.24**	.39**	.057	.045	.30**	.23**	.38**	.30**	-.12	-.13*
5. RSE					1.00	-.22**	.013	.087	-.17*	-.18*	-.15*	-.19*	.11	.14*
6. EPQR-N						1.00	-.036	-.049	.20**	.14*	.23**	.20**	-.037	-.071
7. EPQR-L							1.00	.12*	.050	.065	.010	.044	-.012	-.041
8. EPQR-E								1.00	.011	.089	.013	.034	.12	.023
9. EMBU-MR									1.00	.67**	.44**	.32**	-.35**	-.29**
10. EMBU-FR										1.00	.41**	.55**	-.23**	-.47**
11. EMBU-MO											1.00	.73**	-.11	-.19**
12. EMBU-FO												1.00	-.079	-.20*
13. EMBU-MW													1.00	.64**
14. EMBU-FW														1.00

Note 1. **BDI**: Beck Depression Inventory, **BAI**: Beck Anxiety Inventory, **RSE**: Rosenberg Self-Esteem Scale, **EPQR-N**: Eysenck Personality Questionnaire- Neuroticism subscale, **EPQR-E**: Eysenck Personality Questionnaire- Extraversion subscale, **EPQR-L**: Eysenck Personality Questionnaire- Lie subscale, **EMBU-MR**: EMBU-C Mother Rejection subscale, **EMBU-FR**: EMBU-C Father Rejection subscale, **EMBU-MO**: EMBU-C Mother Overprotection subscale, **EMBU-FO**: EMBU-C Father Overprotection subscale, **EMBU-MW**: EMBU-C Mother Warmth subscale, **EMBU-FW**: EMBU-C Father Warmth subscale.

Note 2. *p≤ .05 level (2- tailed); **p≤ .01 level (2- tailed); p≤ .001.

After the multivariate analyses, univariate analyses were performed for significant effects with the application of the Bonferroni correction. Thus, for the univariate analyses, the alpha values that were lower than .025 were considered to be significant with this correction. Univariate analyses with Bonferroni correction for the main effect of BDI showed a significant effect for Self-worth Ambivalence, $F(2, 277) = 42.89, p < .001; \eta^2 = .24$, and Moral Ambivalence, $F(2, 277) = 18.08, p < .001; \eta^2 = .12$, subscales (see Table 6). Post-hoc analyses using the Scheffé post-hoc criterion for the significance indicated that as the depression levels of individuals increase, both self-worth ambivalence and moral ambivalence scores increase. Therefore, moderately depressed group had higher self-worth ambivalence and moral ambivalence scores than the low depressed group. Similarly, high-depressed group showed more self-worth and moral ambivalence than both moderately depressed and low depressed groups. For the details of mean and standard deviation values see Table 7.

Table 6 MANOVA Table for BDI Group Differences on Self-Worth Ambivalence and Moral Ambivalence

Variables	Multivariate <i>F</i>	<i>df</i>	Wilks λ	Multivariate <i>eta</i> ²	Univariate <i>F</i>	<i>eta</i> ²
BDI Groups	20.20*	4, 552	.76	.12		
Self- Ambivalence		2, 277			42.99*	.24
Moral- Ambivalence		2, 277			18.08*	.12

* $p < .001$,

Table 7 Mean and Standard Deviation Values for Self-Ambivalence Subscales Based on the Levels of Depressive Symptoms

Levels of Depressive Symptoms	Self-Ambivalence Subscales	
	Self-Worth Ambivalence	Moral-Ambivalence
Low Depression	1.64 (SD = 0.55) ^a	1.56 (SD = 0.94) ^b
Moderate Depression	2.08 (SD = 0.57) ^b	1.95 (SD = 0.93) ^c
High Depression	2.39 (SD = 0.56) ^c	2.37 (SD = 0.90) ^a

2.4 Conclusion

The aim of this pilot study was to investigate the psychometric properties of the Turkish version of the Self-Ambivalence Measure in a Turkish sample. For this reason, internal consistency, split-half reliability, test re-test reliability, convergent, and criterion-related validity, and factor structure of this scale were examined.

The internal consistency of the whole SAM-T, Self-Worth factor, and Moral Ambivalence factor were found to be high. Additionally, the Turkish version of the SAM and its subscales were also shown to have high split-half reliability and relatively moderate temporal stability. These results, as consistent with the English version (Bhar, 2004), indicated that the SAM-T is a reliable instrument that could be applied in Turkish culture.

For the purpose of convergent validity, the relationship between the SAM-T, its subscales and BDI, BAI, EMBU-C subscales, and EPQR subscales were examined. The results verified that the SAM-T was significantly and positively associated with depression and anxiety symptoms, perceived rejection and overprotection from parents, and neuroticism. Such a pattern between ambivalent self and anxiety (Bhar & Kyrios, 2007; Tisher, Allen & Crouch, 2014) and depression (Bhar, 2004) was also supported by the findings in the literature. Additionally, criterion validity of the Turkish version of the SAM were also

assessed by comparisons of groups with three different levels of depression symptoms. The analyses revealed that subjects who had higher depressive symptoms also showed more self-ambivalence in terms of their self-worth and morality. Therefore, it can be concluded that the Turkish version of the SAM had a satisfactory discriminatory power between different levels of depression symptoms.

As a result of poor loadings of item 12 and item 2, and the increment in the model fit for the data after removing these items, it can be concluded that participants may have failed to understand these two items may be because of the wordings that are not suitable for the Turkish culture. Besides, since only item 2 is reverse coded while the rest of the items are coded straight-forward, it may have also led to a confusion for the participants. As a result of all these analyses, coding of item 2 has been changed to straight-forward, and both item 2 and item 12 were reevaluated and rewritten within the thesis follow-up committee for the main research.

CHAPTER III

MAIN STUDY

3.1 Overview

The aim of the present study was to assess the pathways through which perceived parenting styles and self-ambivalence lead to obsessive-compulsive symptoms in line with a comprehensive model of OCD. Therefore, the relationship among perceived parenting styles, self-ambivalence, obsessive-compulsive beliefs, emotion regulation; and their possible effects on obsessive-compulsive symptomatology was examined. In this section, firstly, sample characteristics, descriptions and psychometric properties of the instruments used is presented. Additionally, the procedure of the main study and information about the statistical analyses are provided.

In the second part of this section, results of the analyses performed to test the hypotheses of the current study are presented. First of all, internal consistency and descriptive statistics for all variables used in the analyses are presented. Then, the psychometric properties of the new adapted Turkish Version of Self-Ambivalence Scale after the modifications explained in the previous section are given. In the next part, before the main analyses correlations between the predictor variables and the outcome variables are presented. This is followed by analyses conducted to examine the effects of reported clinical status (having a psychiatric diagnosis vs. not having any diagnosis) on main variables. After that, results for the main model are presented for total obsessive-compulsive symptom scores, and for five types of obsessive-compulsive symptoms (e.g. checking, contamination/washing, grooming/dressing, obsessional thoughts, and obsessional impulses). Following this, four mediation analyses for perceived parenting styles

and self-ambivalence factors are given. Finally, results of the Structural Equation Modeling performed to test the proposed model are presented.

3.2 Method

3.2.1 Sample

The sample of the current study consisted of 877 participants drawn from various parts of Turkey via online survey system. There were 555 (63.3%) female and 322 (36.7%) male participants with the ages ranging from 18 to 72 ($M = 29.69$, $SD = 10.09$). 392 (44.7%) of the participants were students, 321 (36.6%) participants reported working with various occupations, and the other 148 (16.8%) reported to be unemployed, as shown in Table 8. In terms of the education level, 37 (4.2%) participants were primary and secondary school graduates, 167 (19%) graduated from high school, and 532 (60.7%) graduated from university. The majority of the participants were single [$N = 508$, (57.9%)], 322 (36.7%) were married, 36 (4.1%) were divorced, and 11 (1.3%) of the participants reported as being widowed. 512 (58.4%) participants reported big cities (e.g. Ankara, İstanbul, and İzmir) as the place where they spent most of their lives up to the present, while 260 (29.6%) reported living in other cities, 71 (8.1%) lived in towns, and 34 (3.9%) in small towns.

Participants also reported having different current residential status. Out of 877 participants, 588 (67%) of them stated that they were living with their family members, 188 of them (21.43%) at home with friends or alone. Additionally, as for the monthly income of the participants, 710 (81%) of them reported middle-income level, whereas 89 (10.1%) participants reported it as being in the low-income level. In terms of parental education levels, last degree completed was taken into account. For mother's education, 72 (8.2%) were illiterate, 309 (35.2%) were graduates of primary school, 173 (19.7%) graduated from high school, and 161 (18.4 %) graduated from university.

Table 8 Demographic Characteristics of the Sample ($N = 877$)

Variables	Frequency (%)	Mean (<i>SD</i>)
Age		29.69 (10.09)
Gender		
Female	555 (63.3%)	
Male	322 (36.7%)	
Marital Status		
Single	508 (57.9%)	
Married	322 (36.7%)	
Widowed	11 (1.3%)	
Divorced	36 (4.1%)	
Education Level		
Primary & Secondary School	37 (4.2%)	
High School	167 (19%)	
University	532 (60.7%)	
Post-Graduate	114 (13%)	
Income Level		
Low-income	89 (10.1%)	
Middle-income	710 (81%)	
High-income	78 (8.9%)	
Employment Status (16 missings)		
Yes	321 (36.9%)	
No	540 (61.5%)	
<i>If No, Reason</i>		
Student	392 (44.7%)	
Unemployed	148 (16.8%)	
Occupation Categories		
Academician	34 (10.5%)	
Lawyer	7 (2.2%)	
Banking and Finance	30 (9.3%)	
Teacher	41 (12.7%)	
Architecture and Engineering	89 (27.7%)	
Public-Servant	16 (4.9%)	
Personal Care and Service	28 (8.7%)	
Health-Care Workers/Consultant	29 (9.03%)	
Directors/Managers/Secretary	22 (6.85%)	
Military and Protective Service	6 (1.8%)	
Retired	6 (1.8%)	
Other	16 (4.9%)	

Table 8 (Continued)

Variables	Frequency (%)	Mean (<i>SD</i>)
Hometown		
Metropolitan City	512 (58.4%)	
Town	260 (29.6%)	
Small Town	71 (8.1%)	
	34 (3.9%)	
Mother's Education Level		
Illiterate	72 (8.2%)	
Literate	58 (6.6%)	
Primary School	309 (35.2%)	
Secondary School	90 (10.3%)	
High School	173 (19.7%)	
University	161 (18.4%)	
Graduate	14 (1.6%)	
Father's Education Level		
Illiterate	13 (1.5%)	
Literate	46 (5.2%)	
Primary School	232 (26.5%)	
Secondary School	124 (14.1%)	
High School	217 (24.7%)	
University	209 (23.8%)	
Graduate	36 (4.1%)	
Psychiatric Problem		
No	668 (76.2%)	
Yes	209 (23.8%)	
<i>If yes, Diagnose Type</i>		
Anxiety Disorders	128 (14.6%)	
Major Depressive Disorder	67 (7.6%)	
Comorbidity	14 (1.6%)	
<i>If yes, On-going Treatment Type</i>		
Psychotherapy	32 (15.3%)	
Medical Treatment	74 (35.4%)	
Both	20 (9.5%)	

Furthermore, for father's education level, 13 (1.5%) was illiterate, 232 (26.5%) were graduates of primary school, 217 (24.7%) were graduates of high school, and 209 (23.8%) were university graduates (for detailed information see Table 8).

Additionally, mental health history of the participants was also examined. 209 (23.8%) participants reported receiving a psychiatric diagnosis in any part of their lives (for the reported psychiatric diagnosis see Table 8). Among them, 106 (50.71%) reported receiving an on-going treatment. Detailed information about the socio-demographic characteristics of the participants are presented in Table 8.

3.2.2 Instruments

The instrument set of the main study was composed of Demographical Information Form and seven self-report instruments; namely Short-EMBU (Egna Minnen Beträffande Uppfostran- My Memories of Upbringing), Self-Ambivalence Measure (SAM), Emotion Regulation Questionnaire (ERQ), Obsessive-Compulsive Beliefs Questionnaire (OBQ), and Padua Inventory-Washington State University Revision (PI-WSUR), Beck Depression Inventory (BDI), and Rosenberg Self-Esteem Scale (RSES).

3.2.2.1 Demographical Information Form

The Demographical Information Form has been designed for the current research in order to obtain some basic information about the participants' demographic characteristics (age, sex, education level, place of living, level of income, and parents' education) and psychiatric problems (if yes; type of treatment, and current treatment) (see Appendix B).

3.2.2.2 Short-EMBU (Egna Minnen Beträffande Uppfostran- My Memories of Upbringing)

The Short-EMBU was developed from the 81-item original scale in order to measure individuals' perceptions of their parents' child rearing behaviors, and parental attitudes (Arrindell et. al., 1999).

The Short-EMBU has 23 items rated for both perceived mothers' and fathers' behaviors on a 4-point Likert type scale ranged from 1 (*never*) to 4 (*most of the time*). The scale composes of three subscales; namely, Rejection, Overprotection, and Emotional Warmth. The scale was adapted into Turkish by

Dirik, Karanci, and Yorulmaz (2015). The Turkish form was found to show the same factor structure of the original scale. Detailed information about the scale was presented in the previous chapter.

Moreover, the 6-factor version of the scale revealed Cronbach alpha values of .83 for mother's rejection, .86 for father's rejection, .83 for mother's emotional warmth, .83 for father's emotional warmth, .83 for mother's overprotection and .83 for father's overprotection, in the current study. For the inventory, see Appendix B.

3.2.2.3 Self-Ambivalence Measure (SAM)

Since the scale was presented in the previous chapter, brief information will be given in this present section. Bhar (2004) developed the SAM in order to measure ambivalence about one's general sense of self-worth. The scale is unidimensional and is composed of 19 items rated on a five-point Likert type scale, from 0 (*not at all*) to 4 (*totally agree*). The items include statements about uncertainty, self-dichotomy, and self-preoccupation.

In line with previous aims of the present study, psychometric evaluation were also performed for this instrument, and relevant detailed information is given in the Result section of the current study. For now, it can be reported that the Turkish version of the SAM revealed promising psychometric findings in this sample. The scale is presented in Appendix B.

3.2.2.4 Emotion Regulation Questionnaire (ERQ)

The scale was developed by Gross and John (2003) in order to assess individuals' abilities to regulate their emotions. It includes 10-items rated on a 7-point Likert type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scale has two parts, as Cognitive Reappraisal and Suppression, based on the antecedent- and response-focused phases of emotion regulation. It was stated that each item in each subscale indicated emotion regulatory processes proposed by Gross and John's (2003) theory of emotion regulation. Cognitive reappraisal consists of 6 items (e.g. "I control my emotions by changing the way I think about

the situation I'm in”) and assess the ability to regulate emotions by changing thoughts. On the other hand, suppression factor includes 4 items (e.g. “When I feel positive emotions, I’m careful not to express them”) that measure the tendency of not expressing emotions. Higher scores indicate the greater use of emotion-regulatory strategy.

The internal consistencies for cognitive reappraisal ($\alpha = .79$) and suppression ($\alpha = .73$) was found to be strong (Gross & John, 2003). Test-retest reliability was reported as .69 for both subscales at a 3-month interval. Two factorial structure was supported with Confirmatory factor analysis and each of two scales was shown to have good internal consistency in the Italian version of the ERQ (Balzorotti, John, & Gross, 2010). On the other hand, the original factor structure did not receive support from either Australian or United Kingdom samples (Devon, Flavie, Laura, Lusia, & Romola, 2014). After revising the scale into 9 items (ERQ-9), they reported strong model fit to both samples.

The inventory was translated and adapted into Turkish by Yurtsever (2008). The Cronbach Alpha Coefficients for Cognitive Reappraisal and Suppression scales were found to be .85 and .78, respectively. Additionally, test-retest correlations for Cognitive Reappraisal were .88 and for Suppression was .82 at a 4-week interval. Aka (2011) reevaluated and revised the Turkish version of the ERQ. By using the original factor structure, Cronbach alpha coefficients were calculated as .85 for the Cognitive Reappraisal and .78 for the Suppression subscale. Test-retest reliability values for Cognitive Reappraisal and Suppression subscales were reported as .69 and .67, respectively. Additionally, in terms of validity analyses, Turkish version of the ERQ was also shown to have good concurrent and criterion validity values (Aka, 2011). For the current study, the last version of the scale (Aka, 2011) and the two-factor structure is used and alpha coefficients are found to be .86 for Cognitive Reappraisal and .77 for the Suppression subscale. For the scale, see Appendix B.

3.2.2.5 Revised Version of the Obsessive-Compulsive Beliefs Questionnaire (OBQ-44)

The Obsessive Compulsive Cognitions Working Group (OCCWG, 1997) in order to assess the dysfunctional belief domains that is thought to contribute to the development and maintenance of obsessions and compulsions developed the original form of Obsessive-Beliefs Questionnaire (OBQ). It initially comprised of 129 items (OCCWG, 2001), was later revised to include only 87 items (OCCWG, 2003) rated on a seven point Likert type scale, ranging from 1 (*totally disagree*) to 7 (*very much agree*). Initially, 6 subscales (overestimation of threat, intolerance of uncertainty, importance of thoughts, control of thoughts, responsibility, and perfectionism) were derived theoretically and have been shown to have satisfactory internal consistency and test-retest reliability values (OCCWG, 1997, 2001). However, later methodological studies found out moderately high intercorrelation between the subscales of the OBQ-87 (OCCWG, 2003). In order to reduce the overlap among factors, OCCWG (2005) submitted 6 theoretically derived subscales to factor analysis. Based on these findings, OBQ was reduced to 44 items and 3 factors; namely, responsibility and threat estimation; importance and control of thoughts; and perfectionism and intolerance of uncertainty (OCCWG, 2005). There are 16 items for responsibility and threat estimation subscale, 16 items for perfectionism and uncertainty, and 12 items for importance and control of thoughts subscale.

In terms of the reliability of OBQ-44, internal consistency coefficients were calculated as .93 for responsibility/threat estimation, .89 for importance/control of thoughts, .93 for perfectionism/uncertainty, and .95 for the OBQ total score in clinical sample (OCCWG, 2005). This study also displayed good validity in distinguishing OC patients from non-clinical controls. This new 3-factor version of the OBQ was shown to have higher discriminatory power, meaning that the subscales had less overlap. Myers, Fisher and Wells (2007) found a significant and positive correlation between obsessive-compulsive symptoms and belief domains, indicating a satisfactory convergent validity.

However, findings in the literature revealed inconsistent factor structure of OBQ. For instance, Myers, Fisher and Wells (2008) reported a 4-factor structure (i.e. perfectionism/uncertainty, importance/control of thoughts, responsibility, and overestimation of threat. Similarly, after poor fit of either 3 or 6-factor structure, Woods, Tolin and Abramowitz (2004) also suggested 4-factors; namely, OCD-general, importance/control of thoughts, perfectionism, and responsibility. On the other hand, 3-factor structure of the OBQ has also received support from other studies. For instance, Taylor, McKay and Abramowitz (2005) suggested isolating higher- and lower-order factors by conducting hierarchical factor analysis of the original OBQ and showed that lower order factors (i.e. responsibility/over threat estimation, perfectionism/uncertainty, and importance/control of thoughts) reflected the heterogeneity of OCD when compared to higher-order factors. Moreover, Bortoncello, Braga, Gomes, Pasquoto de Souza, and Cordioli (2012) examined the Brazilian version of the OBQ, and they confirmed the three belief domains and showed very good internal consistency.

In the current study, the version of the OBQ adapted by Yorulmaz and Gençöz (2008) was used. Yorulmaz and Gençöz (2008) used three-factor structure and reported satisfactory Cronbach alphas values, as .80 for importance/need for control; .86 for perfectionism/uncertainty; and .85 for responsibility/threat estimation; and an acceptable item-total correlation ranges for both Turkish and Canadian samples. Therefore, the Turkish version of the OBQ-44 has adequate validity and reliability for a non-clinical Turkish sample (Yorulmaz & Gençöz, 2008). For the present study, the 3-factor version is used and Cronbach alpha coefficients of subscales are .90 for Responsibility/Threat estimation, .90 for Perfectionism/Uncertainty, and .88 for Importance/Control of thoughts. For the inventory, see Appendix B.

3.2.2.6 Padua Inventory-Washington State University Revision (PI-WSUR)

The original scale (PI), which is composed of 60 items rated on a 5-point scale (0 = not at all; 4 = very much), was developed to measure the distress from

obsessions and compulsions. Sanavio (1988) identified 4 factors which were used to derive 4 sub-scales: (1) impaired control over mental activities; (2) becoming contaminated; (3) checking behaviors and (4) urges and worries. In recent years a number of studies have been carried out to analyze and verify the dimensional structure and the convergent and divergent validity of the instrument (Sternberger & Burns, 1990; Van Oppen, 1992; Kyrios, Bhar & Wade, 1996). On the other hand, because of including items that examine worry rather than obsessions, the original PI received some criticism (Freeston, Rheaume, Letarte, Dugas, & Ladouceur, 1994). Therefore, Burns, Keortge, Formea, and Sternberger (1996) excluded some problematic items and formed 39-items PI-WSUR which includes 5 subscales; obsessional thoughts about harm to self/others (7 items); obsessional impulses to harm self/others (9 items); contamination obsessions and washing compulsions (10 items); checking compulsions (10 items); and dressing/grooming compulsions (3 items). The revised form of the PI was examined among 5010 non-clinical university students and was shown to have good internal consistency (alphas = .77 to .88), test-retest reliability values, and validity (Burns, Keortge, Formea, & Sternberger, 1996). It was also reported that this version of the PI discriminated OCD symptoms from worry, which can be accepted as a support for the discriminant validity.

The PI-WSUR was adapted into Turkish by Yorulmaz, Karanci, Dirik, Baştuğ, Kısa, Göka, and Burns (2007). Same factor structure, with small differences in item distribution under subscales, was found in both clinical and non-clinical samples. Turkish version of the instrument was shown to have acceptable internal consistency and test-retest reliability. It was also reported that OCD patients were significantly different not only from the control groups, but also from patients having other anxiety disorders in terms of the PI-WSUR scores. Therefore, since revised PI-WSUR is the most comprehensive self-report measures of OCD and has promising psychometric properties both in non-clinical and clinical populations, it is used to assess the outcome variable in the current study. The original 5-factor version of the scale was used in the present study

revealing Cronbach alpha values of .93 for Checking Compulsions, .91 Contamination, .73 for Grooming/Dressing, .86 for Obsessional thoughts about harm, and .87 for Obsessional impulses to harm subscales. Additionally, internal consistency for the total score was found to be .95. For the measure, see Appendix B.

3.2.2.7 Beck Depression Inventory (BDI)

The BDI is a self-report inventory developed to measure cognitive, emotional, and motivational symptoms of depression (Beck, Rush, Shaw, & Emery, 1979). It is composed of 21 items for each of which participant rate him/herself on a 4 point scale. The scores for each item range from 0 to 3. The scale was adapted into Turkish by Hisli (1988). Higher scores indicate higher levels of depressive symptoms and high scores above 17 were found to indicate clinical depression (Hisli, 1988). Detailed information about the scale was given in the previous chapter.

In the current study, it was used to examine the psychometric properties of the Self-Ambivalence Measure, and the alpha coefficient of the scale was found to be .92. The measurement is presented at Appendix A.

3.2.2.8 Rosenberg Self-Esteem Scale (RSES)

The scale, developed by Rosenberg (1965), is composed of 10 items rated on a 4-point Likert-type scale ranging from “strongly agree” to “strongly disagree”. Higher scores on the scale reflect higher levels of self-esteem. The scale was translated into Turkish by Çuhadaroğlu (1986). In the previous chapter, details of the scale are presented.

In the present study, the RSES was used as a tool to evaluate the psychometric properties of the SAM. The internal consistency of the scale was found to be .90 for the current study. For the inventory, see Appendix A.

3.2.3 Procedure

Initially, ethical approval for the present study was granted from The Applied Ethics Research Center of Middle East Technical University. Then, data was gathered via convenience sampling from various parts of Turkey using an online survey system, SurveyMonkey.com. In data gathering process, the link to the secure survey website which included information about the survey, a request for informed consent (see Appendix B), the instrument set, and the debriefing form (see Appendix B) was shared in different social network groups either through sending an e-mail or putting the link on the website. Prior to each participation, information about the purpose and the scope of the study was provided to all participants. Additionally, the informed consent was obtained electronically via the survey site. If the individuals clicked “I agree” then they could proceed to the survey. It took participants about 30-40 minutes to complete the questionnaire. At the end of the survey, debriefing form that included further details about the study and contact information were given to each participant.

In the present study, data collection was completed between June and October 2014. After the completion of the survey, the researcher downloaded the data from SurveyMonkey server and it was removed from the database.

3.2.4 Statistical Analyses

Prior to analysis, data cleaning procedures suggested by Tabachnick and Fidell (2007) were followed. The data was screened for the accuracy of data entry, missing values, fit between data set and assumptions for multivariate analysis, and for the univariate and multivariate outliers. At the end of these procedures, 4 cases were found to be systematically missing data and were deleted. Since missing values were not more than 5%, missing values were replaced by the mean for all single cases. Mahalanobis distance was assessed in order to identify multivariate outliers. Analyses revealed one case as multivariate outlier and 60 cases were also detected as outliers which were excluded. Thus, finally 877 cases were examined in the analyses.

Statistics Package for Social Sciences (SPSS) 20 Program was used for the statistical analyses and LISREL 8.51 was performed for model testing. After conducting reliability analyses for total and subscales, original factor structures were used for the Turkish versions of the scales. Internal consistency was assessed with Cronbach's alpha values.

Factor congruency was examined via Confirmatory Factor Analysis (CFA) on the items of Self-Ambivalence Measure. Covariance matrix and maximum likelihood estimation was employed to estimate all observed variables and was assessed by means of data fit indices such as χ^2 , ratio of χ^2 to degree of freedom (df), Goodness of Fit Index (GFI), Adjusted of Goodness of Fit Index (AGFI), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Non-Normed Fit Index (NNFI) (Tabachnick and Fidell, 2007). Ratio was below the 5:1 for χ^2/df , RMSEA between 0.0 and 0.08, values close to 0.90 for the GFI, AGFI, CFI, and NNFI were taken as criteria for a good model fit (Bollen, 1986; Tabachnick & Fidell, 2007). Following this, validity for the SAM was assessed.

Additionally, descriptives for demographic variables and mean scores for the main variables were examined. Correlational analyses were conducted for all variables in the study in order to examine the associations between them. Coefficients above .50 were viewed as high correlation; while coefficients between .30 and .49 were accepted as moderate and values below .30 were accepted as low correlations (Cohen, 1988). In order to make group comparisons between individuals reporting having a psychiatric diagnosis and other individuals reporting being psychologically healthy on the measures of the current study, one way ANOVA's and one way MANOVA's were conducted. Then, hierarchical regression analyses were performed for the prediction of self-ambivalence, emotion regulation strategies, OCD-related cognitive factors and symptoms by taking clinical status of the subjects as a control variable. Finally, mediations were tested via bootstrap procedures, and then the comprehensive model hypothesized by the current study was tested via Structural Equation Modeling (SEM) by using LISREL.

3.3 Results

3.3.1 Internal Consistency of the Instruments

Internal consistency and item-total correlation ranges of the measures in total and their subscales are presented in Table 9. Original factor structures of the scales were evaluated with Cronbach's alpha coefficient and found out that all of the values were satisfactory and in acceptable ranges.

Table 9 Internal Consistency Coefficients of the Instruments

Measures	Cronbach Alpha (Item Total Correlations)
Self-Ambivalence Measure (SAM)-Total	0.92 (0.38- 0.72)
Emotion Regulation Questionnaire (ERQ)	
ERQ- Reappraisal	0.86 (0.45- 0.76)
ERQ- Suppression	0.77 (0.41- 0.65)
Short-EMBU (Egna Minnen Beträffande Uppfostran)	
Perceived Paternal Rejection	0.86 (0.47- 0.73)
Perceived Maternal Rejection	0.83 (0.40- 0.67)
Perceived Paternal Overprotection	0.83 (0.35- 0.69)
Perceived Maternal Overprotection	0.83 (0.39- 0.68)
Perceived Paternal Emotional Warmth	0.83 (0.20- 0.72)
Perceived Maternal Emotional Warmth	0.83 (0.41- 0.72)
Obsessive-Compulsive Beliefs Questionnaire (OBQ-44)	
OBQ- Responsibility/Threat Estimation	0.90 (0.37- 0.69)
OBQ- Perfectionism/Uncertainty	0.90 (0.38- 0.77)
OBQ- Importance/Control of thoughts	0.88 (0.32- 0.72)
Padua Inventory (PI-WSUR)-Total	0.95 (0.29- 0.68)
PI-WSUR- Checking	0.93 (0.58- 0.78)
PI-WSUR- Clean/Contamination	0.91 (0.55- 0.73)
PI-WSUR- Grooming	0.73 (0.48- 0.55)
PI-WSUR- Obsessional Thoughts	0.86 (0.53- 0.66)
PI-WSUR- Obsessional Impulses	0.87 (0.52- 0.66)
Rosenberg Self-Esteem Scale	0.90 (0.52- 0.73)
Beck Depression Inventory	0.92 (0.25- 0.73)

3.3.2 Descriptive Statistics

Descriptive statistics (e.g. mean and standard deviation) for all variables used in the main study are presented in Table 10.

Table 10 Descriptive Statistics for Main Variables of the Study

Variables	<i>N</i>	Mean	<i>SD</i>	Min-Max
<i>Perceived Parenting Styles</i>				
Paternal Rejection	877	1.55	0.63	1-4
Maternal Rejection	875	1.54	0.57	1-4
Paternal Overprotection	874	2.14	0.64	1-4
Maternal Overprotection	876	2.30	0.65	1-4
Paternal Emotional Warmth	876	2.36	0.70	1-4
Maternal Emotional Warmth	875	2.60	0.68	1-4
<i>Self-Ambivalence Variables</i>				
Self-Worth Ambivalence	877	1.95	0.95	0-4
Moral Ambivalence	877	1.90	1.03	0-4
Public Self-Acceptability	877	2.11	0.93	0-4
<i>Obsessive Appraisals</i>				
Responsibility/Threat Estimation	877	3.81	1.21	1-7
Perfectionism/Uncertainty	877	4.33	1.21	1-7
Importance/Control of thoughts	877	3.25	1.33	1-7
<i>Emotion-Regulation Strategies</i>				
Cognitive Reappraisal	877	4.57	1.38	1-7
Suppression	877	3.71	1.57	1-7
<i>OCD Symptoms</i>				
Total Score	877	1.06	0.71	0-4
Checking	877	1.37	1.01	0-4
Contamination/Washing	877	1.22	0.93	0-4
Grooming/Dressing	877	1.01	1.03	0-4
Obsessional thoughts to harm	877	1.14	0.94	0-4
Obsessional impulses to harm	877	0.50	0.70	0-4

3.3.3 Results for the Hypothesis in Group 1

Hypothesis 1: Turkish version of the Self-Ambivalence measure is expected to be psychometrically reliable and valid.

3.3.3.1 Psychometric Properties of the Turkish Version of the Self-Ambivalence Measure (SAM-T)

The Self-Ambivalence Measure (SAM; Bhar & Kyrios, 2007) as adapted into Turkish in accordance with the aims of the current study. Information about the adaptation procedure is provided in the previous chapter. Based on the findings of the pilot study, it was concluded that translation of item-2 (“I am secure in my sense of self-worth”) and item-12 (“I think about how I can improve myself”) need modifications in line with Turkish culture and language. The coding of the item-2 was changed into straight-forward in order to maintain the consistency with the rest of the scale items all of which are straight-forward. Additionally, both item-2 and item-12 were rewritten according to Turkish grammar rules and cultural issues. Therefore, in this section, reliability, validity, and factor structure of the last version of the SAM-T are examined after modifying these two items.

3.3.3.1.1 Factor Structure of the Turkish Version of the SAM

Confirmatory factor analysis (CFA) was performed through LISREL 8.51 on the items of the Self-Ambivalence Measure (SAM) in order to test the underlying two factor model of self-ambivalence. Items 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 15, 19 serve as indicators of Self-Worth Ambivalence; while items 9, 11, 13, 16, 17, 18 serve as indicators of Moral Ambivalence. The two factors are hypothesized to covary with one another.

The hypothesized model is presented in Figure 3 where circles represent latent variables, and rectangles represent measured variables. Absence of a line connecting variable implies no hypothesized direct effect. In the figure, each indicator has two arrows leading to it. Linear structural correlations between a latent variable and its indicators are shown by a one-way arrow from a latent variable leading to its indicators. All of the errors in the model are assumed to be uncorrelated with each other and one-way arrows to indicators represent measurement errors or residuals of the indicators. Finally, the double-headed

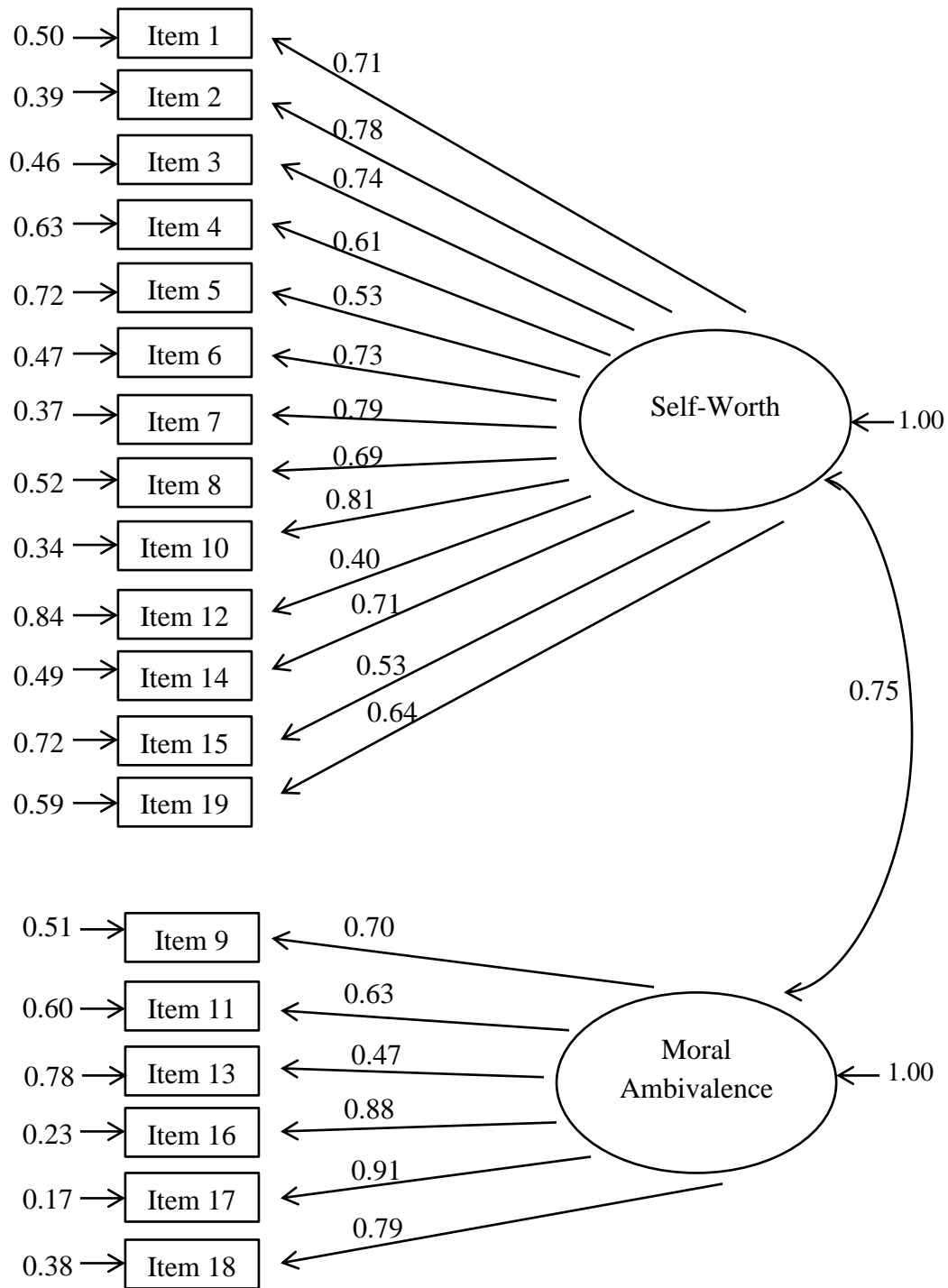
arrows between the latent variables represent the correlations between these variables.

A chi-square test indicated significant differences between the observed and estimated parameters, $\chi^2(151) = 2188.58, p \leq .001$. Goodness of fit statistics also revealed that the model did not fit the data well: GFI = .79; NNFI = .78; AGFI = .74; CFI = .81; and RMSEA = .12.

Investigation of the modification indices suggested that adding error variances between several indicator variables and paths between indicator variables and latent variables would significantly improve the model. Therefore, post-hoc model modifications were performed in an attempt to develop a better fitting model. Error covariances were added one at a time to the model between items of the same latent constructs 1-2, 18-11 and 6-15. A chi-square difference test indicated that the model was significantly improved by the addition of these paths, $\chi^2_{\text{diff}}(3) = 858.64, p \leq .001$. However, goodness of fit indices indicated a suboptimal fit for the data, NNFI = .86, GFI = .86; AGFI = .82; CFI = .88, RMSEA = .09 (see Figure 4).

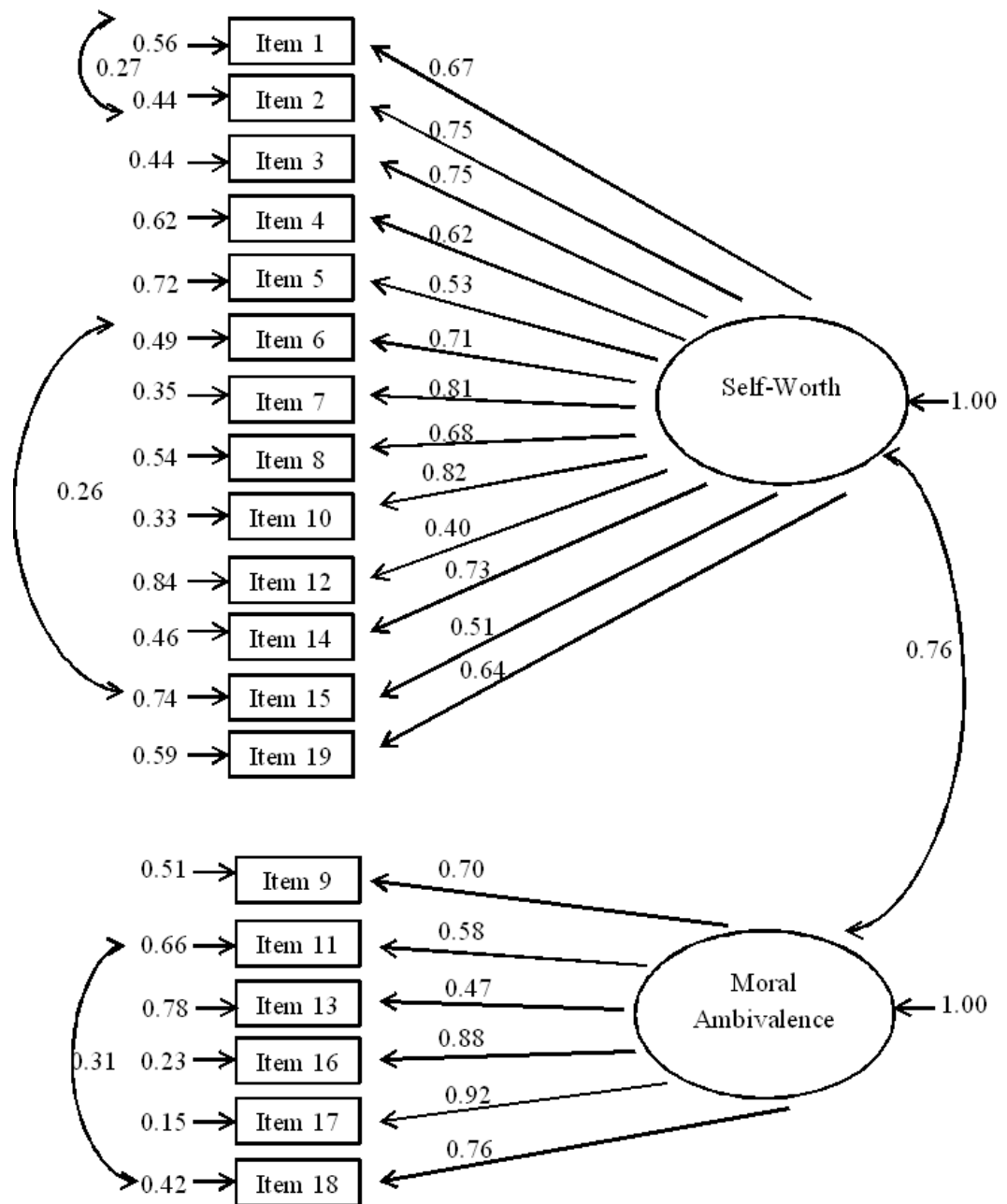
Examination of the structural correlations between the latent variables indicated that self-worth ambivalence and moral ambivalence were significantly correlated ($r = .76, p < .05$). All the paths predicting items of SAM from Self-Worth and Moral Ambivalence was significant at $p < .05$ with standardized coefficients ranging between .40 and .92.

In sum, after the addition of correlated errors between various items, the model still provided poor fit to the data. Additionally, examination of path parameters indicated that all the items had a significant loading above .30, which was used as a criterion to determine item structure of these two factors, as suggested by Tabachnick and Fidell (2007).



Chi-Square = 2188.58, df= 151, $p \leq .001$, RMSEA = .12

Figure 4 CFA Model before Modifications with Standardized Coefficients



Chi-Square = 1329.94, df = 148, $p \leq .001$, RMSEA = .09

Figure 5 Final modified CFA model with significant coefficients presented in standardized form

CFA results showed that the hypothesized two-factor structure did not appear to be an acceptable fitting model for the current sample. Therefore, principal component analysis was conducted to identify the factor structure of the SAM-T that would best fit the present data. The 19 items of the SAM-T were subjected to Principal Component Analysis (PAC) with Varimax rotation. Factorability of the items within the current sample was adequate as indicated by Bartlett's test of sphericity ($\chi^2 (171) = 8181.81, p \leq .001$) and Kaiser–Meyer–Olkin measure of sampling adequacy (.93).

The factors with eigenvalues above 1.00 were considered with respect to scree plot. As a result of the factor analysis, 4 factors have emerged with eigenvalues above 1, which accounted for 63.32 % of the total variance. Examination of the scree plot and item distribution suggested that the most adequate solution was a 3-factor structure, which was supported by Guidano and Liotti's (1983) theory of self-ambivalence. According to Guidano and Liotti (1983), self-ambivalence is based on three related features, namely contradictory self-views, uncertainty about self-worth and preoccupation in verifying one's self-worth.

An item was included in a factor scale if the item's loading was at least .30 and if the difference in its loadings across factors was more than .20. Based on these criteria, three subscales were developed; self-ambivalence about self-worth (self-worth ambivalence (SA); 9 items), ambivalence about morality (moral ambivalence (MA); 5 items), and ambivalence about self-acceptability (public self-acceptability (PSA); 5 items). The eigenvalues, respectively, for these factors were 4.70, 2.67, and 3.29; and together they accounted for 56.15 % of the total variance. Although item 16 and item 17 were statistically loaded under public self-acceptability factor, it was decided that theoretically it should be included in the factor "moral ambivalence. Factor loadings and reliability coefficients are given in Table 11.

Table 11 Factor Structure of the Turkish Version of Self-Ambivalence Measure

Items	Factor 1 (Self-Worth Ambivalence)	Factor 2 (Moral Ambivalence)	Factor 3 (Public Self-Acceptability)
3. I feel torn between different parts of my personality	.78	.18	.09
2. I am secure in my sense of self-worth	.72	.02	.35
7. I feel that I am full of contradictions	.70	.15	.31
10. I have mixed feelings about my self-worth	.69	.23	.32
96 1. I doubt whether others really like me	.67	.01	.33
14. I tend to move from one extreme to the other in how I think about myself	.63	.17	.27
4. I fear I am capable of doing something terrible	.62	.23	.07
5. I think about my worth as a person	.51	.31	.05
19. I constantly worry about whether I will make anything of my life	.50	.22	.29
Eigenvalue:	4.70		
Explained Variance:	24.75%		
Alpha Level:	.88		
Total Item Correlation:	.44 to .73		

Table 11 (Continued)

Items	Factor 1 (Self-Worth Ambivalence)	Factor 2 (Moral Ambivalence)	Factor 3 (Public Self-Acceptability)
11. I question whether I am a moral person	.13	.83	.14
18. I question whether I am morally a good or bad person	.09	.81	.34
12. I think about how I can improve myself	.23	.56	.03
16. I am constantly concerned about whether I am a "decent" human being	.30	.53	.55
17. I am constantly worried about whether I am a good or bad person	.28	.52	.58
Eigenvalue:		2.67	
Explained Variance:		14.06%	
Alpha Level:		.83	
Total Item Correlation:		.37 to .76	

Table 11 (Continued)

Items	Factor 1 (Self-Worth Ambivalence)	Factor 2 (Moral Ambivalence)	Factor 3 (Public Self-Acceptability)
15. I am mindful about how I come across to others	.11	.04	.79
6. I am constantly aware of how others perceive me	.42	.12	.66
9. I tend to think of myself in terms of categories such as "good" or "bad"	.38	.26	.58
8. I question the extent to which others want to be close to me	.49	.11	.50
13. If I inadvertently allow harm to come to others, this proves I am untrustworthy	.15	.20	.49
Eigenvalue:			3.30
Explained Variance:			17.34%
Alpha Level:			.78
Total Item Correlation:			.38 to .66

3.3.3.1.2 Internal Consistency of the Turkish Version of the SAM

Cronbach's alpha coefficients were analyzed for both the total score of the SAM-T and for three factors, namely Self-Worth Ambivalence, Moral Ambivalence, and Public Self-Acceptability. The whole scale was found to have a Cronbach's alpha coefficient of .92. The corrected item-total correlations ranged from .38 to .71. The subscales of the SAM-T also revealed considerably high internal consistencies; Cronbach's alpha coefficient for the Self-Worth Ambivalence subscale was .88, the Moral Ambivalence subscale was .83, and it was .78 for the Public Self-Acceptability. The corrected item-total correlations ranged from .44 to .73 for Self-Worth Ambivalence subscale; from .37 to .76 for Moral Ambivalence Subscales, and from .38 to .66 for Public Self-Acceptability Subscales. Table 12 presents internal consistency and item total ranges of the SAM-T and its subscales.

Split-half reliability was also computed for the whole scale and subscales. The scale was randomly splitted into two parts. The Guttman split-half reliability for the SAM-T was .84, where Cronbach's alpha coefficient for the first part, composed of 10 items, was .89 and it was .84 for the second part, which consisted of 9 items. Guttman split-half reliability for the Self-Worth Ambivalence subscale was .83, where Cronbach's alpha coefficient for the first part composed of 5 items, was .86 and it was .66 for the second part consisted of 4 items. For the Moral Ambivalence subscale, Guttman split-half reliability was .85, where the Cronbach's alpha coefficient for the first part composed of 3 items was .65 and it was .79 or the second part which was consisted of 2 items. For the Public Self-Acceptability subscale, Guttman split-half reliability was .76, where the Cronbach's alpha coefficient for the first part composed of 3 items was .65 and it was .59 or the second part which was consisted of 2 items.

Table 12 Internal Consistency and Item Total Correlation Ranges of the SAM-T and its Subscales

	SAM	SA	MA	PSA
Cronbach's alpha	0.92	0.88	0.83	0.78
Item-Total Range	0.38-0.71	0.44-0.73	0.37-0.76	0.38-0.66
Guttman Split-Half Reliability	0.84	0.83	0.85	0.76

Note. SAM = Total Score of Self Ambivalence Measure, SA= Self-Worth Ambivalence, MA = Moral Ambivalence, PSA = Public Self-Acceptability

3.3.3.1.3 Validity of the Turkish Version of the SAM (SAM-T)

In order to check for the validity of the scale, correlations of subject's responses to Self-Worth Ambivalence, Moral Ambivalence, and Public Self-Acceptability with scores for "Rosenberg Self-Esteem Scale", "Beck Depression Inventory", and "Padua Inventory-Washington State University Revision" were examined. It was revealed that Self-Worth Ambivalence was positively correlated with depression scores ($r = .64, p < .01$), and total score of PADUA scale ($r = .45, p < .01$). Similarly, Moral Ambivalence scores of the participants were found to be positively correlated with both depression scores ($r = .40, p < .01$) and total PADUA scores ($r = .33, p < .01$). Additionally, Public Self-Acceptability scores of the participants were found to be positively correlated with both depression scores ($r = .53, p < .01$) and total PADUA scores ($r = .41, p < .01$). On the other hand, in line with the literature findings, self-esteem scores were negatively correlated with both Self-Worth Ambivalence subscale ($r = -.67, p < .01$), Moral Ambivalence subscale ($r = -.43, p < .01$), and Public Self-Acceptability subscale ($r = -.55, p < .01$) (see Table 13).

Table 13 Correlations of Self-Worth Ambivalence, Moral Ambivalence, and Public Self-Acceptability with Other Variables

	1	2	3	4	5	6	7
1. SAM-Total	1	.92*	.81*	.86*	.64*	.45*	-.65*
2. Self-Worth Ambivalence		1	.56*	.69*	.68*	.43*	-.67*
3. Moral Ambivalence			1	.62*	.40*	.33*	-.43*
4. Public Self-Acceptability				1	.53*	.41*	-.55*
5. BDI					1	.45*	-.72*
6. Total-PADUA						1	-.33*
7. RSE							1

*Correlation is significant at .01 level. BDI: Beck Depression Inventory; Total-PADUA: Padua Inventory-Washington State University Revision-Total Score; RSE: Rosenberg Self-Esteem Scale.

Furthermore, in order to test for the criterion validity of the Turkish version of the SAM, group comparisons were performed for its subscales. Accordingly, three groups were generated based on the participants' BDI scores. The BDI scores were grouped in terms of 33, 66, and 99th percentiles and named as "low depressed", "moderately depressed" and "high depressed", respectively. In the "high depressed" group, there were 290 participants, whose BDI scores were over 22 ($M = 31.90$, $SD = 8.04$). In the "moderately depressed" group there were 286 participants and for this group BDI scores ranged from 11 to 21 ($M = 15.58$, $SD = 3.12$). In the "low depressed" group, there were 299 participants and for this group BDI scores ranged from 0 to 10 ($M = 5.79$, $SD = 3.06$).

As a criterion validity, subscales of SAM were expected to be significantly different for these groups. To evaluate the possible differences between groups, MANOVA was conducted. Results revealed significant group main effect of

BDI scores, *Multivariate F* (6, 1740) = 93.34, $p < .001$; *Wilk's Lambda* = .57; $\eta^2 = .24$, indicating that “high depressed”, “moderately depressed”, and “low depressed” group differed from each other in terms of self-worth ambivalence, moral ambivalence, and public self-acceptability scores of the participants (see Table 14). After the multivariate analyses, univariate analyses were performed for significant effects with the application of the Bonferroni correction. Thus, for the univariate analyses, the alpha values that were lower than .001 were considered to be significant with this correction. Univariate analyses with Bonferroni correction for the main effect of BDI Symptom Group showed a significant effect for Self-worth Ambivalence, $F(2, 872) = 308.98$, $p < .001$; $\eta^2 = .42$, Moral Ambivalence, $F(2, 872) = 66.04$, $p < .001$; $\eta^2 = .13$, and Public Self-Acceptability, $F(2, 872) = 157.37$, $p < .001$; $\eta^2 = .27$, subscales.

Table 14 MANOVA Table for BDI Group Differences on Self-Worth Ambivalence, Moral Ambivalence, and Public Self-Acceptability

Variables	Multivariate <i>F</i>	<i>df</i>	Wilks λ	Multivariate <i>eta</i> ²	Univariate <i>F</i>	<i>eta</i> ²
BDI-Group	93.34*	6, 1740	.57	.24		
SA		2, 872			309.98*	.42
MA		2, 872			66.04*	.13
PSA		2, 872			157.37	.27

* $p < .001$

The results of post-hoc comparisons with Scheffe showed a significant difference between groups. Means and standard deviations of the groups are presented in Table 15. “Highly depressed group” seemed to be significantly more ambivalent than both the “low depressed” and “moderately depressed” groups in

terms of self-worth, morality, and public self-acceptability. Additionally, results showed that individuals in the “moderately depressed” group were significantly more ambivalent in terms of their self-worth, morality and public self-acceptability than the individuals in the “low depressed group”. In consequence, these findings about group differences provided evidence for criterion validity of the Turkish version of the SAM.

Table 15 Mean and Standard Deviation Values for Self-Ambivalence Subscales Based on the Levels of BDI scores

Levels of BDI Symptoms	Self-Ambivalence Subscales		
	Self-Worth Ambivalence	Moral Ambivalence	Public Self Acceptability
Low Depressed	1.20 (SD = 0.73)	1.47 (SD = 0.89)	1.55 (SD = 0.78)
Moderately Depressed	1.97 (SD = 0.68)	1.86 (SD = 0.97)	2.06 (SD = 0.81)
Highly Depressed	2.69 (SD = 0.76)	2.38 (SD = 1.04)	2.72 (SD = 0.81)

Additionally, the SAM-T’s power of distinguishing between groups, that it should theoretically be able to distinguish between, was also assessed by comparisons of extreme groups in OC symptoms. Accordingly, two extreme groups on lower and higher 33 percentages on total-PADUA scores were contrasted on subscales of the SAM. Individuals having lowest (below 25 points, $N= 289$) scorers were assigned to the low OC Symptom group ($M = 15.00$, $SD = 6.05$); whereas highest scorers (over 47 points, $N = 308$) were named as high OC Symptom group ($M = 72.37$, $SD = 21.84$).

As a criterion validity, subscales of SAM were expected to be significantly different for these groups. To observe the possible differences between groups, MANOVA was conducted. Results revealed significant group main effect, *Multivariate F* (3, 593) = 57.88, $p < .001$; *Wilk’s Lambda* = .77; $\eta^2 = .23$, indicating that “high OC Symptom” group differed from “low OC Symptom” group in terms of self-worth ambivalence, moral ambivalence, and public self-

acceptability scores of the participants (see Table 16). Univariate analyses with Bonferroni correction for the main effect of OC Symptom Group showed a significant effect for Self-worth Ambivalence, $F(1, 595) = 139.90, p < .001; \eta^2 = .19$, Moral Ambivalence, $F(1, 595) = 77.87, p < .001; \eta^2 = .12$, and Public Self-Acceptability, $F(1, 595) = 147.83, p < .001; \eta^2 = .20$, subscales.

Table 16 MANOVA Table for OCD Group Differences on Self-Worth Ambivalence, Moral Ambivalence, and Public Self-Acceptability

Variables	Multivariate <i>F</i>	<i>df</i>	Wilks λ	Multivariate <i>eta</i> ²	Univariate <i>F</i>	<i>eta</i> ²
OC-Group	57.88*	3, 593	.77	.23		
Self-Ambivalence		1, 595			139.90*	.19
Moral-Ambivalence		1, 595			77.87*	.12
Public Self-Acceptability		1, 595			147.83*	.20

* $p < .001$

The results of comparisons that also include means and standard deviations of the groups are presented in Table 17. High OCD group seemed to be more ambivalent than the low OCD group in terms of self-worth and morality.

Table 17 Mean and Standard Deviation Values for Self-Ambivalence Subscales Based on the Levels of BDI scores

Levels of OC Symptoms	Self-Ambivalence Subscales		
	Self-Worth Ambivalence	Moral Ambivalence	Public Self Acceptability
Low OC Symptom	1.48 (SD = 0.88)	1.48 (SD = 0.95)	1.62 (SD = 0.84)
High OC Symptom	2.34 (SD = 0.89)	2.20 (SD = 1.05)	2.48 (SD = 0.88)

3.3.4 Results for the Hypothesis in Group 2

Hypothesis 2: Perceived parenting styles, self-ambivalence, obsessive appraisals, and emotion regulation strategies will be correlated with each other and OC Symptoms.

Hypothesis 3: Perceived parenting styles, self-ambivalence, cognitive appraisals, and emotion regulation strategies will predict the level and different types of (checking, contamination, grooming, obsessional thoughts, obsessional impulses) obsessive-compulsive symptomatology.

3.3.4.1 Group Comparisons between Reported Psychiatric Care Group and Group without any Diagnosis and Psychiatric Treatment

Before testing the predictors separately, a dummy variable, named as “reported clinical status”, was formed based on participants’ reports as either having a psychiatric diagnosis or reporting not having any diagnosis in order to examine group differences in predictors and OC symptoms. One way ANOVAs for the total scale scores and one way MANOVAs for the subscale scores of the instruments were performed. Table 18 presents means, standard deviations and results of significance tests in relevant variables.

Among perceived parenting styles, it was found out that individuals reporting receiving a psychiatric diagnosis in any part of their lives perceived their mothers’ behaviors as more rejecting and overprotective than individuals reporting not having any psychiatric diagnosis. Whereas individuals with no previous psychiatric care perceived more emotional warmth from both their fathers and mothers when compared to the individuals reporting having a psychiatric diagnosis. On the other hand, there was no difference in paternal rejection and overprotection among groups. Among ambivalence factors, individuals reporting having a diagnosis seemed to be more self-ambivalent in total and to have more ambivalence in terms of their self-worth than individuals not having any diagnosis. However, there was no difference between groups in terms of moral ambivalence and public self-acceptability.

In terms of appraisal and emotion regulation factors, reported clinical group were more likely to emphasize responsibility/threat estimation, perfectionism/uncertainty, and importance/control of thoughts than the other group. Whereas reported non-clinical group reported to use more cognitive reappraisal strategy as an emotion regulation. On the other hand there was no difference between groups in concerns on importance and control of thoughts, and the use of suppression strategy. In terms of OCD symptoms, individuals reporting having a diagnosis experienced more OCD symptoms in general and in checking, contamination/washing, and obsessional thoughts subscale than the reported non-clinical group. There was no group difference in terms of subscales including grooming, and obsessional impulses.

In conclusion, since group differences were observed in general OC symptoms and most of other predictors (e.g. maternal rejection, paternal/maternal overprotection, paternal/maternal emotional warmth, self-worth ambivalence, obsessive appraisals), reported clinical status variable (Yes:1; No:0) was decided to be taken as a control variable in regression analyses.

Table 18 Group Comparisons between Previous Psychiatric Care Group and Group without any Diagnosis and Psychiatric Treatment

	Reported Clinical		Reported Non-Clinical		Significance Test
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Perceived Parenting Behaviors	<i>Wilk's Lambda</i> = .98, <i>Multivariate F</i> (6, 863)= 3.08**				
Paternal Rejection	1.63	0.69	1.52	0.59	<i>n.s.</i>
Maternal Rejection	1.65	0.62	1.50	0.55	<i>F</i> (1, 868)= 10.35*
Paternal Overprotection	2.22	0.72	2.11	0.61	<i>n.s.</i>
Maternal Overprotection	2.42	0.69	2.26	0.62	<i>F</i> (1, 868)= 8.39*
Paternal Emotional Warmth	2.24	0.69	2.40	0.69	<i>F</i> (1, 868)= 8.09*
Maternal Emotional Warmth	2.45	0.67	2.64	0.67	<i>F</i> (1, 868)= 11.92*
Self-Ambivalence-Total	40.21	17.31	36.71	15.63	<i>F</i> (1, 875)= 7.57*
	<i>Wilk's Lambda</i> = .98, <i>Multivariate F</i> (3, 873)= 4.53**				
Self-Worth Ambivalence	2.14	0.96	1.89	0.94	<i>F</i> (1, 875)= 11.44*
Moral Ambivalence	1.96	1.17	1.87	0.99	<i>n.s.</i>
Public Self-Acceptability	2.23	0.97	2.07	0.92	<i>n.s.</i>
Obsessive Appraisals	<i>Wilk's Lambda</i> = .98, <i>Multivariate F</i> (3, 873)= 5.69**				
Responsibility/Threat	4.06	1.24	3.73	1.18	<i>F</i> (1, 875)= 12.08*

Table 18 (Continued)

	Reported Clinical		Reported Non-Clinical		Significance Test
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Perfectionism/Uncertainty	4.62	1.21	4.24	1.19	$F(1, 875)= 16.33^*$
Importance/Control Thoughts	3.51	1.40	3.17	1.30	$F(1, 875)= 10.61^*$
Emotion Regulation Strategies					<i>Wilk's Lambda= .98, Multivariate F (2, 874)= 5.52**</i>
Cognitive Reappraisal	4.35	1.53	4.63	1.32	$F(1, 875)= 6.60^*$
Suppression	3.87	1.58	3.67	1.56	<i>n.s.</i>
Outcome Variables					
PADUA-Total	1.22	0.79	1.01	0.68	$F(1, 875)= 13.17^*$
<i>OCD Symptom Domains</i>					<i>Wilk's Lambda= .97, Multivariate F (5, 871)= 5.44**</i>
Checking	1.54	1.09	1.31	0.97	$F(1, 875)= 8.91^*$
Contamination/Washing	1.36	1.05	1.17	0.88	$F(1, 875)= 6.45^*$
Grooming	1.10	1.11	0.98	1.02	<i>n.s.</i>
Obsessional Thoughts	1.41	1.01	1.04	0.90	$F(1, 875)= 24.55^*$
Obsessional Impulses	0.57	0.72	0.48	0.69	<i>n.s.</i>

3.3.4.2 Correlations Among Variables of the Present Study

Pearson correlation coefficients among the variables used in the current study are presented in Table 19.

Results revealed that the outcome variable total OCD symptoms was positively correlated with perceived paternal rejection ($r = .23, p \leq .01$), perceived maternal rejection ($r = .25, p \leq .01$), perceived paternal overprotection ($r = .25, p \leq .01$), perceived maternal overprotection ($r = .20, p \leq .01$). Whereas, PADUA scores showed significant negative correlation with perceived paternal emotional warmth ($r = -.08, p \leq .01$), perceived maternal emotional warmth ($r = -.09, p \leq .01$). In other words, as perceived warmth of the mothers and fathers increased, obsessive-compulsive symptoms of the participants decreased whereas when perceived rejection and overprotection behaviors of fathers and mothers increased, OC symptoms of the individuals also increased. In addition, PADUA scores indicated significant positive correlations with self-worth ambivalence ($r = .43, p \leq .01$), moral ambivalence ($r = .33, p \leq .01$), and public self-acceptability ($r = .41, p \leq .01$), which means that the more the ambivalence individuals experience on self-worth, morality, and self-acceptability, the more the OC symptoms. PADUA scores also showed a positive correlation with suppression subscale ($r = .29, p \leq .01$), responsibility/threat estimation ($r = .58, p \leq .01$), perfectionism/uncertainty ($r = .51, p \leq .01$), importance/control of thoughts ($r = .52, p \leq .01$). In other words, as participants use of suppression as an emotion regulation strategy and their use of OCD-relevant belief domains increased, obsessive-compulsive symptoms of the participants also increased. Results also showed that OC symptoms are negatively correlated with years of education ($r = -.15, p \leq .01$), and age ($r = -.14, p \leq .01$), which means that as the education level and the age of the participants increased, OC symptoms decreased.

The outcome variable Checking symptom was positively correlated with perceived paternal rejection ($r = .18, p \leq .01$), perceived maternal rejection ($r = .19, p \leq .01$), perceived paternal overprotection ($r = .21, p \leq .01$), perceived maternal overprotection ($r = .16, p \leq .01$), self-worth ambivalence ($r = .35, p \leq .01$), moral ambivalence ($r = .28, p \leq .01$), public self-acceptability ($r = .34, p \leq .01$).

.01), suppression ($r = .25, p \leq .01$), responsibility/threat estimation ($r = .49, p \leq .01$), perfectionism/uncertainty ($r = .45, p \leq .01$), importance/control of thoughts ($r = .42, p \leq .01$), and negatively correlated with education years ($r = -.15, p \leq .01$), and age ($r = -.09, p \leq .05$). In other words, as perceived rejection and overprotection behaviors of fathers and mothers, ambivalence on self-worth and morality, and participants use of suppression strategy and OCD-relevant belief domains increased, checking symptoms of the individuals also increased. However, when education level and age of the participants increased, Checking symptoms decreased.

Another outcome variable Contamination and Washing symptom was positively correlated with perceived paternal rejection ($r = .11, p \leq .05$), perceived maternal rejection ($r = .12, p \leq .01$), perceived paternal overprotection ($r = .18, p \leq .01$), perceived maternal overprotection ($r = .14, p \leq .01$), self-worth ambivalence ($r = .21, p \leq .01$), moral ambivalence ($r = .18, p \leq .01$), public self-acceptability ($r = .23, p \leq .01$), reappraisal ($r = .09, p \leq .05$), suppression ($r = .16, p \leq .01$), responsibility/threat estimation ($r = .34, p \leq .01$), perfectionism/uncertainty ($r = .35, p \leq .01$), importance/control of thoughts ($r = .32, p \leq .01$), and negatively correlated with age ($r = -.08, p \leq .05$), and gender ($r = -.14, p \leq .01$). In other words, as perceived rejection and overprotection behaviors of fathers and mothers, ambivalence on self-worth and morality, and participants use of suppression and cognitive reappraisal emotional regulation strategy and use of OCD-relevant belief domains increased, Contamination/Washing symptoms of the individuals also increased; whereas when age of the participants increased, Contamination/Washing symptoms decreased.

With respect to variables associated with Grooming and Dressing symptom; it was correlated positively with perceived paternal rejection ($r = .12, p \leq .01$), perceived maternal rejection ($r = .12, p \leq .01$), perceived paternal overprotection ($r = .14, p \leq .01$), perceived maternal overprotection ($r = .10, p \leq .05$), self-worth ambivalence ($r = .25, p \leq .01$), moral ambivalence ($r = .21, p \leq .01$), public self-acceptability ($r = .29, p \leq .01$), suppression ($r = .18, p \leq .01$), responsibility/threat estimation ($r = .37, p \leq .01$), perfectionism/uncertainty ($r =$

.34, $p \leq .01$), importance/control of thoughts ($r = .36$, $p \leq .01$), and negatively correlated with education years ($r = -.10$, $p \leq .05$), and age ($r = -.08$, $p \leq .05$). In other words, as perceived rejection and overprotection behaviors of fathers and mothers, ambivalence on self-worth and morality, and participants use of OCD-relevant belief domains increased, Grooming/Dressing symptoms of the individuals also increased; whereas when education levels and age of the participants increased, Grooming/Dressing symptoms decreased.

Furthermore, results of the Obsessional Thoughts to Harm symptom analyses revealed that participants' scores on obsessional thoughts to harm subscale showed positive correlation with perceived paternal rejection ($r = .28$, $p \leq .01$), perceived maternal rejection ($r = .32$, $p \leq .01$), perceived paternal overprotection ($r = .30$, $p \leq .01$), perceived maternal overprotection ($r = .26$, $p \leq .05$), self-worth ambivalence ($r = .47$, $p \leq .01$), moral ambivalence ($r = .37$, $p \leq .01$), public self-acceptability ($r = .48$, $p \leq .01$), suppression ($r = .31$, $p \leq .01$), responsibility/threat estimation ($r = .66$, $p \leq .01$), perfectionism/uncertainty ($r = .54$, $p \leq .01$), and importance/control of thoughts ($r = .60$, $p \leq .01$). On the other hand, it was showed negative correlation with perceived paternal emotional warmth ($r = -.12$, $p \leq .05$), perceived maternal emotional warmth ($r = -.14$, $p \leq .01$), education years ($r = -.19$, $p \leq .01$), age ($r = -.12$, $p \leq .05$), and gender ($r = -.07$, $p \leq .05$). In other words, as perceived rejection and overprotection behaviors of fathers and mothers, ambivalence on self-worth and morality, and participants use of suppression as an emotion regulation strategy and OCD-relevant belief domains increased, scores on the Obsessional Thoughts to Harm subscale also increased; whereas when perceived warmth of the mothers and fathers, education levels and age of the participants increased, scores on the Obsessional Thoughts to Harm subscale decreased.

According to the results of correlation analyses, the other outcome variable, namely Obsessional Impulses to Harm symptom showed significant positive correlation with perceived paternal rejection ($r = .22$, $p \leq .01$), perceived maternal rejection ($r = .23$, $p \leq .01$), perceived paternal overprotection ($r = .13$, $p \leq .01$), perceived maternal overprotection ($r = .11$, $p \leq .05$), self-worth ambivalence

($r = .40, p \leq .01$), moral ambivalence ($r = .25, p \leq .01$), public self-acceptability ($r = .30, p \leq .01$), suppression ($r = .24, p \leq .01$), responsibility/threat estimation ($r = .39, p \leq .01$), perfectionism/uncertainty ($r = .29, p \leq .01$), importance/control of thoughts ($r = .37, p \leq .01$), and gender ($r = .09, p \leq .05$). It also had negative correlations with perceived paternal emotional warmth ($r = -.13, p \leq .01$), perceived maternal emotional warmth ($r = -.13, p \leq .01$), cognitive reappraisal ($r = -.07, p \leq .05$), education years ($r = -.15, p \leq .01$), age ($r = -.19, p \leq .05$). In other words, as perceived rejection and overprotection behaviors of fathers and mothers, ambivalence on self-worth and morality, and participants use of OCD-relevant belief domains increased, scores on the Obsessional Impulses to Harm subscale also increased; whereas when perceived warmth of the mothers and fathers, use of reappraisal strategy as an emotion regulation, and education levels of the participants increased, scores on the Obsessional Impulses to Harm subscale decreased.

Table 19 Correlation Coefficients Among Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. PADUA_Total	1	.868**	.792**	.686**	.842**	.645**	.453**	.428**	.331**	.409**	.233**	.251**	.251**
2. Checking		1	.561**	.553**	.832**	.422**	.374**	.348**	.284**	.337**	.184**	.188**	.213**
3. Contamination/Washing			1	.544**	.543**	.293**	.236**	.212**	.180**	.225**	.114**	.123**	.179**
4. Grooming/Dressing				1	.481**	.348**	.282**	.246**	.209**	.289**	.119**	.124**	.140**
5. Obsessional Thoughts to harm					1	.547**	.510**	.474**	.372**	.476**	.275**	.316**	.295**
6. Obsessional Impulses						1	.382**	.404**	.253**	.296**	.221**	.234**	.128**
7. SAM_Total							1	.920**	.809**	.862**	.295**	.292**	.262**
8. Self_Worth Ambivalence								1	.576**	.698**	.313**	.301**	.246**
9. Moral Ambivalence									1	.622**	.176**	.178**	.172**
10. Public Self-Acceptability										1	.249**	.256**	.262**
11. Paternal Rejection											1	.674**	.565**
12. Maternal Rejection												1	.437**
13. Paternal Overprotection													1

Table 19 (Continued)

	14	15	16	17	18	19	20	21	22	23	24
1. PADUA_Total	.202**	-.075*	-.087**	.007	.289**	.577**	.509**	.524**	-.173**	-.049	-.137**
2. Checking	.162**	-.026	-.039	.004	.245**	.490**	.449**	.419**	-.169**	-.009	-.090**
3. Contamination/Washing	.135**	-.020	-.026	.099**	.164**	.343**	.349**	.323**	-.050	-.141**	-.077*
4. Grooming/Dressing	.100**	-.022	-.020	.034	.176**	.365**	.344**	.363**	-.104**	-.029	-.083*
5. Obsessional Thoughts to harm	.261**	-.116**	-.137**	-.064	.305**	.658**	.536**	.596**	-.201**	-.071*	-.115**
6. Obsessional Impulses	.113**	-.129**	-.131**	-.071*	.237**	.392**	.285**	.366**	-.160**	.096**	-.185**
7. SAM_Total	.252**	-.223**	-.177**	-.134**	.313**	.575**	.541**	.520**	-.222**	-.053	-.282**
8. Self_Worth Ambivalence	.260**	-.267**	-.209**	-.188**	.289**	.509**	.481**	.453**	-.218**	-.092**	-.300**
9. Moral Ambivalence	.139**	-.111**	-.077*	-.019	.237**	.437**	.399**	.416**	-.142**	.045	-.232**
10. Public Self-Acceptability	.238**	-.158**	-.141**	-.096**	.285**	.563**	.539**	.498**	-.206**	-.065	-.165**
11. Paternal Rejection	.422**	-.456**	-.308**	-.013	.106**	.238**	.208**	.225**	-.134**	-.059	.000
12. Maternal Rejection	.554**	-.380**	-.481**	-.012	.155**	.269**	.242**	.246**	-.155**	-.149**	.022
13. Paternal Overprotection	.721**	-.113**	-.135**	-.046	.100**	.253**	.230**	.241**	-.116**	-.129**	-.020
14. Maternal Overprotection	1	-.124**	-.131**	-.040	.082*	.218**	.219**	.176**	-.080*	-.188**	-.003
15. Paternal Emotional Warmth		1	.702**	.062	-.156**	-.141**	-.147**	-.161**	.168**	-.061	-.067*
16. Maternal Emotional Warmth			1	.072*	-.215**	-.177**	-.154**	-.174**	.199**	-.057	-.129**
17. Reappraisal				1	.167**	-.012	-.076*	-.073*	.007	.017	.082*
18. Suppression					1	.353**	.297**	.331**	-.144**	.156**	.000
19. Responsibility/Threat Estimation						1	.740**	.776**	-.256**	.063	-.020
20. Perfectionism/Uncertainty							1	.656**	-.179**	-.039	-.035
21. Importance/Control of Thoughts								1	-.358**	.071*	-.076*
22. Education Years									1	-.052	.013
23. Gender										1	.111**
24. Age											1

Note. p** ≤ .01; p* ≤ .05

3.3.4.3 Regression Analyses

Six separate hierarchical regression analyses with stepwise equation were conducted in order to see possible effects of perceived parental behaviors, self-ambivalence, cognitive appraisals and emotion regulation strategies associated with total OCD symptoms and the symptom domains of OCD after controlling for age, gender, education level and reported clinical status.

Table 20 Variables Introduced According to The Steps in Regression Analyses

Block	Predictor Variables	Method
1	Control Variables Age Gender Education Level Reported Clinical Status	Enter
2	Perceived Parental Styles Paternal Rejection Maternal Rejection Paternal Overprotection Maternal Overprotection Paternal Emotional Warmth Maternal Emotional Warmth	Stepwise
3	Self-Ambivalence Factors Self-Worth Ambivalence Moral Ambivalence Public Self-Acceptability	Stepwise
4	Obsessive Appraisals and Emotion Regulation Responsibility/Threat Estimation Perfectionism/Uncertainty Importance/Control of Thoughts Cognitive Reappraisal Suppression	Stepwise

As shown in Table 20, variables were entered into the equation via four steps. In order to control for the possible effects of socio-demographic variables (i.e., gender, age, years of education, and reported clinical status), these were entered in the equation in the first step, labeled as control variables. In the second step, Perceived parental styles (i.e., paternal-maternal rejection, paternal-maternal overprotection, paternal-maternal emotional warmth), followed by Self-

ambivalent factors in the third step (i.e., self-worth ambivalence, moral ambivalence, public self-acceptability), and finally, in the last step Cognitive/Obsessive appraisals (i.e., responsibility/ threat estimation, perfectionism/ uncertainty, importance/ control of thoughts) and Emotion Regulation Strategies (i.e., cognitive reappraisal and suppression) were included in the equation via stepwise method.

3.3.4.3.1 Predictors of General OC Symptoms: Full Model

In order to test the full model (Figure 1) for general obsessive-compulsive symptomatology, participants' total scores for PI-WSUR scale were taken as the dependent variable. The predictor variables were entered into the analysis hierarchically within individual steps using stepwise method, as described in Table 20.

The results of the analysis showed that when all variables were in the equation, in the last step, R^2 value of .40 indicated that 40% of the variability in obsessive-compulsive symptoms was explained by the variables entered into the equation. In the first step, control variables, including age, gender, years of education, and reported clinical status of the participants were entered into the equation explaining 6 % of the variance ($R^2 = .06$), $F(4, 865) = 14.83$, $p \leq .001$). This step revealed that age ($\beta = -.14$; $t = -4.27$, $p \leq .001$) and education years ($\beta = -.16$; $t = -4.85$, $p \leq .001$) of the individuals were negatively associated with OC symptoms whereas having a psychiatric diagnosis or not (e.g. Yes:1; No: 0) was negatively associated with obsessive-compulsive symptoms ($\beta = -.13$; $t = 3.90$, $p \leq .001$).

As the second step, perceived parenting styles were added into the equation, adding 7% to the variance explained in OC symptoms and this change in R^2 was significant, $F \text{ Change}(2, 863) = 16.88$, $p \leq .001$. Among the six dimensions of perceived parenting styles, perceived rejection from mother ($\beta = .23$; $t = 6.80$, $p \leq .001$). and perceived overprotection from father ($\beta = .15$; $t = 4.11$, $p \leq .001$) were positively associated with OC symptoms.

Following the second step, self-ambivalence measures were added as the third step. Addition of these variables improved explained variance in symptom severity significantly by 10%, $F \text{ Change } (1, 861) = 19.99, p \leq .001$. Among the variables, self-worth ambivalence ($\beta = .34; t = 9.74, p \leq .001$) and public self-acceptability ($\beta = .19; t = 4.47, p \leq .001$) were both positive predictors of OC symptoms.

In the fourth and the final step, obsessive appraisals and emotion regulation strategies were entered in equation, all of which incremented the explained variance in obsessive-compulsive symptoms significantly by 17%, which was a significant change in R^2 , $F \text{ Change } (4, 857) = 7.35, p \leq .01$. Responsibility/threat estimation ($\beta = .48; t = 13.98, p \leq .001$), importance/control of thoughts ($\beta = .16; t = 3.54, p \leq .001$), perfectionism/uncertainty ($\beta = .12; t = 2.81, p \leq .01$), and suppression ($\beta = .08; t = 2.71, p \leq .001$) were among appraisal and emotion regulation factors that were positively associated with OC symptoms. In this final step, together with responsibility/threat estimation, importance/control of thoughts, perfectionism/uncertainty, and suppression; self-worth ambivalence and age remained significant ($\beta = .08; t = -2.02, p < .05$, and $\beta = -.10; t = -3.28, p < .01$, respectively). Table 21 summarizes the results of the regression analyses.

Table 21 Predictors of General OC Symptoms

Steps	Variables in Set	β	t (within)	R^2 Change	Partial correlation	t (last step)	Partial Corr (last step)	Model R^2
DV: OC Symptoms (PADUA-Total)								
1	<i>Control Variables</i>							.06
	Age	-.14	-4.27***	.06	-.14	-3.27**	-.11	
	Education	-.16	-4.85***	.06	-.16	0.68	.02	
	Reported Clinical-Status	.13	3.90***	.06	.13	1.59	.05	
2	<i>Perceived Parenting Styles</i>							.13
	Maternal Rejection	.23	6.80***	.05	.23	1.53	.05	
	Paternal Overprotection	.15	4.11***	.02	.14	1.79	.06	
3	<i>Self-Ambivalence</i>							.23
	Self-Worth Ambivalence	.34	9.74***	.09	.32	2.02*	.07	
	Public Self-Acceptability	.19	4.47***	.01	.15	-0.39	-.01	
4	<i>Appraisals and Emotion Regulation</i>							.40
	Responsibility/Threat Estimation	.48	13.98***	.14	.43	6.24***	.21	
	Importance/Control of thoughts	.16	3.54***	.01	.12	2.78**	.09	
	Perfectionism/Uncertainty	.12	2.81**	.01	.09	2.74**	.09	
	Suppression	.08	2.71**	.01	.09	2.71**	.09	

3.3.4.3.2 Predictors of Checking Symptoms: Full Model

A hierarchical multiple regression analysis was performed to examine the significant associates of checking symptoms. As can be followed from Table 20 above (see pp. 118), same group of variables were entered into the equation via four steps.

According to the results of the analysis (see Table 22), all the variables in the equation, in the last step yielded an R^2 value of .28 indicating that 28% of the variability in checking symptoms was explained by the variables entered into the equation, $F(11, 858) = 4.79, p \leq .05$.

In the first step, control variables, including age, gender, years of education, and reported clinical status of the participants were entered into the equation explaining 5 % of the variance ($R^2 = .05$), ($F(4, 865) = 10.57, p \leq .001$). The predictors of checking symptoms among control variables were age ($\beta = -.10; t = -2.95, p \leq .01$), years of education ($\beta = -.16; t = -4.71, p \leq .01$), and reported clinical status of the participants ($\beta = .11; t = 3.19, p \leq .01$).

As the second step, perceived parenting styles were added into the equation, adding 4% to the variance explained in checking symptom stype and this change in R^2 was significant, $F Change(2, 863) = 8.06, p \leq .001$. From perceived parenting styles, paternal overprotection ($\beta = .18; t = 5.46, p \leq .001$) and maternal rejection ($\beta = .11; t = 2.84, p \leq .01$) were found to be positively associated with checking. Following the second step, self-ambivalence measures were added as the third step. Addition of these variables improved explained variance in symptom severity significantly by 7%, $F Change(2, 861) = 12.82, p \leq .001$. Among the self-ambivalence variables, both self-worth ambivalence ($\beta = .28; t = 7.72, p \leq .001$) and public self-acceptability ($\beta = .16; t = 3.58, p \leq .001$) were significantly and positively related to checking symptoms. Finally, responsibility/threat estimation ($\beta = .41; t = 10.90, p \leq .001$), perfectionism/uncertainty ($\beta = .18; t = 4.00, p \leq .001$), and suppression ($\beta = .07; t = 2.19, p \leq .05$) were among the cognitive and emotion regulation factors that were positively associated with checking symptoms. Addition of these variables into the equation incremented the

explained variance in checking symptoms significantly 12%, which was a significant change in R^2 , F Change (3, 858) = 4.79, $p \leq .01$.

When the beta values for all variables in the equation were examined within the final step, results revealed that despite remaining significant, paternal overprotection and age experienced slight decrements ($\beta = .06$; $t = 1.94$, $p \leq .05$ and $\beta = -.06$; $t = 2.16$, $p \leq .05$, respectively). All these decrements at the regression effects of variables might indicate possible mediation effects that can guide further analyses.

3.3.4.3.3 Predictors of Contamination/Washing Symptoms: Full Model

In order to answer the question of what predicts contamination and/or washing symptoms, a hierarchical regression analyses was conducted. Similar to the analyses in the previous section, variables were entered into the analyses in four steps as described in Table 20.

The results of the analysis revealed that when all the variables were in the equation, in the last step, R^2 value of .19 indicating that 19% of the variance in contamination/washing symptoms was explained by the variables entered into the equation, F (10, 859) = 7.88, $p \leq .01$.

In the first step, control variables, including age, gender, years of education, and reported clinical status of the participants were entered into the equation, explaining 3 % of the variance ($R^2 = .03$), (F (4, 865) = 7.39, $p \leq .001$). This step revealed that gender ($\beta = -.13$; $t = -3.83$, $p \leq .001$) was negatively associated with contamination/washing symptoms. In other words, women were more likely to show contamination symptoms than men. On the other hand, reported clinical status of the participants ($\beta = .09$; $t = 2.53$, $p \leq .01$) was found to be positively associated with contamination/washing symptoms. As the second step, perceived parenting styles were added into the equation, adding 2% to the variance explained in OC symptoms and this change in R^2 was significant, F Change (1, 864) = 19.16, $p \leq .001$. Among the six dimensions of perceived parenting styles, only perceived overprotection from father ($\beta = .15$; $t = 4.38$, $p \leq .001$) was positively associated with contamination/washing symptoms.

Table 22 Predictors of Checking Symptom Dimension

Steps	Variables in Set	β	t (within)	R^2 Change	Partial correlation	t (last step)	Partial Corr. (last step)	Model R^2
DV: Checking Symptoms								
1	<i>Control Variables</i>							.05
	Age	-.10	-2.95**	.05	-.10	-2.16*	-.07	
	Education	-.16	-4.71***	.05	-.16	-0.93	-.03	
	Clinical-Status	.11	3.19**	.05	.11	1.19	.04	
2	<i>Perceived Parenting Styles</i>							.09
	Paternal Overprotection	.18	5.46***	.03	.18	1.94	.07	
	Maternal Rejection	.11	2.84**	.01	.10	0.26	.01	
3	<i>Self-Ambivalence</i>							.16
	Self-Worth Ambivalence	.28	7.72***	.06	.25	1.33	.05	
	Public Self-Acceptability	.16	3.58***	.01	.12	-0.46	-.02	
4	<i>Appraisals and Emotion Regulation</i>							.28
	Responsibility/Threat Estimation	.41	10.90***	.10	.35	6.08***	.20	
	Perfectionism/Uncertainty	.18	4.00***	.01	.14	3.92***	.13	
	Suppression	.07	2.19*	.01	.07	2.19*	.07	

Following the second step, self-ambivalence measures were added as the third step. Addition of these variables improved explained variance in the contamination/washing symptoms significantly by 3%, F Change (1, 863) = 24.59, $p \leq .001$. Among these variables, only public self-acceptability ($\beta = .17$; $t = 4.96$, $p \leq .001$) was positive predictors of contamination/washing dimensions. In the fourth and the final step, cognitive appraisals and emotion regulation strategies were entered in equation, all of which increased the explained variance in the contamination/washing symptom dimension significantly by 11%, which was a significant change in R^2 , F Change (4, 859) = 7.88, $p \leq .01$. Responsibility/threat estimation ($\beta = .34$; $t = 8.67$, $p \leq .001$), perfectionism/uncertainty ($\beta = .18$; $t = 3.96$, $p \leq .01$), cognitive reappraisal ($\beta = .13$; $t = 4.02$, $p \leq .001$), and importance/control of thoughts ($\beta = .15$; $t = 2.81$, $p \leq .01$) were among appraisal and emotion regulation factors that were positively associated with contamination/washing symptoms. In this final step, together with responsibility/threat estimation, perfectionism/ uncertainty, cognitive reappraisal, and importance/control of thoughts; paternal overprotection and gender remained significant ($\beta = .07$; $t = 2.08$, $p \leq .05$, and $\beta = -.14$; $t = -4.27$, $p < .01$, respectively). Table 23 summarizes the results of the regression analyses.

3.3.4.3.4 Predictors of Grooming and/or Dressing Symptoms: Full Model

A hierarchical multiple regression analysis was performed to reveal the significant associates of grooming and/or dressing symptoms, taken as a dependent variable. As can be followed from Table 20 above (see pp. 118), same group of variables were entered into the equation via four steps.

According to the results of the analysis (see Table 24), when all variables were in the equation, in the last step, R^2 value of .17 indicated that 17% of the variability in grooming/dressing symptoms was explained by the variables entered into the equation, F (9, 860) = 6.65, $p \leq .01$.

In the first step, control variables, including age, gender, years of education, and reported clinical status of the participants were entered into the equation explaining 2 % of the variance ($R^2 = .02$), F (4, 865) = 4.39, $p \leq .01$.

Table 23 Predictors of Contamination/Washing Symptoms

Steps	Variables in Set	β	t (within)	R^2 Change	Partial correlation	t (last step)	Partial Corr. (last step)	Model R^2
DV: Contamination/Washing Symptoms								
1	<i>Control Variables</i>							.03
	Gender	-.13	-3.83***	.03	-.13	-4.27***	-.14	
	Reported Clinical Status	.09	2.53**	.03	.09	1.35	.05	
2	<i>Perceived Parenting Styles</i>							.05
	Paternal Overprotection	.15	4.38***	.02	.15	2.08*	.07	
3	<i>Self-Ambivalence</i>							.08
123	Public Self-Acceptability	.17	4.96***	.03	.17	-0.62	-.02	
4	<i>Appraisal and Emotion Regulation</i>							.19
	Responsibility/Threat Estimation	.34	8.67***	.07	.28	2.20*	.08	
	Perfectionism/Uncertainty	.18	3.69***	.01	.13	3.49***	.12	
	Reappraisal	.13	4.02***	.02	.14	4.23***	.14	
	Importance/Control of thoughts	.15	2.81**	.01	.10	2.81**	.10	

The common predictors of grooming/dressing symptoms among control variables were age ($\beta = -.08$; $t = -2.48$, $p \leq .05$) and years of education ($\beta = -.10$; $t = -2.88$, $p \leq .001$). As the second step, perceived parenting styles were added into the equation, adding 1% to the variance explained in grooming/dressing symptom dimension and this change in R^2 was significant, $F Change (1, 864) = 12.19$, $p \leq .001$. From perceived parenting styles, only paternal overprotection ($\beta = .12$; $t = 3.49$, $p \leq .001$) was found to be positively associated with grooming/dressing symptoms.

Following the second step, self-ambivalence measures were added as the third step. Addition of these variables improved explained variance in the grooming/dressing symptoms significantly by 6%, $F Change (1, 863) = 53.12$, $p \leq .001$. Among the self-ambivalence variables, only public self-acceptability ($\beta = .25$; $t = 7.29$, $p \leq .001$) was significantly and positively related to grooming/dressing symptoms. Finally, importance/control of thoughts ($\beta = .30$; $t = 7.88$, $p \leq .001$), perfectionism/ uncertainty ($\beta = .16$; $t = 3.52$, $p \leq .001$), and cognitive reappraisal ($\beta = .08$; $t = 2.58$, $p \leq .01$) were among cognitive and emotion regulation factors that were positively associated with grooming/dressing symptoms.

Addition of these variables into the equation incremented the explained variance in the grooming/dressing symptom type significantly 12%, which was a significant change in R^2 , $F Change (3, 860) = 6.65$, $p \leq .01$.

When the beta values for all variables in the equation were examined within the final step, results revealed that despite remaining significant, public self-acceptability had a decrement in its predictive effect ($\beta = .09$; $t = 2.32$, $p \leq .05$).

Table 24 Predictors of Grooming/Dressing Symptoms

Steps	Variables in Set	β	t (within)	R^2 Change	Partial correlation	t (last step)	Partial Corr. (last step)	Model R^2
DV: Grooming/Dressing Symptoms								
1	<i>Control Variables</i>							.02
	Age	-.08	-2.48*	.02	-.08	-1.63	-.06	
	Education	-.10	-2.88**	.02	-.10	0.89	.03	
2	<i>Perceived Parenting Styles</i>							.03
125	Paternal Overprotection	.12	3.49***	.01	.12	0.79	.03	
3	<i>Self-Ambivalence</i>							.09
	Public Self-Acceptability	.25	7.29***	.06	.24	2.32*	.08	
4	<i>Appraisal and Emotion Regulation</i>							.17
	Importance/Control of thoughts	.30	7.88***	.06	.26	4.96***	.17	
	Perfectionism/Uncertainty	.16	3.52***	.01	.12	3.59***	.12	
	Reappraisal	.08	2.58**	.01	.09	2.52*	.09	

3.3.4.3.5 Predictors of Obsessional Thoughts to Harm: Full Model

Another hierarchical regression analysis with stepwise equation was also performed to predict symptom dimension of obsessional thoughts. Same steps, presented in Table 20 were followed in this regression analysis.

Analyses showed that when all of the variables were in the equation in the last step, R^2 value of .50 indicated that 50% of the variability obsessional thoughts symptoms was explained by some of the variables entered into the equation, $F(11, 858) = 6.19, p \leq .01$.

In the first step, control variables, including age, years of education, and reported clinical status of the participants were entered into the equation, explaining 8 % of the variance ($R^2 = .08$), $F(4, 865) = 19.74, p \leq .001$. This step revealed that age ($\beta = -.12; t = -3.72, p \leq .001$) and years of education ($\beta = -.19; t = -5.79, p \leq .001$) were both negatively associated with obsessional thoughts about harm. Whereas the reported clinical status of the participants ($\beta = .17; t = 5.06, p \leq .001$) was found to be positively associated with contamination/washing symptoms. As the second step, perceived parenting styles were added into the equation which added a further 10% of the explained variance in obsessional thoughts about harm symptom dimension and this change in R^2 was significant, $F Change(2, 863) = 23.21, p \leq .001$. Among the six dimensions of parenting styles, perceived rejection from mother ($\beta = .28; t = 8.64, p \leq .001$) and perceived overprotection from father ($\beta = .17; t = 4.86, p \leq .001$) were positive predictors of obsessional thoughts about harm. Following the second step, self-ambivalence measures were added as the third step. Addition of these variables improved explained variance in the obsessional thoughts about harm symptom dimension significantly by 13%, $F Change(2, 861) = 22.34, p \leq .001$. Among these variables, public self-acceptability ($\beta = .37; t = 11.95, p \leq .001$) and self-worth ambivalence ($\beta = .20; t = 4.73, p \leq .001$) were positively associated with obsessional thoughts dimension.

In the fourth and the final step, cognitive appraisals and emotion regulation strategies were entered into the equation. Addition of these variables into the

equation incremented the explained variance in the obsessional thoughts about harm symptom type by 19%, which was a significant change in R^2 , F Change (3, 858) = 6.19, $p \leq .01$. Responsibility/threat estimation ($\beta = .54$; $t = 17.19$, $p \leq .001$), importance/control of thoughts ($\beta = .18$; $t = 4.41$, $p \leq .001$), and suppression ($\beta = .07$; $t = 2.49$, $p \leq .05$) were among cognitive and emotional factors that were positively associated with obsessional thoughts about harm. In the final step, together with responsibility/threat estimation, importance/control of thoughts, and suppression; maternal rejection, paternal overprotection ($\beta = .07$; $t = 2.08$, $p \leq .05$, and $\beta = .06$; $t = 2.31$, $p \leq .01$, respectively), age and reported clinical status remained significant ($\beta = -.07$; $t = -2.63$, $p \leq .01$, and $\beta = .08$; $t = 3.02$, $p \leq .01$, respectively). Table 25 summarizes the results of the regression analyses.

3.3.4.3.6 Predictors of Obsessional Impulses: Full Model

Finally, a hierarchical multiple regression analysis was performed to examine the significant associates of obsessional impulses about harm which was taken as the dependent variable. As can be followed from Table 20 above (see pp. 118), same group of variables were entered into the equation via four steps.

According to the results (see Table 26), when all of the variables were in the equation, R^2 value of .25 indicating that 25% of the variability in obsessional impulses dimension was explained by some of the variables entered into the equation, $F(7, 862) = 42.20$, $p \leq .001$.

In the first step, control variables, including age, years of education, and reported clinical status of the participants were entered into the equation, explaining 8 % of the variance ($R^2 = .08$), $F(4, 865) = 17.78$, $p \leq .001$.

The common predictors of obsessional impulses symptoms among control variables were age ($\beta = -.08$; $t = -2.48$, $p \leq .05$), years of education ($\beta = -.10$; $t = -2.88$, $p \leq .001$), and gender ($\beta = .13$; $t = 3.85$, $p \leq .05$).

Table 25 Predictors of Obsessional Thoughts about Harm Symptom Dimension

Steps	Variables in Set	β	t (within)	R^2 Change	Partial correlation	t (last step)	Partial Corr. (last step)	Model R^2
DV: Obsessional Thoughts to Harm								
1	<i>Control Variables</i>							.08
	Age	-.12	-3.72***	.08	-.13	-2.63**	-.09	
	Reported Clinical Status	.17	5.06***	.08	.17	3.02**	.10	
	Education	-.19	-5.79***	.08	-.19	0.90	.03	
128	2	<i>Perceived Parenting Styles</i>						.18
	Maternal Rejection	.28	8.64***	.07	.28	2.89**	.10	
	Paternal Overprotection	.17	4.86***	.02	.16	2.31*	.08	
3	<i>Self-Ambivalence</i>							.31
	Public Self-Acceptability	.37	11.95***	.12	.38	1.07	.04	
	Self-Worth Ambivalence	.20	4.73***	.01	.16	1.92	.07	
4	<i>Appraisals and Emotion Regulation</i>							.50
	Responsibility/Threat Estimation	.54	17.19***	.17	.51	9.94***	.32	
	Importance/Control of thoughts	.18	4.41***	.01	.15	4.24***	.14	
	Suppression	.07	2.49*	.01	.09	2.49*	.09	

Unlike age and years of education, gender was positively associated with obsessional impulses. As the second step, perceived parenting styles were added into the equation which added a further 5% of the explained variance in obsessional impulses symptom dimension and this change in R^2 was significant, F Change (1, 864) = 55.81, $p \leq .001$. From perceived parenting styles, only perceived rejection from mother ($\beta = .24$; $t = 7.47$, $p \leq .001$) was found to be positively associated with obsessional impulses. Self-ambivalence measures were added as the third step, which improved explained variance in the obsessional impulses symptom dimension significantly by 8%, F Change (1, 863) = 87.01, $p \leq .001$. Among the self-ambivalence variables, only self-worth ambivalence ($\beta = .32$; $t = 9.33$, $p \leq .001$) was significantly and positively related to grooming/dressing symptoms. Finally, responsibility/threat estimation ($\beta = .23$; $t = 6.50$, $p \leq .001$), was the only variable, among cognitive and emotion regulation factors, that was positively associated with obsessional impulses to harm dimension. Addition of these variables into the equation incremented the explained variance in the obsessional impulses symptom stype significantly 4%, which was a significant change in R^2 , F Change (1, 862) = 42.20, $p \leq .001$.

When the beta values for all variables in the equation were examined within the final step, results revealed that despite remaining significant, self-worth ambivalence ($\beta = .21$; $t = 5.53$, $p \leq .001$), maternal rejection ($\beta = .13$; $t = 4.15$, $p \leq .001$), gender ($\beta = .14$; $t = 4.73$, $p \leq .001$), and age ($\beta = -.14$; $t = -4.23$, $p \leq .001$) had a decrement in their predictive effects. In other words, when previously entered variables remained significant in the last step with some reduction may be considered as a signal for a possible mediation effect (Baron & Kenny, 1986).

Additionally, summary table below presents a simple overview of the results for all the hierarchical regression analyses (see Table 27). The summary table includes only the significant predictors of all the outcome variables.

Table 26 Predictors of Obsessional Impulses to Harm Symptom Dimension

Steps	Variables in Set	β	t (within)	R^2 Change	Partial correlation	t (last step)	Partial Corr. (last step)	Model R^2
DV: Obsessional Impulses to Harm								
1	<i>Control Variables</i>							.08
130	Age	-.20	-6.05***	.08	-.20	-4.23***	-.14	
	Gender	.13	3.85***	.08	.13	4.73***	.16	
	Education	-.14	-4.29***	.08	-.14	-0.58	-.02	
2	<i>Perceived Parenting Styles</i>							.13
	Maternal Rejection	.24	7.47***	.05	.25	4.15***	.14	
3	<i>Self-Ambivalence</i>							.21
	Self-Worth Ambivalence	.32	9.33***	.08	.30	5.53***	.19	
4	<i>Appraisal and Emotion Regulation</i>							.25
	Responsibility/Threat Estimation	.23	6.50***	.04	.22	6.48***	.22	

Table 27 Overview of the Results for All the Hierarchical Regression Analyses

	Perceived Parenting Styles		Self-Ambivalence Factor		Cognitive Appraisals			Emotion Regulation	
	Paternal-Overprotection	Maternal-Rejection	Self-Worth	Public Self	RTE	ICT	PU	Suppr.	Reappr.
PADUA-Total	Yes(+)	Yes(+)	Yes(+)	Yes(+)	Yes(+)	Yes(+)	Yes(+)	Yes(+)	No
Checking	Yes(+)	Yes(+)	Yes(+)	Yes(+)	Yes(+)	No	Yes(+)	Yes(+)	No
Contamination	Yes(+)	No	No	Yes(+)	Yes(+)	No	Yes(+)	No	Yes(+)
Grooming	Yes(+)	No	No	Yes(+)	No	Yes(+)	Yes(+)	No	Yes(+)
Obsessional T.	Yes(+)	Yes(+)	Yes(+)	Yes(+)	Yes(+)	Yes(+)	No	Yes(+)	No
Obsessional I.	No	Yes(+)	Yes(+)	No	Yes(+)	No	No	No	No

Note. Yes: significant; No: not significant. (+)/(-) indicates direction of the relationship. RTE: Responsibility/threat estimation; ICT: Importance/control of thoughts; PU: Perfectionism/Uncertainty; Suppr: Suppression; Reappr: Cognitive Reappraisal

3.3.5 Results for the Hypothesis in Group 3

Hypothesis 4: Perceived parenting styles will predict OC symptoms through the mediator role of self-ambivalence factors.

Hypothesis 5: Self-ambivalence will predict OC symptoms through the mediator role of cognitive appraisals and emotion regulation strategies.

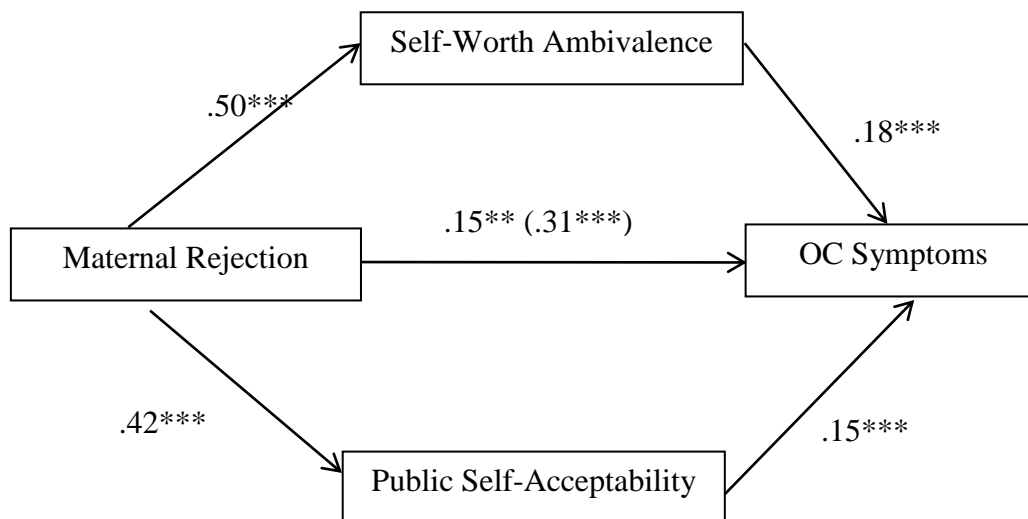
3.3.5.1 Mediation Analyses

For all the mediation analyses, in addition to the conditions suggested by Baron and Kenny (1986), bootstrapping approach was used to evaluate the total, direct, and indirect effects through selected multiple mediators, as described by Hayes (2013). It was suggested that bootstrap procedures are one of the most powerful and valid methods to test mediator effects (Hayes, 2009; Williams & MacKinnon, 2008). Bootstrapping approaches also enable including multiple mediators in a single model without assuming normality of the distribution of indirect effects (Shrout and Bolger, 2002). Additionally, this procedure provides stronger protection against Type 2 error when compared to normal theory procedures. A SPSS macro, called PROCESS, which has been recently provided by Hayes (2013) was used to calculate the total, direct, and indirect effects, including tests of significance using both normal theory such as Sobel test and bootstrap procedures. The total indirect effect shows how all mediators transmit the effects of a predictor variable on the outcome variable; while each indirect effect describes how each mediator transmit the effect of the predictor variable on the outcome variable. In order to test the hypotheses of the current study, bootstrapping procedure was used to examine the statistical significance of the indirect effects. Unstandardized indirect effects were computed for each of 5,000 bootstrapped samples, and the 95% confidence interval was computed. A significant effect does not have a confidence interval that includes zero, and the regression coefficients generated by the models are unstandardized.

3.3.5.1.1 Mediator Role of Self-Ambivalence Factors between Perceived Parenting Styles and OC Symptoms

Based on the hypothesis and the results of the regression analyses, the indirect effects of perceived maternal rejection (see Figure 6) and perceived paternal overprotection (see Figure 7) on general OCD symptoms through self-worth ambivalence and public self-acceptability was tested via Parallel Multiple Mediator Analysis by using ordinary least squares path analysis (OLS).

Results from the first mediation model revealed that perceived maternal rejection had significant and positive direct effect on self-worth ambivalence ($B = .50, t = 9.33, p \leq .001$) and public self-acceptability ($B = .42, t = 7.82, p \leq .001$). Test of the direct effects on the outcome showed that self-worth ambivalence ($B = .18, t = 5.74, p \leq .001$) and public self-acceptability ($B = .15, t = 4.86, p \leq .001$) had significant direct positive effects on OC symptoms. The total effect of perceived maternal rejection on obsessive-compulsive symptoms was also significant and positive ($B = .31, t = 7.65, p \leq .01$). Overall, 25% of the variance on obsessive-compulsive symptoms explained by model (see Figure 6).

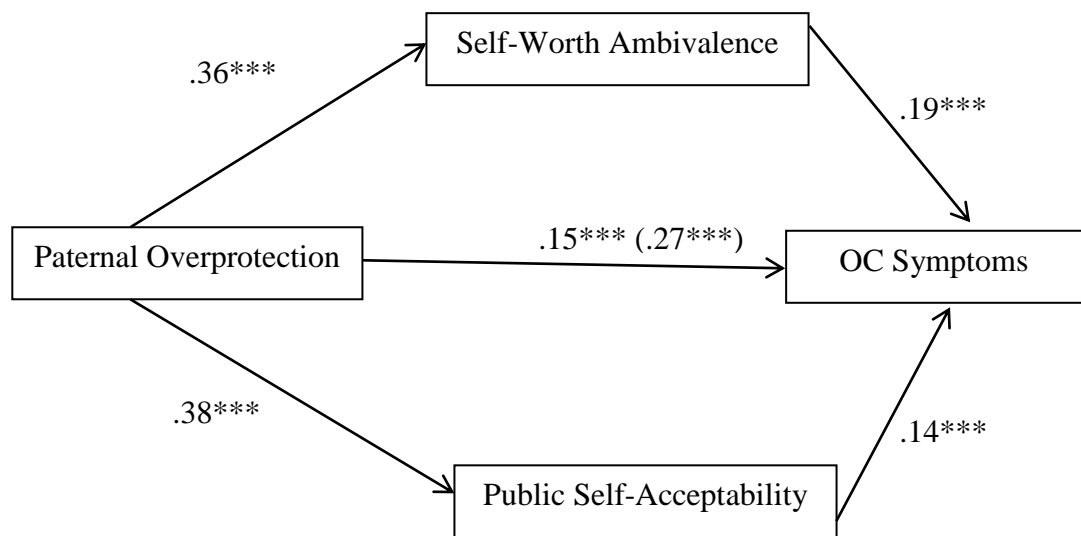


*** $p \leq .001$; ** $p \leq .01$

Figure 6 Indirect Effects of Perceived Maternal Rejection on OC Symptoms

The hypothesized mediators of perceived rejection of mother's effects on OC symptoms had a significant total indirect effect ($B = .15$, $CI_{.95} = .11, .20$) and several significant specific indirect effects on OC symptoms. The specific indirect effects derived by the model indicated that self-worth ambivalence ($B = .09$, $CI_{.95} = .05, .13$) and public self-acceptability ($B = .06$, $CI_{.95} = .03, .10$) both uniquely mediated the effects of perceived maternal rejection on obsessive-compulsive symptoms.

Likewise, results from the multiple mediator model that used paternal overprotection as the predictor showed that paternal overprotection had significant and positive direct effects on self-worth ambivalence ($B = .36$, $t = 7.48$, $p \leq .001$) and public self-acceptability ($B = .38$, $t = 8.02$, $p \leq .001$).



*** $p \leq .001$; ** $p \leq .01$

Figure 7 Indirect Effects of Perceived Paternal Overprotection on OC Symptoms

Moreover, tests of the direct effects of the mediators on the outcome revealed that both self-worth ambivalence ($B = .19, t = 6.18, p \leq .001$) and public self-acceptability ($B = .14, t = 4.55, p \leq .001$) had significant and positive effects on OC symptoms. The total effect of perceived paternal overprotection on obsessive-compulsive symptoms was also significant and positive ($B = .27, t = 7.67, p \leq .001$). Overall, paternal overprotection model explained 22% of the variance in OC symptoms.

The hypothesized mediators of perceived paternal overprotection's effects on OC symptoms had a significant total indirect effect ($B = .12, CI_{.95} = .09, .16$) and several significant specific indirect effects on OC symptoms. The specific indirect effects derived by the model indicated that self-worth ambivalence ($B = .07, CI_{.95} = .04, .11$) and public self-acceptability ($B = .06, CI_{.95} = .03, .09$) both uniquely mediated the effects of perceived maternal rejection on obsessive-compulsive symptoms.

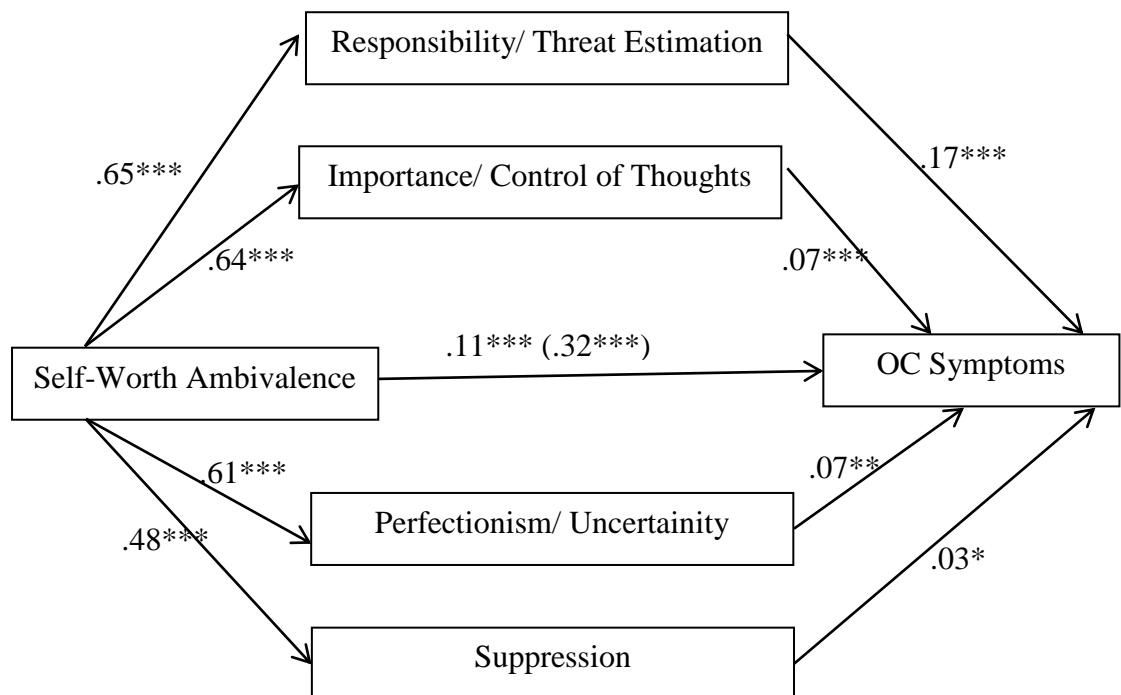
3.3.5.1.2 Mediator Role of Obsessive Appraisals and Emotion Regulation Strategies between Self-Ambivalence Factors and OC Symptoms

As previous analysis revealed a significant relationship between two factors of self-ambivalence, including self-worth ambivalence and public self-acceptability, and obsessive-compulsive symptoms, further analysis were conducted using these two factors as predictors. Likewise, suppression was the only emotion regulation strategy found to be related with the outcome. Thus, in addition to obsessive appraisals, suppression was used as a mediator in the current analyses (see Figure 8 & Figure 9).

Results from the first mediation model revealed that self-worth ambivalence had significant and positive direct effect on responsibility/threat estimation ($B = .65, t = 17.49, p \leq .001$), importance/control of thoughts ($B = .64, t = 15.03, p \leq .001$), perfectionism/uncertainty ($B = .61, t = 16.21, p \leq .001$), and suppression ($B = .48, t = 8.94, p \leq .001$). Test of the direct effects on the outcome showed that responsibility/ threat estimation ($B = .17, t = 5.79, p \leq .001$), importance/ control of thoughts ($B = .07, t = 3.14, p \leq .001$), perfectionism/

uncertainty ($B = .07, t = 2.89, p \leq .001$), and suppression ($B = .03, t = 2.26, p \leq .05$) had significant direct positive effects on OC symptoms. The total effect of self-worth ambivalence on obsessive-compulsive symptoms was also significant and positive ($B = .32, t = 13.99, p \leq .001$). Overall, the model explained 38% of the variance on obsessive-compulsive symptoms (see Figure 8).

The hypothesized mediators of self-worth ambivalence on OC symptoms had a significant total indirect effect ($B = .21, CI_{.95} = .17, .26$) and several significant specific indirect effects on OC symptoms. The specific indirect effects derived by the model indicated that responsibility/threat estimation ($B = .11, CI_{.95} = .07, .15$), importance/control of thoughts ($B = .05, CI_{.95} = .02, .08$), perfectionism/ uncertainty ($B = .04, CI_{.95} = .02, .07$), and suppression ($B = .01, CI_{.95} = .01, .03$), uniquely mediated the effects of self-worth ambivalence on obsessive-compulsive symptoms.



*** $p \leq .001$; ** $p \leq .01$; * $p \leq .05$

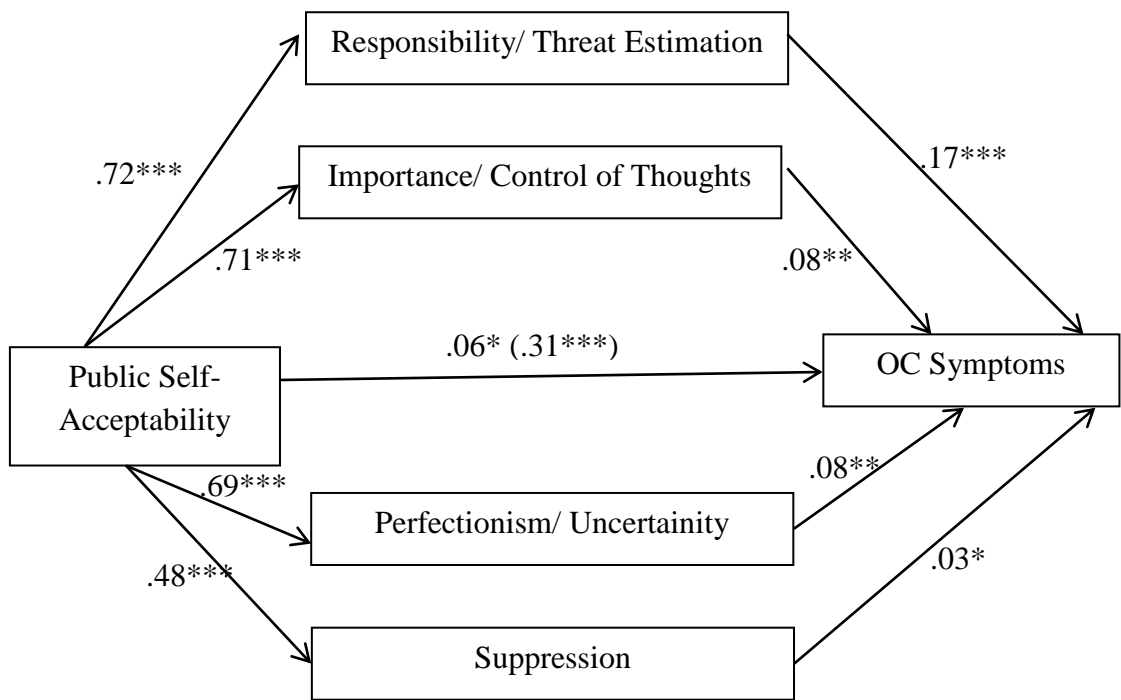
Figure 8 Indirect Effects of Self-Worth Ambivalence on OC Symptoms

Finally, the strength of the individual indirect effects against each other were compared. In this case there are six possible pairwise contrasts between the four indirect effects. Results showed that the indirect effect via responsibility/threat estimation is greater than the effect via importance/control of thoughts ($CI_{.95} = .01, .12$), via perfectionism/uncertainty ($CI_{.95} = .01, .12$), and via suppression ($CI_{.95} = .05, .14$). There was not any significant difference between other indirect effects. Therefore, when compared to other mediators, responsibility/threat estimation was the strongest mediator of self-worth ambivalence on obsessive-compulsive symptoms.

Likewise, results from the multiple mediator model that used public self-acceptability as the predictor showed that it had significant and positive direct effects on responsibility/threat estimation ($B = .72, t = 20.14, p \leq .001$), importance/control of thoughts ($B = .71, t = 17.00, p \leq .001$), perfectionism/uncertainty ($B = .69, t = 18.93, p \leq .001$), and suppression ($B = .48, t = 8.79, p \leq .001$). Moreover, tests of the direct effects of the mediators on the outcome revealed that responsibility/threat estimation ($B = .17, t = 6.01, p \leq .01$), importance/control of thoughts ($B = .08, t = 3.23, p \leq .01$), perfectionism/uncertainty ($B = .08, t = 3.08, p \leq .01$), and suppression ($B = .03, t = 2.57, p \leq .05$), had significant and positive effects on OC symptoms. The total effect of public self-acceptability on obsessive-compulsive symptoms was also significant and positive ($B = .31, t = 13.26, p \leq .001$). Overall, public self-acceptability model explained 37% of the variance in OC symptoms.

The hypothesized mediators of public self-acceptability's effects on OC symptoms had a significant total indirect effect ($B = .25, CI_{.95} = .21, .31$) and several significant specific indirect effects on OC symptoms. The specific indirect effects derived by the model indicated that responsibility/threat estimation ($B = .13, CI_{.95} = .09, .18$), importance/control of thoughts ($B = .05, CI_{.95} = .02, .09$), perfectionism/uncertainty ($B = .05, CI_{.95} = .02, .09$), and suppression ($B = .02, CI_{.95} = .01, .03$) uniquely mediated the effects of public self-acceptability on obsessive-compulsive symptoms.

The strength of the individual indirect effects against each other were also compared. In this case, there are six possible pairwise contrasts between the four indirect effects. Results showed that the indirect effect via responsibility/threat estimation is greater than the effect via importance/control of thoughts ($CI_{.95} = .01, .14$), via perfectionism/uncertainty ($CI_{.95} = .01, .13$), and via suppression ($CI_{.95} = .07, .16$). There was not any significant difference between other indirect effects. Therefore, responsibility/threat estimation was the strongest mediator of self-worth ambivalence on obsessive-compulsive symptoms among other mediators used in this model (see Figure 9).



*** $p \leq .001$; ** $p \leq .01$; * $p \leq .05$

Figure 9 Indirect Effects of Public Self-Acceptability on OC Symptoms

3.3.6 Results for the Hypothesis in Group 4

Hypothesis 6: Perceived rejection and overprotection from parents will increase self-ambivalence level, which in turn will increase the individuals' maladaptive appraisals or obsessive beliefs. Obsessive beliefs are expected to further increase the use of suppression, and decrease the use of cognitive reappraisal as an emotion regulation strategy, and in turn will predict obsessive-compulsive symptomatology.

3.3.6.1 Model Testing

The proposed model in Figure 1, examining the predictors of obsessive-compulsive symptoms, was tested with Structural Equation Modeling (SEM) using LISREL 8.51 (Jöreskog & Sörbom, 1996). The corresponding covariance matrix was obtained from the SPSS data file.

The model as a whole was composed of main variables, namely Perceived Parenting Styles, Self-Ambivalence Factors, Obsessive Appraisals, Emotion Regulation Strategies, and Obsessive-Compulsive Symptoms, which are summarized in Table 28.

Firstly, the measurement model was estimated by separating some of the indicators of main variables in order to see their unique contribution on the relationships. Eight latent variables and their indicators of the measurement model are summarized in Table 29; Rejection, Overprotection, and Emotional Warmth were constructed as separate latent variables, scale items of them were served as indicators. Self-worth ambivalence, moral ambivalence, and public self-acceptability were three indicators serving for the self-ambivalence latent variable. Likewise, responsibility/threat estimation, perfectionism/uncertainty, and importance/control of thoughts were three indicators of obsessive appraisal latent variable. Since two strategies of emotion regulation were hypothesized to have different impacts on the outcome, cognitive reappraisal and suppression were considered to be two latent variables, and the scale items served as indicators. The outcome variable was labeled as OC Symptoms indicators of

which were checking, contamination/washing, grooming/dressing, obsessional thoughts, and obsessional impulses.

Table 28 Main Variables Used in the Proposed Model

Vulnerability Factors	
Perceived Parenting Styles	Perceived Maternal Rejection, Perceived Paternal Rejection, Perceived Maternal Overprotection, Perceived Paternal Overprotection, Perceived Maternal Emotional Warmth, Perceived Paternal Emotional Warmth (measured by EMBU-C)
Factors Related to Self	
Self-Ambivalence	Self-worth ambivalence, moral ambivalence, and public self-acceptability (measured by SAM)
Cognition and Emotion Regulation	
Obsessive Appraisals	Responsibility/Threat Estimation, Perfectionism/ Uncertainty, Importance/Control of Thoughts (measured by OBQ-44)
Emotion Regulation Strategies	Suppression, Cognitive Reappraisal (measured by ERQ)
Outcome	
Obsessive-Compulsive Symptoms	5 OCD Symptoms: Checking, Contamination, Grooming, Obsessional Thoughts, Obsessional Impulses (measured by PI-WSUR)

One path that had the highest loading for each latent variable was selected as a reference indicator, which was set to 1. For the analysis, data fit indices such as χ^2 , ratio of χ^2 to degree of freedom (df), Root Mean Square Error of Approximation (RMSEA), and Non-Normed Fit Index (NNFI) were assessed. For the ratio between χ^2 and df , values between 1 and 5, for RMSEA 0.0 and 0.08, for NNFI and CFI values higher than 0.90 were evaluated as acceptable criteria.

Table 29 Latent Variables and Indicators in the Model

Rejection	Perceived Maternal Rejection, Perceived Paternal Rejection
Overprotection	Perceived Maternal Overprotection, Perceived Paternal Overprotection
Emotional Warmth	Perceived Maternal Emotional Warmth, Perceived Paternal Emotional Warmth
Self-Ambivalence	Self-worth ambivalence, moral ambivalence, and public self-acceptability
Obsessive Appraisals	Responsibility/Threat Estimation, Perfectionism/Uncertainty, Importance Control of Thoughts
Suppression	Five items of suppression factor (measured by ERQ)
Cognitive Reappraisal	Five items of reappraisal factor
Obsessive-Compulsive Symptoms	5 OCD Symptoms: Checking, Contamination, Grooming, Obsessional Thoughts, Obsessional Impulses

The analysis based on the covariance matrix indicated a poor fit ($\chi^2(296) = 1608.07, p \leq .05$; GFI = .88, AGFI = .85; CFI = .89; NNFI = .87; RMSEA = .07). Model modifications were performed in an attempt to develop a better fitting model. Investigation of modification indices suggested a decrement in the Chi-Square fit index by adding error variances between some indicators of cognitive reappraisal (item 3 and item 4), and between indicators of the outcome variable (contamination and grooming). The results yielded that goodness-of-fit indices showed values close to the values considered to indicate a satisfactory fit ($\chi^2(293) = 1362.92, p \leq .001$; GFI = .90, AGFI = .87; CFI = .91; NNFI = .89; RMSEA = .06). Moreover, the $\chi^2: df$ ratio was 3.86, which supported the good fit of the model to the data. The standardized regression coefficient (loadings) of indicators on each of the latent variables ranges from .20 to .91.

In order to test the hypotheses (H6), the structural model was examined. The model provided a good fit to the data with statistically significant chi-square value, $\chi^2 (309, N = 877) = 1523.92, p \leq .001, (\chi^2/df = 3.8)$, and with other fit indices; RMSEA = .06 (C.I. 0.063-0.070), NNFI = .89, CFI = .90, GFI = .90, AGFI = .87. The finalized structural model, with standardized structural coefficients is presented in Figure 10. Circles in the Figure represent latent variables, and rectangles represent observed variables or indicators. The absence of a line connecting latent variables implies lack of a significant direct effect. Additionally, in order to illustrate the model in a simpler format, the error variances of each indicator, error covariance between latent variables, and the indicators of Suppression and Cognitive Reappraisal were not included in the figure. Across latent variables while the most powerful relationship (.69) was obtained between the obsessive appraisals and OC symptoms, the least powerful relationship (-.06) was obtained between suppression and OC symptoms.

As shown in Figure 10, perceived parental rejection yielded three direct effects, implying that higher levels of perceived rejection from parents was significantly predictive of higher levels of self-ambivalence ($\beta = .32, t = 6.21, p \leq .01$), more engagement in maladaptive appraisals related to obsessions ($\beta = .09, t = 2.30, p \leq .01$), and higher levels of obsessive-compulsive symptoms ($\beta = .11, t = 3.43, p \leq .01$). The direct path from perceived overprotection to self-ambivalence was also positively significant, ($\beta = .11, t = 2.08, p \leq .01$), indicating that higher levels of overprotection perceived from parents predicted greater self-ambivalence in individuals. Moreover, the only significant direct path from emotional warmth was to suppression ($\beta = -.10, t = -2.39, p \leq .01$), which means that the more the individuals receive emotional warmth from their parents, the less their tendency to suppress the behavioral expressions of their emotions. With respect to self-ambivalence, increased self-ambivalence significantly predicted higher levels of engaging in obsessive appraisals ($\beta = .68, t = 18.06, p \leq .01$), higher levels of regulating emotions by suppression ($\beta = .36, t = 8.81, p \leq .01$), whereas lower levels of regulating emotions by reappraisal ($\beta = -.10, t = -2.31, p \leq .01$). Additionally, direct path from obsessive appraisals to obsessive-compulsive

symptoms was positively significant ($\beta = .69, t = 20.75, p \leq .01$), indicating that the more the individuals engage in maladaptive appraisals related to intrusive thoughts, the higher the levels of their obsessive-compulsive symptoms. With respect to emotion regulation strategies, increased use of suppression significantly predicted higher levels of obsessive-compulsive symptoms ($\beta = .07, t = 2.09, p \leq .01$). On the other hand, cognitive reappraisal did not significantly predict the levels of OC symptoms.

In terms of indirect effects, the indirect effect of perceived rejection from parents on OC symptoms was .20 and significant ($t = 6.47, p < .05$) via self-ambivalence, obsessive appraisals. The results yielded that increased levels of perceived rejection predicted increased levels of obsessive appraisals, which in turn leads to higher levels of obsessive-compulsive symptoms. Another significant path indicated that those perceiving their parents as more rejected experienced greater self-ambivalence, and in turn engaged in more suppression in order to regulate their negative emotions, which predicted higher levels of obsessive-compulsive symptoms. Moreover, the indirect effect of perceived overprotection from parents on OC symptoms was .06 and significant ($t = 2.05, p < .05$) via self-ambivalence, which showed that those perceiving their parents as overly protective perceived themselves as more ambivalent, which in turn leads to the development of higher levels of obsessive-compulsive symptoms via suppression and obsessive-beliefs. The indirect effect of perceived emotional warmth from parents on OC symptoms was -.02 and significant ($t = -1.58, p < .05$). The results yielded that those perceiving their parents as showing more emotional warmth, less likely to suppress their emotions, which would decrease the tendency to develop obsessive-compulsive symptoms. Additionally, the indirect effect of self-ambivalence on OC symptoms via suppression and obsessive appraisals was .43 and significant ($t = 14.94, p < .05$), indicating that those experiencing higher levels of self-ambivalence, engaged in more obsessive appraisals and/or more likely to use suppression as an emotion regulation strategy, which in turn results in more obsessive-compulsive symptoms.

As a result, the model explained 57 % of the variance on OC symptoms. The explained variances of the endogenous variables in the model were 13 % for self-ambivalence, 51 % for obsessive appraisals, 17 % for suppression, and 1% for reappraisal.

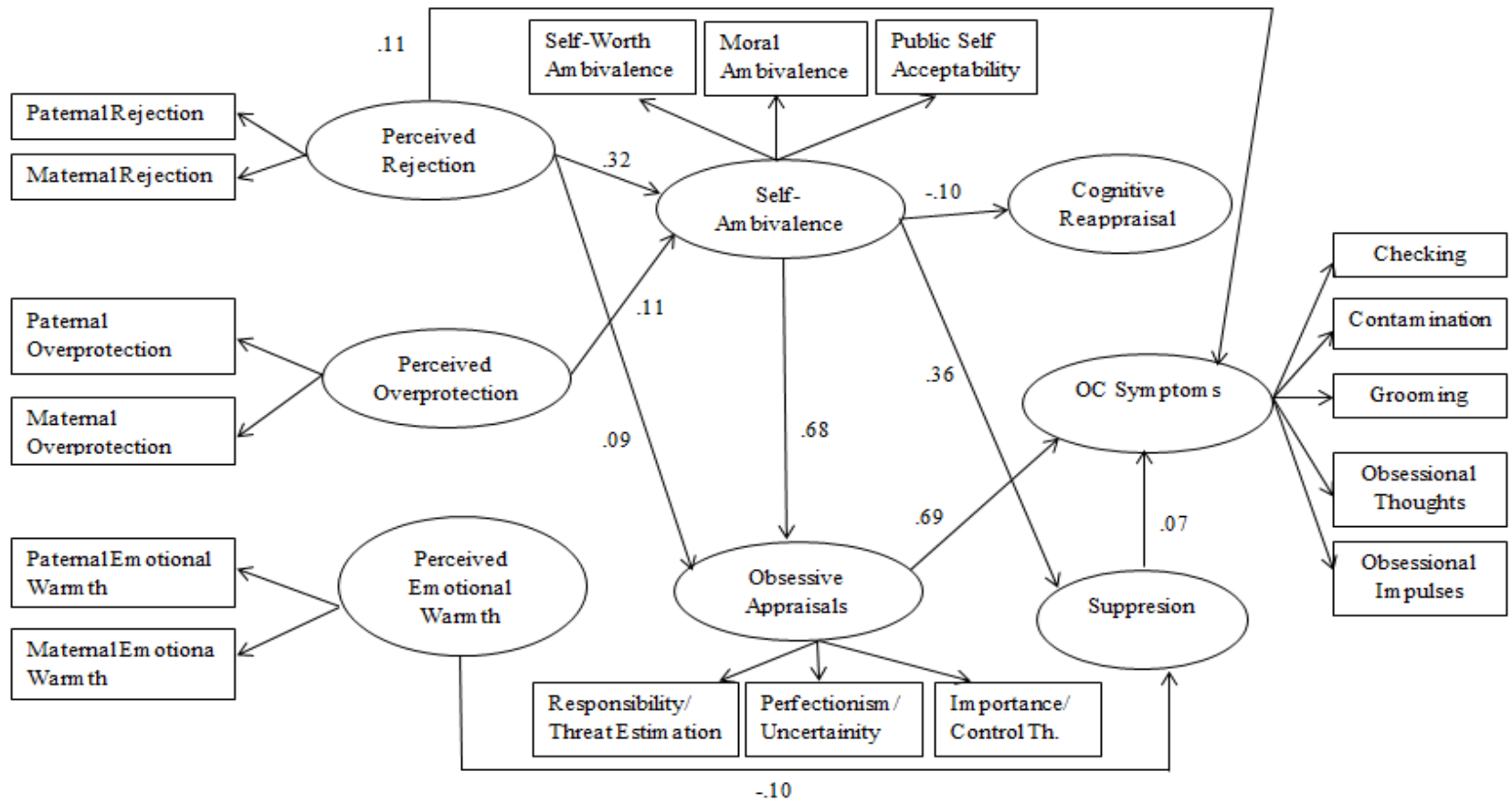


Figure 10 The Proposed Model

CHAPTER IV

GENERAL DISCUSSION

4.1 Overview

The main objective of the current study was to investigate both the vulnerability and the maintenance factors of obsessive-compulsive symptomatology in a community sample. On the basis of the cognitive models of OCD (Salkovskis, 1985; Rachman, 1997; Clark, 2004), Guidano and Liotti's (1983) model and Gross' (1999) theory of emotion regulation, the present study aimed to evaluate the relationship among perceived parenting styles, self-ambivalence, obsessive-compulsive beliefs, emotion regulation strategies; and their possible effects on specific obsessive-compulsive symptomatology, namely checking, contamination, grooming, obsessional thoughts, and obsessional impulses. Furthermore, the present study also aimed to adapt the Self-Ambivalence Measure (SAM) and to examine the psychometric characteristics of the SAM in Turkish sample. Finally, it was aimed to find out how perceived parental rearing attitudes and self-ambivalence have an effect on obsessive-compulsive symptoms. In other words, pathways through which perceived parenting styles and self-ambivalence maintain obsessive-compulsive symptoms were examined via mediation analyses.

In this section, the main findings of the present study will be discussed in the light of the hypothesis of the present study and the related literature. Firstly, the results of the psychometric analyses of the SAM-T are discussed. Then, the findings of the main study about the hypothesis of the current study (see pp. 49-51) are presented and discussed. Finally, limitations of the study, clinical implications and directions for future studies are provided.

4.2 The Psychometric Properties of the Turkish Version of the Self-Ambivalence Measure (SAM-T)

The Self-Ambivalence Measure (SAM; Bhar and Kyrios, 2007) is an instrument that was developed for assessing a persons' experience of uncertainty, conflict and preoccupation associated with the self, in line with Guidano and Liotti's (1983) concept of self-ambivalence. The psychometric properties, namely the validity and the reliability of the SAM were supported by different studies in both clinical and non-clinical samples (Bhar & Kyrios, 2007; Tisher, Allen & Crouch, 2014). However, it is of interest to note that there is an inconsistency in terms of the factor structure of the SAM in the literature. In contrast with the findings of Bhar and Kyrios (2007) identifying a two-factor structure, Tisher, Allen and Crouch (2014) showed that the SAM was best characterized by three factors. Therefore, the adaptation of the SAM to different cultures and further exploration of the psychometric properties of it is warranted to establish it as a tool for use in both research and clinical setting.

The SAM was adapted into Turkish in order to use it in examining the effects of self-ambivalence on obsessive-compulsive symptoms. First of all, a pilot study was conducted in order to examine both the preliminary findings about psychometric properties of the SAM-T. Results of the pilot study showed that the original two-factor structure suggested by Bhar and Kyrios (2007) did not fit with the current sample. Examination of the path parameters indicated that item 12 ("I think about how I can improve myself") and item 2 ("I am secure in my sense of self-worth") were problematic in terms of their loadings. It was concluded that participants might have failed to understand these two items may be because of the wordings that did not fit to Turkish culture, or may be because of the coding. Since item 2 is the single reverse-coded item in the scale while the rest of the items are coded straight-forward, participants may have experienced difficulty with this item while coding. Additionally, item 12 may also seem not to work in Turkish culture. In Turkish culture, struggling to improve oneself can be considered as being a positive thing in one's life; so item 12 may have been

treated as a positive item by the participants. However, the original item aims to evaluate a negative part including excessive preoccupation with thinking to improve oneself in order to deal with the sense of ambivalence. Therefore, it can be concluded that one to one translation of item 12 and item 2 have led to a confusion between what it has measured and what it has aimed to measure, so not consistent with the content of the scale. Straightforward translation of items in adaptation of scales may pose problems if they do not suit the ecological/cultural context. Thus, in order to maintain the content validity of the questionnaire at a conceptual level, the items should not be only translated linguistically, but also be adapted culturally. Based on the findings of the pilot study, these two items (item 2 and item 12) were reevaluated in terms of their content and the coding by thesis follow-up committee, and revised for the main study. Additionally, coding of item 2 has been changed to straightforward to make it more consistent with the rest of the scale.

After these modifications, data collected for testing the main hypothesis was used to explore the factor structure and psychometric properties of the Turkish version of the SAM in a community sample. The factor analysis revealed a three-factor structure, which was mainly based on Guidano and Liotti's (1983) original theory of self-ambivalence, in which they hypothesized that the concept of self-ambivalence was based on uncertainty about one's self-worth, personal morality, and lovability. Consistent with this theory (Guidano & Liotti, 1983) and the original study of the SAM (Bhar & Kyrios, 2007), the first factor, identified in the current study, named as "self-worth ambivalence", and includes nine items about perceptions, and general mixed feelings about self-worth. The second factor, named as "moral ambivalence", includes five items many of which were consistent with Bhar and Kyrios's (2007) moral ambivalence factor. This factor generally reflects concerns about being a good person and the ambivalence in thinking of the self as being either moral or immoral. The third factor, named as "public self-acceptability" in the current study, includes five items similar to Tisher et. al.'s (2014) "public self-consciousness" factor except one item. This last factor characterized by preoccupation with other people's perceptions and

judgments about oneself. Public Self-Acceptance factor that was detected in the current study as a separate factor is overlapped with Guidano and Liotti's (1983) concept of ambivalence about lovability that was used to describe individuals' insecurity about being loved, being accepted, and approved by others. Although Guidano and Liotti (1983) did not define what they mean by lovability, they suggested that gaining approval from other people is primary way for the obsessive-compulsive individual to achieve a sense of self-worth. Tisher, Allen and Crouch (2014) argued that the more the individuals accept themselves as who they are, the less they are preoccupied with other people's approval. Based on these findings and the item contents, the third factor was decided to be named as "public self-acceptability". Each factor reflects a different aspect of uncertainty about self. For instance, the "self-worth ambivalence" represents general questioning of self-worth, while "moral ambivalence" and "public self-acceptability" factors reflect uncertainty about moral and social domains of self, respectively.

In addition to its factor structure, reliability and the validity of the SAM-T was supported in the current study. For the reliability assessment, Cronbach alpha values, item-total correlations, and split-half reliability were examined. Reliability analyses revealed similar Cronbach alpha values when compared to the original reliability analyses of the scale (Bhar & Kyrios, 2007), which was originally conducted with both non-clinical and clinical sample in Australia. Accordingly, the Turkish version of the SAM had satisfactory internal consistency coefficients, and the item total correlation ranges, in total scale and its subscales, were acceptable in range. Split-half reliability of the scale, in terms of Guttman split-half reliability, was also found to be satisfactory.

Considering the validity, outcomes of the scale, concurrent and criterion validity of the subscales were examined. In terms of concurrent validity, the relationship between SAM-T total, subscale scores, and total scores of Padua Inventory-Washington State University Revision (PI-WSUR), Beck Depression Inventory (BDI), and Rosenberg Self-Esteem Scale (RSES) were explored. Correlations of these scales with total and subscale scores of the SAM-T were in

expected directions, and most of them were significant. Correlations between total score of PI-WSUR and SAM-T subscales indicated that individuals having higher scores on obsessive-compulsive symptoms, also have higher scores on all subscales of the SAM-T. This finding is in line with previous studies on self-ambivalence and obsessive-compulsive symptoms, showing a positive relationship between them (Bhar & Kyrios, 2007). Furthermore, the current study also confirmed a significant and positive relationship between depressive symptoms and self-ambivalence factors. Although Guidano and Liotti (1983) hypothesized that self-ambivalence was specific to OCD, Bhar and Kyrios (2007) could not support this specific relationship by showing that OCD group did not differ from other anxious controls in terms of self-ambivalence. Thus, current findings also supported the view that self-ambivalence is related to, but not specific to OCD. Therefore, for future research, it may be fruitful to explore the relationship of SAM with other psychopathology dimensions.

Additionally, as expected, high negative correlations were found between the self-ambivalence factors and self-esteem. In other words, the current findings showed that as individuals' self-esteem increases, their uncertainty about their self-worth decreases. Therefore, based on the literature findings (Bhar & Kyrios, 2007; Riketta & Ziegler, 2006) and current results, it can be concluded that having contradictory self-views may impair self-esteem, and lead to the needs for being accepted and approved by others, and result in depression and anxiety symptoms.

Thus, results in relation to correlations between obsessive-compulsive symptoms, depressive symptoms, self-esteem, and self-ambivalence factors revealed supportive evidence for the concurrent validity of the SAM-T. According to the present findings, self-worth ambivalence, moral ambivalence, and public self-acceptability factors may be considered as vulnerability factors for both OCD and depression.

To examine the criterion validity, the SAM subscales were studied in terms of their effectiveness in differentiating participants based on the measures of both obsessive-compulsive symptoms and depressive symptoms. Our analyses

revealed that individuals who had higher OCD symptoms also experienced more ambivalence in terms of their self-worth, morality, and public self-acceptability than low scorers in OCD. Similarly, low, high and moderate depressive groups were successfully differentiated in our sample on the basis of self-worth ambivalence, moral ambivalence, and public self-acceptability scores. People in the high depressive symptom group showed more ambivalence in terms of self-worth, morality and public acceptability than those in the moderate and low depressive symptom groups. Moderate and low depressive symptom groups also differed from each other on the basis of self-ambivalence scores. Hence, self-ambivalence is more prominent in those exhibiting high levels of obsessive-compulsive symptoms and/or high levels of depressive symptoms. Thus, subjects who had more OCD symptoms and/or depressive symptoms were also more ambivalent in their sense of self is consistent with other relevant literature findings (Bhar & Kyrios, 2007; Ferrier & Brewin, 2005; Ruegg, 1994) and some models of psychopathology suggesting that negative beliefs about self increases the likelihood of developing specific psychological problems, including depression and OCD (e.g. Beck, 1976; Guidano & Liotti, 1983).

Thus, the findings about reliability, and concurrent and criterion validity showed that Turkish version of the SAM are psychometrically a reliable and valid instrument in a non-clinical population. Although the hypothesis in group one is supported, there is still a need for studies examining the psychometric properties of the Turkish version of the SAM in clinical samples, particularly in patients with OCD. Additionally, further research on the ability of the scale to differentiate individuals with OCD from those without OCD and/or with anxiety or depressive disorders is needed.

4.3 Predictors of Obsessive-Compulsive Symptoms: The roles of Perceived Parenting Styles, Self-Ambivalence, Obsessive-Compulsive Beliefs, and Emotion Regulation Strategies

As proposed in hypothesis 3, the current study also aimed to evaluate the specific contributions of perceived parenting styles, self-ambivalence, obsessive-

compulsive beliefs, emotion regulation strategies in predicting the general and different subtypes of (checking, contamination, grooming, obsessional thoughts, obsessional impulses) obsessive-compulsive symptomatology. For this aim, six main hierarchical regression analyses were conducted. During the analyses, the proposed comprehensive model in Figure 1 (pp. 52) was taken into consideration. Results of the group comparison analyses of current sample showed that individuals who reported a past or current psychiatric diagnosis were differed from individuals who did not report any psychiatric diagnosis in various variables; therefore, reported clinical status of the participants was regarded as a confounding variable and statistically controlled in the regression analyses in order not to reduce internal validity of the current study. Additionally, since, several studies showed the effects of age (e.g. Fontenelle, Mendlowicz, Marques, & Versiani, 2003; Mendlowicz & Versiani, 2006), gender (Mathis et. al., 2011; Karadağ et. al., 2006), and education level (Landau et. al., 2011; Nordsletten et. al., 2013) on obsessive-compulsive symptomatology, these variables were also decided to be controlled in the regression analyses in order to decrease their confounding effects. The results of these analyses will be discussed in the following sections based on the predictor variables.

4.3.1 Socio-Demographic Variables and Obsessive-Compulsive Symptoms

Among sociodemographic variables, only age and years of education were found to be associated with overall obsessive-compulsive symptom scores. In the current study, it was shown that gender did not appear as important in OCD scores, grooming/dressing, checking, and harm obsessions. Whereas, gender mattered in determining only contamination/washing and obsessional impulses subtypes of OCD in the present study, indicating that women were more likely to exhibit contamination/washing obsessions than men, while men were more likely to show obsessional impulses about harm than women. Although there is a conflicting data regarding OCD patterns and gender, consistent with the current findings, a predominance of aggressive obsessional symptoms among men, and contamination/cleaning symptoms among women has been identified in several

studies in several different countries, indicating a more universal characteristic of these dimensions, which may result from biological, psychosocial (e.g. personality, coping) and/or cultural influences (Mahajan, Chopra, & Mahajan, 2014; Torresan et. al., 2013; Mathis, et. al., 2011; Karadağ, Oğuzhanoğlu, Özdel, Ateşçi, & Amuk, 2006). Additionally, gender appeared as important in some dimensions (e.g. contamination/washing and obsessional impulses) of obsessive-compulsive symptoms may be also due to underreporting of specific symptoms by either gender or may be due to an expectation of gender-related social roles. More specifically, gender differences in the incidences of contamination and cleaning compulsions in both current study and in other various studies (e.g. Mahajan, Chopra, & Mahajan, 2014; Torresan et. al., 2013) may have been partly result from different roles of men and women in terms of housework and cleaning issues which are considered as predominantly a female activity in Turkish culture. Therefore, it can be concluded that gender affects the vulnerability to different symptom clusters of OCD.

In addition to gender, being younger and having lower education level were also found to be associated with higher levels of general obsessive-compulsive symptoms, and especially with higher levels of grooming/dressing obsessions, obsessional thoughts to harm, and obsessional impulses. On the contrary, checking symptoms were found to increase, as individuals get older. Only contamination/washing symptoms were seemed to be not related with age and education level. When the mean age of the sample of the current study is taken into consideration (i.e., $M= 29.69$), these findings really seem to be parallel to the epidemiological characteristics of the OCD. Retrospective studies with adult OCD

patients indicated that almost half of them had onset prior to age 25, and mean age of onset was 19.5 (Ruscio, Stein, Chiu, & Kessler, 2010; Rasmussen & Eisen, 1992).

Thus, the current findings seem to highlight the role of gender in the expression of obsessive-compulsive symptom subtypes, especially in two

dimensions; contamination/washing and obsessional impulses. Additionally, younger age and lower education level were found to be related with general obsessive-compulsive symptomatology.

4.3.2 Perceived Parenting Styles and Obsessive-Compulsive Symptoms

In this study, zero-order correlations among variables showed that overprotection and rejection perceived from both parents were positively, while emotional warmth perceived from both parents were negatively correlated with overall obsessive-compulsive symptoms. In other words, as control/protection and criticism/coldness of parents increases, obsessive-compulsive symptoms increases; whereas, as emotional warmth and support increases, obsessive-compulsive symptoms decreases. These findings support the current hypothesis (H3.1) and confirm results obtained in the literature (e.g. Smari, Martinsson, & Einarsson, 2010; Ayçiçeği, Harris, & Dinn, 2002; Salkovskis, Shafran, Rachman, & Freeston, 1999; Cavedo & Parker, 1994).

On the other hand, after the effects of socio-demographic variables were controlled, among perceived parenting styles, only overprotection perceived from fathers and rejection perceived from mothers were found to significantly predict higher levels of obsessive-compulsive symptoms. Moreover, both perceived maternal rejection and paternal overprotection were significant predictors of general obsessive-compulsive symptoms until self-ambivalence factors were entered into the regression equation; this result indicates that although self-ambivalence factors and perceived parenting styles contribute to the variance, self-ambivalence factors had more significant contribution in explaining obsessive-compulsive symptoms. The results of indirect effect of perceived parenting styles on obsessive-compulsive symptomatology via self-ambivalence will be later discussed in mediation analyses and model testing sections. This finding was in line with the literature findings, that perceived rejection and overprotection from parents on its own or in combination with individuals' sense of self was associated with obsessive-compulsive symptoms (Bowlby, 1969;

Guidano & Liotti, 1983; Bartholomew & Horowitz, 1991; Doron, Moulding, Kyrios, Nedeljkovic, & Mikulincer, 2009).

In addition to total scores of obsessive-compulsive symptoms, the effects of perceived parenting styles on different symptom dimensions were also examined in the current study. Although there are studies investigating the impact of parenting in the development of OCD in general, few of them examined the impact of early parenting behaviors and attitudes specifically in the development of different obsessive-compulsive symptom types (Alonso et. al., 2004; Smari, Martinsson, and Einarsson, 2010). According to the findings of the current study, paternal overprotection and maternal rejection appeared together as significant in checking and obsessional thoughts about harm subtypes of OCD. It can be concluded that when excessive behavioral and psychological control and protection from fathers come together with rejected, criticized, punitive, and/or shaming parenting styles from mothers become toxic and play a crucial role in the development of OCD in general, and more specifically in the development of checking and obsessional thoughts about harm subtypes. Besides, contamination/washing and grooming/dressing symptoms were found to be related with only fathers' parenting styles as being overly protective and controllable, whereas obsessional impulses to harm subtype was found to be only linked with mothers' attitudes including rejection and criticism. These findings point out to the important roles of certain perceived maternal and paternal characteristics. It is obvious that the combined effect of paternal overprotection and maternal failure of responding to the needs of the children is likely to contribute to the development of obsessive-compulsive symptoms.

Parental attitudes including emotional warmth and affection, and avoiding excessive control, criticism and rejection were suggested to be an important factors in developing a healthy personality (Guidano & Liotti, 1983). On the other hand, overprotective type of parenting, characterized by being intrusive, overinvolved, and overprotective, might model fearfulness, avoidance behaviors, and result in overestimation of threat. Rejecting parental rearing style, which includes being punitive and critical as parents, was said to contribute to the

development of maladaptive belief domains related with self, failure, and inadequacy (Arrindel et. al., 1999). Fathers and mothers might have different roles in terms of child rearing practices and these roles may vary due to the age and gender of the child (Bögels & Phares, 2008). It was shown that the presence of low maternal affection, even its coupled with high paternal affection, was still associated with higher levels of anxiety symptoms in children, implying that fathers could not compensate for low maternal affection (Jorm, Dear, Rodgers, & Christensen, 2003). This may be explained by the differences between unconditional love received just from mothers, and instrumental, expectant love received from fathers (Fromm, 1956). Consistently, correlation analyses in the current sample showed a positive relationship between perceived maternal rejection and perceived paternal overprotection. Therefore, as rejection perceived from mothers increases, overprotection perceived from fathers also increases, which may be because of fathers' efforts for compensating mothers' uninvolved with the child and their low affection or may be because fathers' overcontrol and intrusive behaviors mothers' become punitive and critical. The common point in both explanations is that perceived maternal rejection is a toxic element for the development of obsessive-compulsive symptoms.

Additionally, as Kağıtçıbaşı (1970) stated, family control in a typical middle class Turkish family was greater than an American family, overprotective rearing style might be perceived as a more positive type of rearing style in Turkish culture. Thus, overprotection received from mothers might be perceived as normal and positive. But, when fathers are overprotective, it is perceived as being authoritarian, as showing low acceptance and high control. Geçtan's (1998) proposal on the parenthood characteristics in Turkish society also supported this point of view. He (1998) suggested that in a traditional Turkish family, father represents authority and is seen as making preventive and punishing decisions, and exhibiting control, which may place him in an unfavorable position in the family and may prevent him from establishing closer and warmer relationships with his children. But, in reality mother makes the decisions which appear to be made by the father in order to protect his masculine role. In this way, mother does

not lose her closer position to the children, which is her traditional role of being the primary caregiver in the child upbringing process (Geçtan, 1998). When it is evaluated from this point of view, it is possible to say that individuals in Turkey are more likely to perceive their fathers as overprotective due to fathers' moral authority roles and their focus on obeying rules in the family. This traditional attitude of the fathers in the family may become the children's ideal image of controlling their emotions and desires in order to maintain their self-images healthy. But, when some flexibility are required, control efforts fail and anxiety increases due to ambivalent self. Vicious cycle is set in, so if they insist on continuing their control efforts in a compulsive fashion, obsessive-compulsive symptomatology would increase. Thus, paternal overprotection, as the present study identified, could be one of the important vulnerability factors of OCD (Yoshida, Taga, Matsumoto, & Fukui, 2005). This proposed mechanism how paternal overprotection predicted OCD was supported with the current findings on the mediating role of ambivalent self between perceived paternal overprotection and obsessive-compulsive symptoms, which will be discussed in another section.

Additionally, various discussions, regarding the family characteristics of OCD patients, have been also held in the literature. Although some researchers have failed to verify the link between parental attitudes and OC symptoms (e.g. Alonso et. al., 2004), most of the studies showed the effects of parental overprotection and rejection in the prediction of OCD (e.g. Adams, 1973; Rachman & Hodgson, 1980; Steketee, Grayson, & Foa, 1985). For instance, a study with non-clinical student sample found that students with high scores on an obsessiveness scale reported their parents to be more rejecting, more overprotective, and less emotionally warm compared with students with low obsessional scores (Ehiobuche, 1988). In another study with OCD patients, higher levels of perceived overprotection from fathers were found to be associated with obsessive-compulsive symptoms, which is consistent with the present findings (Yoshida, Taga, Matsumoto, and Fukui, 2005). Additionally, Hacıomeroglu and Karanci (2014) showed the significant effect of perceived maternal overprotection, indicating the association between mothers' overly interfering

attitudes with obsessive-compulsive symptoms, which is partially inconsistent with the results of this study. In terms of zero-order correlations, the current study also showed a significant correlation between mothers' overprotection attitudes and obsessive-compulsive symptoms. But, in the regression analyses after controlling some related factors (e.g. age, education level, gender), the predictive power of mothers' overprotection attitudes have been lost. This inconsistency might be explained by the sample characteristics of these studies, since the present study examined a community sample (ages ranged between 18 and 72), whereas Haciomeroglu and Karanci (2014) examined university students aged between 17 and 27. It can be suggested that age ranges of the student samples correspond to the same life stages and developmental changes that are generally associated with psychological, emotional, and behavioral problems, including separation from parents, changes in their life conditions and responsibility, which were said to affect their perception of the relationships with their parents and their attitudes towards them (de Goede, Branje, & Meeus, 2009; İlden Koçkar & Gençöz, 2004; Furman & Buhrmester, 1992). Additionally, during these periods, since mothers, in particular, spend more time with their children and are often involved in their children's problems more than their fathers in our culture, it was likely that overly interfering maternal rearing attitudes may be overemphasized and overprotective and overly interfering paternal attitudes may not have attracted attention in previous research. On the other hand, as the ages of the participants increases, their marital status may change and they may have their own children; so become fathers and mothers themselves, which influence their perception about their own parents' attitudes towards themselves. In addition, this inconsistency might be also due to the potential limitations of both of the studies that were based on retrospective reports. The participants' evaluations of their childhood memories about their parents' attitudes towards them might be affected by their current experiences, their current interactions with their parents, and their gender. As Fingerman and his colleagues (2007) suggested that individuals began to share their parents' perspectives and were able to focus on positive aspects of their relationship as they develop across life span. Therefore, they found out that

individuals' perception of their parents and their relationship may have changed, as they get older. (Fingerman, Hay, Dush, Cichy, & Hosterman, 2007). To sum up, although there is no consensus on whether overprotection or rejection perceived from mothers or fathers is important in terms of OCD, it is obvious that early parent child relationships and continuous experiences of overprotection, control, criticism, and rejection can be a developmental factor that makes the person more vulnerable to develop OCD. Thus, current study stresses the importance of paternal control and maternal rejection in the development of OCD. Various studies showed that perceived parental overprotection was not specific to OCD (Haciomeroglu & Karanci, 2014), but none of the studies investigated whether the roles of maternal rejection compared with paternal overprotection was specific to OCD or not. The current study was not designed to specifically evaluate this issue, but based on our findings, further research is needed on this area. Additionally, future studies should also investigate the different effects of perceived maternal and paternal rearing styles on the development of obsessive-compulsive symptomatology in more detail by also taking into account possible gender differences.

In conclusion, this study shows that dysfunctional parenting in terms of high perceived maternal rejection and paternal overprotection constitutes a risk factor for the development of obsessive-compulsive symptoms. How these parental qualities lead to OCD and what may mediate this relationship was explored by examining the impact of self-ambivalence.

4.3.3 Self-Ambivalence Factors and Obsessive-Compulsive Symptoms

Self-ambivalence factors (self-worth ambivalence, moral ambivalence, public self-acceptability) were the next variable group that was evaluated as possible vulnerability factors for OCD symptom. It was proposed that self-ambivalence factors would be a significant predictor for obsessive-compulsive symptoms. The correlation analyses of the data from the present sample supported this hypothesis by showing that total the score of self-ambivalence, and all subscales of self-ambivalence (namely self-worth ambivalence, moral

ambivalence, and public self-acceptability) had a significant positive relationship with obsessive-compulsive symptoms. The results of the regression analyses also confirmed this association (H3.2). Results showed that self-worth ambivalence and public self-acceptability were significant predictors of general obsessive-compulsive symptomatology, while moral ambivalence failed to significantly predict obsessive-compulsive symptomatology. Significant positive relationship between self-worth ambivalence, public self-acceptability and obsessive-compulsive symptoms, indicate that higher levels of self-worth and public self-acceptability ambivalence were associated with higher levels of obsessive-compulsive symptoms. In other words, subjects who reported more ambivalence in terms of self-worth and public acceptability tended to have more obsessive-compulsive symptoms. However, the observed effects of both self-worth ambivalence and public self-acceptability were decreased when obsessive appraisals and emotion regulation strategies entered into the equation. Thus, these findings showed the need for further analysis to examine the indirect effects of self-ambivalence factors on general obsessive-compulsive symptomatology via obsessive appraisals and emotion regulation strategies. The results of the mediation analyses will be discussed in the next sections.

Additionally, according to present findings, moral ambivalence was not a significant predictor of obsessive-compulsive symptoms, which means that self-ambivalence in terms of morality issues are not associated with general obsessive-compulsive symptomatology and specific subtypes of OCD. This inconsistency with the literature findings (Bhar & Kyrios, 2007), may possibly be due to the construct overlap among the SAM-T subscales identified in the current study. Hence, it can be useful to examine the factor structure of the Self-Ambivalence Measure in different samples and to investigate the relationship between dimensions of self-ambivalence and different types of obsessive-compulsive symptoms in future research.

On the other hand, significant predictor role of self-worth ambivalence and public self-acceptability for obsessive-compulsive symptoms in general is consistent with research showing that OCD is related to insecurity and uncertainty

about perceptions of self (Doron, Moulding, Kyrios, Nedeljkovic, & Mikulincer, 2009; Ruegg, 1994). OCD patients were found to report more ambivalence than the non-clinical controls (Bhar & Kyrios, 2007). The results of the current study are also consistent with Guidano and Liotti's view that individuals who are ambivalent about their personal characteristics are more vulnerable to obsessive behaviors and beliefs. Guidano and Liotti (1983) suggested that individuals with OCD experienced difficulty reaching a unified view about their self-worth and continuously question whether they are lovable, moral, and worthwhile. Since OCD patients fear that intrusive thoughts might provide evidence for undesirable personal characteristics, they attend closely to, and ruminate about negative intrusive thoughts, images or impulses (Guidano, 1987). For instance, the content of the intrusion (e.g., sexual, aggressive), determines the vulnerable individual's thought of the possibility of being gay, a killer, a careless worker, immoral, evil or irresponsible person. In short, according to this theory, obsessions are the results of appraisals of intrusive thoughts as threats to one's ideal image of self. On the other hand, compulsions are the mechanisms to resolve self-ambivalence and to restore distorted moral and social ideals (Guidano & Liotti, 1983). In the current study, this proposed causal relation was supported by showing the mediator role of obsessive appraisals between self-ambivalence and OC symptoms. Thus, individuals who were uncertain and sensitive in terms of their self-worth and social acceptability are more likely to show symptoms of OCD.

Another aim of the current study was to investigate the predictor role of self-ambivalence factors for various subtypes of OC symptom clusters. To our knowledge, there is no study that directly examined the relationship between self-ambivalence factors and different dimensions of obsessive-compulsive symptoms. However, Bhar and Kyrios (2005) showed that different OCD subtypes were related with different cognitive and mood variables including responsibility, depressed mood, and self-oriented perfectionism. Based on their findings, they proposed that since obsessions are internal phenomena, they were considered by the patients as having social implications, and are appraised in relation to social norms. Therefore, appraisals of intrusions as being socially unacceptable may

activate fears of social disapproval and abandonment, which in turn increases the frequency of obsessions. Additionally, since compulsions are observable to others, patients were proposed to be more concerned with personal standards of control and perfection. Thus, compulsions are the mechanisms to resolve self-ambivalence and to restore distorted moral and social ideals (e.g. approved or being loved) (Bhar & Kyrios, 2005; Guidano & Liotti, 1983). The findings of the current study on the relationship between self-ambivalence factors and different subtypes of obsessive-compulsive symptoms are in line with these proposals that are made for OCD patients. Results of the regression analyses showed that self-ambivalence factors explained the highest variance in obsessional thoughts about harm and checking subtypes, while it explained the lowest variance in contamination/washing and grooming/dressing subtypes. These results may indicate that self-ambivalence is related more to obsessions and compulsions that are focused on resolving doubts about one's character (e.g. obsessional thoughts about harm) and preventing harm to others (e.g. checking compulsions) than to other subtypes that are more likely to be related with fear of contamination and the need for exactness (e.g. grooming/dressing). Additionally, according to the findings of the current study, self-worth ambivalence and public self-acceptability were together influential variables for only checking and obsessional thoughts to harm subtypes. It can be concluded that when self-worth ambivalence is combined with the ambivalent sense of being acceptable or not by others become a vulnerability factor for the development of checking and obsessional thoughts about giving harm to self and/or others. Thus, individuals who have conflicted evaluations of the self, not certain about his/her worth as a person, and additionally, experience insecurity about being loved, being accepted, and approved by others are more likely to have intrusive thoughts related to harm (e.g. fire, theft, flood), feels responsible for the occurrence of feared events, and more likely to perform checking rituals to decrease the likelihood of the feared events, and to prevent damage to self and to others (Sookman & Pinard, 2002; McKay et al., 2004). On the other hand, obsessional impulses dimension was found to be only associated with self-worth ambivalence, implying that individuals

experiencing uncertainty about their self-worth, are vulnerable to develop bizarre impulses about giving harm to self and others. Besides, in the current study, contamination/washing and grooming/dressing symptoms were found to be related with only public-self acceptability dimensions of self-ambivalence. The current findings suggested that individuals who are in chronic preoccupation in verifying their lovability and acceptability by other people, are more likely to show observable behavioral rituals, may be because of active fears of social reproach than individuals experiencing ambivalence about their self-worth or morality. It is possible that obsessions about contamination in the present sample were more likely to be related with fear of contaminating others which may lead to social disgrace stemming from the possibility of contaminating others. Thus, preoccupation on what other people thinks about oneself may become more salient. These results also provide support for Guidano and Liotti's (1983) hypothesis that individuals, having ambivalent sense of self, solve uncertainty in their self-concept by fulfilling attitudes about duty, responsibility, and ethics, and try to meet certain criteria via their rituals.

In conclusion, as expected, self-ambivalence factors were found to be a significant predictor for both general obsessive-compulsive symptoms and obsessive-compulsive subtypes, in line with many studies in the literature. Hence, the proposed relationship and also the ambivalence as a vulnerability factor were supported once more with the findings of the current study.

4.3.4 Obsessive Belief Domains, Emotion Regulation Strategies and Obsessive-Compulsive Symptoms

Obsessive Belief Domains (responsibility/threat estimation, perfectionism/uncertainty, importance/ control of thoughts) and emotion regulation strategies (suppression and cognitive reappraisal) are the last groups of variables entered into the regression equations. It was hypothesized that increased use of cognitive appraisals, including responsibility/ threat estimation, perfectionism/ uncertainty, importance/ control of thoughts, would lead to higher levels of obsessive-compulsive symptomatology (H 3.3). Increased concerns on responsibility, threat

estimation, perfectionism, certainty, and importance of intrusive thoughts result in an increment in the obsessive-compulsive symptoms, as proposed by the cognitive models of OCD (Clark & Purdon, 1999; Rachman, 1997; Salkovskis, 1985) and supported by many research findings (e.g. Yorulmaz, Baştuğ, Tüzer, & Göka, 2013; Yorulmaz, Gençöz, & Woody, 2010; Altın & Karanci, 2008; Yorulmaz, Karanci, and Tekok-Kılıç, 2006; OCCWG, 2005; Tolin, Abramowitz, Brigidi, & Foa, 2003).

The present study also aimed to evaluate the specific contributions of obsessive belief domains to different dimensions of obsessive-compulsive symptoms. Multiple regression analyses provided support for the hypothesis that specific beliefs are associated with specific forms of obsessive-compulsive symptomatology. Beliefs about inflated responsibility and overestimation of threat, and beliefs about being perfect and intolerance to uncertainty positively predicted checking and contamination/washing dimensions of OCD. Belief pertaining to need for certainty and perfection, and beliefs about importance of and need to control thoughts predicted grooming/dressing symptom dimension. Additionally, inflated responsibility/overestimation of threat and beliefs about importance and control of thoughts predicted obsessional thoughts about harm. Inflated responsibility and overestimates of threat also predicted the OCD symptom dimension involving obsessional impulses about giving harm to oneself or others. Therefore, responsibility/threat estimation appraisal was found to be related with all symptom clusters of OCD except grooming/dressing compulsions, which includes doing certain things in a certain order and exactness. It can be proposed that if the individual strives to do specific things (e.g. dressing) in an exact order, overestimation of threat and inflated responsibility about giving harm or preventing something dangers do not play a significant role.

Consistent with these findings, Salkovskis' (1985) cognitive model of OCD emphasized both the overestimation of threat and the interpretation of obsessional intrusions as indicating personal responsibility for harm to oneself or others as linking the intrusive thoughts to the discomfort, and the following neutralizing behaviors. Likewise, Yorulmaz, Altın, and Karanci (2008) also

highlighted the importance of responsibility appraisals for checking symptoms, cleaning and, for obsessive thinking. Although various researchers proposed that responsibility had more important role in checking as opposed to contamination/cleaning dimension (Rachman, 1997; Salkovskis, 1985; Van Oppen and Arntz, 1994), some research findings showed that responsibility was equally relevant for checking and for cleaning compulsions (Shafran, 2005). Regression analyses of the present study showed that responsibility/overestimation of threat belief domain explained the highest variance in obsessional thoughts to harm symptom cluster (explaining 17% of the variance overall), followed by checking (explaining 10% of the variance overall) and contamination/washing (explaining 7% of the variance overall). Thus, consistent with the literature, the current finding imply that individuals who have unrealistic threat appraisals, overvalue the risk of negative consequences and underestimate their capacity to cope, and also have the belief of having a pivotal power either to cause or prevent negative outcomes, are more likely to exhibit obsessional thoughts related to harm (e.g. fire, theft, flood) to self and/or others (Salkovskis, 1985). Additionally, the findings of the present study are also consistent with the current literature by showing that responsibility/threat estimation explained more variance in checking than contamination/washing, indicating that if an individual has an inflated responsibility about causing and/or failing to prevent undesirable outcomes, he/she would be more likely to show checking compulsions rather than contamination/washing symptoms. It can be possible that fears of being responsible to give harm to someone else will be much more salient for the current sample than being responsible to contaminate oneself. Besides, as results showed having excessive concerns about the importance of controlling intrusive thoughts is associated with higher levels of obsessional thoughts about causing/not preventing harm, along with excessive concerns about doing things in an exact order (e.g. grooming/dressing). Moreover, in line with the previous research (e.g. Toffolo, van den Hout, Engelhard, Hooge, & Cath, 2014; Abramowitz, Wheaton, & Storch, 2008), present study showed that having necessity of being certain about everything, poor capacity to cope with

unpredictable change, and also having a tendency to set high standards and employ extremely critical self-evaluations were more likely to be related with overt compulsions including checking, contamination/washing, and grooming/dressing rather than with obsessions. Similarly, Beech and Liddell (1974) previously proposed that OCD patients performed rituals not only to reduce discomfort, but also to meet the need for certainty. Thus, based on current findings, it can be concluded that uncertainty and perfectionism might lead individuals to seek reassurance and to settle their environment in order to bring certainty and to meet higher standards by repeated checking, cleaning, and ordering/exactness, which paradoxically increase uncertainty as shown by a large number of studies (e.g. Boschen & Vuksanovic, 2007; Dek, van den Hout, Giele, & Engelhard, 2010).

A further aim of the study was to discover the relative importance of emotion regulation strategies, namely suppression and cognitive reappraisal in explaining overall OCD symptoms and the relative associations between emotion regulation strategies and symptoms subtypes (Hypothesis 3.4). The results indicated that only suppression significantly predicted general OC symptoms. That is, high levels of inhibition of ongoing emotion expressive behavior are associated with high levels of obsessive-compulsive symptomatology. Cognitive reappraisal was not found to be a significant predictor of general obsessive-compulsive symptoms. From this general finding, it can be concluded that underdeveloped ability to manage emotions, not experiencing or avoiding undesirable emotions may result in negative outcomes, including OCD. Likewise, our finding seems to confirm previous ones indicating a relationship between suppression, as an emotion regulation strategy, and obsessive-compulsive symptoms (e.g. Fergus and Bardeen, 2014; Aka, 2011; Allen & Barlow, 2009). Suppression was also found be associated with checking and obsessional thoughts about harm symptom dimensions of OCD in the current study. As noted by Cisler Olatunji, Feldner, and Forsyth (2010), the chronic and inflexible use of suppression may hinder the learning that avoidant stimuli are not the source of threat, and also may maintain distress. Hence, it can be concluded that

suppression of the expression of emotion might lead to an excessive preoccupation with internal sensation anxiety, so maintain, and even increase the distress associated with the intrusive thought, which in turn increases the obsessive-compulsive symptomatology. These findings agree with all the studies about expressive suppression and its effect on OCD (Allen & Barlow, 2009; Aka, 2011) implying the paradoxical effect of inhibiting emotional expressions.

However, surprisingly, results showed that cognitive reappraisal significantly predicted contamination and grooming/dressing subtypes of OCD, indicating that reevaluating the situation and changing the thinking ways increase the likelihood of occurrence of cleaning and ordering compulsions. This finding is inconsistent with both the Gross' (2001) model of emotion regulation and some other research (e.g. Fergus and Bardeen, 2013). The literature indicated that reappraisal is generally a more adaptive form of cognitive change, in which individuals try to change the way they are thinking about a situation to modify their emotional reactivity, which was said to increase their adaptability (Gross, 2001). On the other hand, although current findings are opposite of the expectations, it is worth noting that these findings may bring up the importance of individuals' differences in terms of anxiety sensitivity, ability to clarify and accept their emotions, and their ability to distract their attention from the anxiety provoking stimuli. As Arntz, Rauner & Van Den Hout, (1995) proposed that not just the stimuli around but also the misinterpretation of internal sensations of anxiety increases the frequency of obsessions and compulsions, individuals exhibiting contamination and grooming subtypes might be more likely to misinterpret their internal sensations as threatening during the process of emotion regulation. In his model Gross (2001) stated that response-focused strategies (e.g. suppression) refer to the things done after response tendencies have been formed when an emotion is about to occur. It can also be proposed that these symptom types may be essentially a type of suppression strategy used to reduce ongoing expression of anxiety. Consistent with this rationale, Stern, Nota, Heimberg, Holaway, and Coles (2014) suggested that a motivation to avoid unwanted emotions might underlie OCD, in that compulsions may be used to reduce

emotional distress generated by an intrusive thought. So, cognitive reappraisal could not work appropriately in these individuals because it may be used maladaptively and lead to a cognitive cycle of unproductive thinking over negative intrusive thoughts and their internal sensations, and may paradoxically increase the anxiety and neutralizing efforts. In other words, in terms of contamination/washing and grooming/dressing symptoms, individuals may develop compulsive reactions as a result of cognitive reappraisal; so they may become obsessed with their thoughts rather than changing it in a rational way. In terms of these symptom dimensions, reappraisal may become counterproductive strategy may be because it is used as a distraction-like strategy rather than changing the irrational thought into a rational one. Hence, in order to clarify and refine current findings, research with different samples examining their reappraisal processes may be fruitful.

In conclusion, based on the current findings and the previous research, it is obvious that increased use of maladaptive belief domains and suppression as an emotion regulation strategy underlie obsessive-compulsive symptomatology (e.g. OCCWG, 1997, 2001; Allen and Barlow, 2009). Additionally, it is also worth noting that the current findings support evidence that specific obsessive beliefs and specific emotion regulation strategies relate to specific OCD symptom dimensions.

With all these conclusions in mind, further analyses were done in order to deepen the understandings of how current variables, identified as significant predictors of OCD symptoms in the regression analyses, affect the general obsessive-compulsive symptoms. In other words, the relationship between these variables and the possible mediating roles of them were also aimed to investigate. For this purposes, two additional analyses were conducted. In the first analyses, the mediator roles of self-ambivalence factors, obsessive-belief domains and suppression were examined separately in relation to obsessive-compulsive symptoms overall. In the second analysis, perceived parenting styles, self-ambivalence factors, obsessive belief domains, and emotion regulation strategies were examined via a comprehensive model, proposed in Figure 1 (pp. 52), in

order to examine the underlying pathways from perceived parental styles to obsessive-compulsive symptomatology. The results of these two main analyses will be discussed in the following Mediation Analyses and Model Testing sections.

4.4 Mediation Analyses

Four Multiple mediation analyses were used to test the relevant hypotheses (H4 and H5). Firstly, the mediator roles of self-ambivalence factors (self-worth ambivalence and public self-acceptability) between the perceived maternal rejection and paternal overprotection, and obsessive-compulsive symptomatology were examined. The two models tested in this study supported the probable effect of perceived parental rearing attitudes on OC symptoms by showing that self-worth ambivalence and public self-acceptability explain how perceived maternal rejection and paternal overprotection increase obsessive-compulsive symptoms. It was previously indicated that parental behaviors of expressing affection and warmth, and avoiding excessive protection, control, and criticism may play an important role in the development of healthy self-model that would be constructed as being lovable, worthy, and competent (Guidano & Liotti, 1983). On the other hand, experiences of rejection, emotional unavailability, lack of support, and criticism will result in an unlovable, unworthy, and incompetent self-model, which has been found to be related with different psychopathologies, including OCD (Rapee, 1997, Guidano & Liotti, 1983). The present findings supported these proposals by showing that higher levels of perceived maternal rejection and paternal overprotection led to higher levels of ambivalence in self-worth and public acceptability that in turn are associated with higher levels of obsessive-compulsive symptoms. Thus, although there are not any difference between maternal rejection and paternal overprotection in terms of the way they influence obsessive-compulsive symptoms, it seems to be clear that experiencing ambivalence in self is an explanatory factor for how negative parenting result in vulnerability to OCD. Detailed analyses on this issue will be discussed in the next session. At this point, it is possible to say that perceiving intense control and

protection from fathers, and perceiving criticism, hostile or passive-aggressive attitudes, and emotional unavailability from mothers might lead to an ambivalent self-image, specifically in self-worth and in thoughts about acceptability by other people which in turn leads to OCD symptoms. Mikulincer and Shaver (2007) stated that having doubts about one's lovability intensify expressions of distress, and fears of being abandoned due to bad nature of self. Likewise, Guidano and Liotti (1983) proposed that being uncertain about lovability and self-worth resulted in OCD symptoms. In other words, obsessions and compulsions are proposed to occur in order to foster completeness and certainty in the sense of self, and as a result to resolve distress caused by self-ambivalence. Therefore, the current findings confirm and refine results obtained in the literature (e.g. Laible & Carlo, 2004; Salkovskis, Shafran, Rachman, & Freeston, 1999) by showing that contradictory communication styles with parents, such as expression of intense interest without an expression of emotional availability and support are not helpful for the individual, especially in terms of their sense of self which is shown to be related with obsessive-compulsive symptoms.

Secondly, the current study also aimed to investigate how self-ambivalence relates to OCD by evaluating the possible mediator roles of obsessive belief domains and suppression. For this aim, two separate models were tested. The present study revealed that contributions of both self-worth ambivalence and public self-acceptability to the obsessive-compulsive symptoms were mediated by obsessive belief domains, namely responsibility/threat estimation, perfectionism/uncertainty, importance/control of thoughts. In more detail, higher levels of ambivalence on self-worth and acceptability led to concern on beliefs pertaining to inflated responsibility/overestimation of threat, perfectionism/intolerance of uncertainty, and importance/control of thoughts, which in turn resulted in higher levels of obsessive-compulsive symptoms. It seems understandable that OCD-related belief domains work as strategies to protect self-worth as worthwhile and lovable, but at the same time precipitate the resulting OCD phenomenon (Guidano & Liotti, 1983). Consistently, current cognitive models suggested that self-schemas are proposed to trigger cognitive

processes such as dysfunctional beliefs, negative automatic thoughts, and biases in attention, memory, and processing, which in turn result in psychopathology (e.g. Guidano & Liotti, 1983; Beck, 1976). More specifically, Guidano and Liotti (1983) proposed that self-ambivalence in OCD may not directly lead to symptoms of OCD; rather it may have fostered the development of cognitions that mediate between the underlying experience of self and obsessive-compulsive symptoms. Thus, the current study confirms previous research on the relationship between self-ambivalence and OCD-related belief domains (Bhar, 2004), by empirically investigating the pathways through which self-ambivalence affects obsessive-compulsive symptoms.

Moreover, the mediational model investigating the mediator role of suppression, as an emotion regulation strategy, in the relationship between self-worth ambivalence, public self-acceptability and obsessive-compulsive symptoms was also supported in the current study. It was shown that higher levels of self-worth ambivalence and ambivalence in public self-acceptability resulted in either inhibiting or avoiding negative emotions which in turn lead to higher levels of obsessive-compulsive symptoms. Accordingly, in order to cope with negative, undesired emotions, individuals experiencing difficulties in reaching a unified view about their self-worth, and also about their acceptability by other people tend to use maladaptive emotion regulation strategy, such as inhibiting emotional expressive behavior. As expected, increased use of this dysfunctional strategy, in turn, perpetuates obsessive-compulsive symptomatology. John and Gross (2004) reported that efforts to suppress feelings may create discrepancy between one's feelings and behaviors, which results in a sense of not being true to oneself. Thus, it may create a vicious cycle between ambivalent sense of self and suppression. Additionally, the current study revealed that having an ambivalent sense of self resulted in efforts to suppress expression of negative feelings. To our knowledge, there is no other study investigating the direction of the relationship between self-ambivalence and emotion regulation strategies. Hence, the current study is the first examining the relational paths between self-ambivalence, suppression and obsessive-compulsive symptomatology. However, since the current study used a

cross-sectional design, it cannot provide an answer for direction of the relationship; so longitudinal studies are needed.

Thus, these findings indicated that the relation between perceived parenting styles and obsessive-compulsive symptoms, and the relation between self-ambivalence factors and obsessive-compulsive symptomatology were not only direct, but also through some other variables. Both self-worth ambivalence and ambivalence in public acceptability contributed to the occurrence of obsessive-compulsive symptoms by mediating perceived maternal rejection and perceived paternal overprotection. Moreover, the effects of self-worth ambivalence and public self-acceptability on obsessive-compulsive symptoms were also mediated with the utilization of OCD-related belief domains and maladaptive emotion regulation strategy.

4.5 Model Testing

Although a host of factors were found to play a role in the etiology of OCD, a systematic evaluation of the pathways is valuable and thus the comprehensive model proposed in the Figure 1 (pp. 52) was examined via Structural Equation Modeling. The model was composed of seven predictor variables, namely perceived rejection, perceived overprotection, perceived emotional warmth, self-ambivalence, obsessive appraisals, emotion regulation strategies, namely cognitive reappraisal, suppression; and an outcome variable namely, obsessive-compulsive symptoms. Since two strategies of emotion regulation were hypothesized to have different impacts on the outcome, cognitive reappraisal and suppression were considered to be two latent variables. In line with cognitive models (Clark, 2004; Rachman, 1997; Salkovskis, 1985) and Guidano and Liotti's (1983) model of OCD, the present model proposes that perceived rejection, overprotection, and emotional warmth plays a role in the development of obsessive-compulsive symptoms not only on their own, but also by contributing to the self-ambivalence factors, obsessive belief domains, and suppression, and at the same time decreasing the use of cognitive reappraisal. Results showed that both parental rejection and parental overprotection affected

self-ambivalence which may lead to the development of obsessive-compulsive symptomatology by affecting obsessive appraisals and suppression as an emotion regulation strategy. With the effect of conflicting beliefs about self, uncertainty about self-attributes, and a preoccupation with the truth about self-worth, misinterpretation of intrusions may lead to anxiety and discomfort, which seems to result in maladaptive emotion regulation strategies, such as increased use of suppression. Although inhibition of expression of anxiety and discomfort brings temporary relief and the sense of control in the short run, it seems to result in increment in anxiety and obsessive-compulsive symptoms in the long run.

Perceived rejection is characterized by parents' being punitive, shaming, abusive, critical, and/or favoring siblings over the child (Arrindel et. al., 1999). In the current study, perceived rejection from both parents yielded three direct effects, implying that higher levels of perceived rejection from parents significantly predicts experiencing higher ambivalence in the sense of self, engaging in more maladaptive appraisals, and higher levels of obsessive-compulsive symptoms. On the other hand, perceived overprotection from parents, which includes both behavioral and psychological attitudes, such as excessive control and anxiety about child's safety (Arrindel et. al., 1999), yielded only one direct effect on self-ambivalence. This finding indicates that parents' overprotective and controlling behaviors significantly directly predicts ambivalent sense of self, including contradictory beliefs about self, uncertainty about personal attributes, and chronic preoccupation in verifying one's self-worth. Additionally, perceived emotional warmth, referring to parents' expressiveness of positive regard and their responsiveness to child's emotional and behavioral needs (Fauber Forehand, Thomas, & Wierson, 1990), was found to directly predict only suppression as an emotion regulation strategy. Thus, it is clear that those receiving lower levels of emotional warmth from their parents are more likely to regulate their negative emotions through inhibiting ongoing expression.

There are supporting findings for the association between parents' being overprotective, demanding, critical and obsessive-compulsive symptoms (Cavedo and Parker, 1994; Alonso et. al., 2004; Yoshida, Taga, Matsumoto, & Fukui,

2005). Ehiobuche (1988) showed that individuals with obsessional symptoms perceived their parents as expressing less emotional warmth when compared to non-clinical controls. Similarly, Alonso and his colleagues (2004) associated low parental warmth and rejecting behavior with OCD symptoms. Some other studies found a positive association between obsessive-compulsive symptoms and perceived overprotection from parents (Smari, Martinsson, and Einarsson, 2010; Cavedo & Parker, 1994). Therefore, consistent with the literature findings, the current study revealed that if someone perceives his/her parents as highly rejecting, and/or overly protective, and exhibiting low emotional warmth, would more likely to show obsessive-compulsive symptomatology.

It is also important to reveal how these perceptions lead to OCD. This study also adds on the previous findings by exploring the factors explaining the relationship between each perceived parenting style and obsessive-compulsive symptoms. Each perceived parenting style may use a different pathway for the development of obsessive-compulsive symptoms. For instance, perceived rejection from parents not only directly contributes to the development of obsessive-compulsive symptoms; but it also influences OC symptoms via the mediator roles of both self-ambivalence and obsessive beliefs. On the other hand, perceiving parents as overly protective and demanding affect obsessive-compulsive symptoms via only the mediating role of self-ambivalence. Hence, based on the current findings, in comparison to overprotection, perceived rejection from parents might be much more toxic in terms of obsessive-compulsive symptoms because of its direct effect on OCS. Guidano and Liotti (1983) proposed that within a healthy reciprocal attachment parents facilitate the child's search for mastery and autonomy and allow the child to perceive him/herself as loveable and capable of controlling a reliable interpersonal environment. On the other hand, if the reciprocity of the attachment is poor, and the parents show their interest in the child by being demanding, controllable, critical, and only providing materialistic support without expressing affection and understanding the child's emotional experiences, individuals are more likely to perceive themselves as unlovable, incompetent, and vulnerable (Bowlby, 1969; Guidano & Liotti, 1983).

For instance, a parent may excessively be concerned about their child's moral and/or social education and express his/her attention through this way, while dismissing expressions of feelings that are incompatible with such values, and not express his/her love with any affect including tenderness. Guidano (1987) perceived this contradictory parenting style as an important vulnerability factor for the OCD development. Consistently, it was suggested that parental control, including demanding interactions with the child, interferes with the child's affective emotion regulation skills and sense of autonomy; while high levels of parental criticism and expectations interferes with the child's view of self/world, acquisition of coping skills, and lead to hypervigilance towards threat (Wood, McLeod, Sigman, Hwang, & Chu, 2003; Rapee, 1997). Thus, these parenting styles were proposed to put children at risk for developing anxiety.

The current analyses also showed that the indirect effects of both perceived parental rejection and overprotection on OCD-related belief domains via self-ambivalence were not significant; however, both perceived parental rejection and overprotection significantly predicted suppression through the mediating role of self-ambivalence. Therefore, the hypothesis (H6) of the study is partially supported. Extending the literature findings and models of OCD, and considering the current findings, it can be suggested that perceived rejection and/or overprotection from parents might be associated with obsessive-compulsive symptoms via impaired sense of self-worth and increased use of suppression as an emotion regulation strategy. In other words, perceived rejection and overprotection from parents increase self-ambivalence level, which in turn increases suppressing the expressions of negative emotions, and further contributes to the development of obsessive-compulsive symptomatology. In line with these findings, a study conducted with adolescents showed that negative and coercive parenting styles lead to emotional distress and to avoidance rather than understanding and appropriately expressing negative emotions (Cummings & Davies, 1996; Eisenberg, Cumberland, & Spinrad, et. al., 2001). Likewise, Klimes-Dougan and Zeman (2007) proposed that if parents are available and responsive to the needs of the adolescents, the adolescents would feel more

comfortable with their negative emotions and would be able to express their emotions with healthy strategies. This was supported by the results of the present study, indicating that low emotional warmth from parents leads individuals to engage in suppressing the expression of their negative emotions, which further results in obsessive-compulsive symptoms. In other words, individuals whose parents are not able to express unconditional positive regard and fail to respond to child's emotional and behavioral needs (Faubert, Forehand, Thomas, & Wierson, 1990) are more likely to inhibit the expression of their emotions, and more likely to develop obsessive-compulsive symptoms due to experiencing a discrepancy between anxiety embracing inner physiological sensations and overt behavioral expressions.

Furthermore, the results for the current model also indicated that self-ambivalence promotes maladaptive obsessive appraisals and suppression of the expressions of negative emotions, which in turn perpetuate the development of obsessive-compulsive symptoms. Although OCD-related belief domains and suppression yielded a direct effect, self-ambivalence did not show a direct effect on obsessive-compulsive symptoms. Self-ambivalence appeared to have an influence on obsessive-compulsive symptoms through the mediating roles of both OCD-related belief domains and suppression. These findings can be regarded as a confirmation of previous empirical results. According to Doron and Kyrios (2005) cognitive-affective structures, including impaired internal representations of self and the world lead to overestimation of threat, and as a result unwanted intrusions are heightened and obsessions are developed. Likewise, appraisals of intrusions that contradict with the person's self-view was proposed to result in the most distressing and reactive experiences (Teachman, Woody & Magee, 2006). It was also proposed that intrusive thoughts might turn into obsessions and compulsions if they are experienced as threatening in the context of an uncertain sense of self (Doron, Moulding, Kyrios, Nedeljkovic, & Mikulincer, 2009; Salkovskis, 1985; Rachman, 1997). Our findings indicated that OCD-related belief domains, such as perfectionism, inflated responsibility, intolerance to uncertainty, and beliefs about the importance of controlling unwanted thoughts, might occur as a strategy in

order to reach a certainty about the self-worth and also to stabilize the sense of self-worth as worthwhile, lovable, and moral in the face of threatening intrusions. Likewise, Guidano and Liotti (1983) emphasized hierarchical relationships between cognitive structures in their model, so it refers to as “hierarchical structuralism”. Within this hierarchical relationship, they perceived self-ambivalence as the higher order construct that govern other cognitive (perceptions, beliefs) and emotional copings, by providing motivation for beliefs about being perfect, and/or moral in order to protect against low self-esteem and disintegration of identity. Thus, based on this model rather than directly affecting obsessive-compulsive symptoms, self-ambivalence seems to contribute to the development of OCD by fostering the development of cognitions which then mediate between the underlying experience of self and symptoms (Guidano & Liotti, 1983). Therefore, the present findings that self-ambivalence leads to obsessive-compulsive symptoms via maladaptive belief domains, is not unexpected. In line with hypothesized hierarchical model, it can be proposed that dichotomous views of self can be a meta-vulnerability factor for obsessive-compulsive symptoms, which means that self-ambivalence may be in a superordinate position in relation to belief domains and emotion regulation strategies. Therefore, the current findings provide support for the idea that OCD-related belief domains may play a role in controlling fluctuations in self-worth and in protecting a positive sense of self.

Additionally, the current study revealed that the relationship between self-ambivalence and obsessive-compulsive symptoms was also explained by maladaptive emotion regulation strategies, namely suppression. Experiencing fluctuations in the evaluations of self may trigger distress and anxiety. Subsequently, in order to reduce anxiety, and to solve uncertainty in the sense of self, individuals engage in modifying the behavioral aspect of their emotion responses without reducing the subjective experience of negative emotion. Therefore, physiological activation continues and the negative emotion accumulates and may create a sense of discrepancy between inner experience and outer expressions (Higgins, 1987), so this becomes counterproductive and turn

into a vicious cycle. According to Sheldon, Ryan, Rawsthorne, and Hardi (1997), this discrepancy may lead to the sense of not being true to oneself, not being honest to others, and result in negative feelings about the self, which in turn contribute further to psychological problems (Hsieh and Stright, 2010). It was shown that the more the individuals used suppression as an emotion regulation strategy, the more they reported obsessive-compulsive symptoms (Aka, 2011). This predictive role of suppression on obsessive-compulsive symptoms is supported in the present study. On the other hand, cognitive reappraisal did not significantly predict obsessive-compulsive symptoms, implying that having ability to stay calm by changing the way of thinking is not associated with obsessive-compulsive symptoms.

Furthermore, although directly related with obsessive-compulsive symptoms, the indirect effects of obsessive beliefs on obsessive-compulsive symptoms either via suppression and/or via cognitive reappraisal were not significant. In other words, the relationship between OCD-related belief domains and obsessive-compulsive symptoms could not be explained by other factors. Thus, maladaptive appraisals of intrusive thoughts directly increase obsessions and compulsions, as predicted by recent cognitive models (OCCWG, 2001).

To sum up, previous analyses in the current study were reconfirmed and extended by testing the proposed comprehensive model with SEM. Specifically, perceived parental rejection and overprotection, and perceived emotional warmth, self-ambivalence, obsessive-appraisals, and suppression as an emotion regulation strategy that were found to be related with obsessive-compulsive symptomatology in this study, exert their effects via different paths. Based on our findings, it can be concluded that individuals who perceive their parents as critical and/hostile and overly protective, are more likely to experience ambivalence in their self-worth. Increased sense of ambivalence in self-worth, morality, and acceptability also results in an increment in their anxiety. Therefore, in order to reach a temporary relief, these individuals may more likely to suppress the behavioral expression of their negative emotions or to engage in maladaptive appraisals in order to solve their ambivalence, which in turn makes them vulnerable to develop obsessive-

compulsive symptoms. In addition, parents showing low emotional warmth and low nurturance to their children may become role models for not expressing their negative emotions. Therefore, individuals perceiving their parents as exhibiting low emotional warmth are found to use suppression as an emotion regulation strategy, and as a result are more likely to develop obsessive-compulsive symptoms.

4.6 Strengths and Limitations of the Present Study

Firstly, although there are many studies on the predictors of obsessive-compulsive symptomatology all around the world, to our knowledge there have been relatively few studies presenting an integrated model for the association among perceived parenting styles, ambivalent sense of self, OCD-related beliefs, emotion regulation, and obsessive-compulsive symptoms. In particular, examining the predictors of subtypes of obsessive-compulsive symptom is considered to be a valuable contribution. Additionally, both unique and combined contributions of variables were examined at the same time, which gives the chance to see the developmental and maintenance mechanisms through which each factor influence obsessive-compulsive symptomatology. Additionally, an instrument on self-ambivalence was adapted into Turkish, and proven to have satisfactory psychometric properties in both university students and in a community sample. By adapting the Self-Ambivalence Measure into Turkish, the current study presented a valuable instrument that can be used for further studies in order to investigate the association between individuals' perception of their selves and disorders other than OCD. Secondly, the present study conducted in a large community sample with a wide age range (18-72), and with diversity in terms of education level, profession, and family structure. Hence, large sample size together with great diversity of the participants increase the external validity of the study; so allow us to make reasonable generalizations.

However, some characteristics of the current sample brought some limitations as well. Therefore, the findings of the current study should be considered in the light of its weaknesses. For instance, unbalanced number of

female and male participants with females being one and a half times more than males. Another example would be the higher education level of the participants. Seventy percent of the sample comprised of university graduates and post-graduates. Although these kinds of differences may violate some of the results, main hypothesis did not include gender and education level differences. But, these sample characteristic was perceived as confounding factors and were statistically controlled in the analyses.

Additionally, the sample used in the current study was a non-clinical sample; thus the findings of the present study should be evaluated cautiously. Researchers showed that findings from non-clinical and clinical samples in terms of obsessive-compulsive symptoms were highly similar (Gibbs, 1996). Likewise, Abramowitz and his colleagues (2014) reviewed research on prevalence rates of OC symptoms, dimensional nature of these symptoms, and developmental and maintenance factors in clinical and analogue (non-clinical) samples in order to investigate the assumption of using analogue samples to understand people with OCD (Abramowitz, Fabricant, Taylor, Deacon, McKay, & Storch, 2014). They supported the idea that research with analogue samples, as the current research, is relevant to draw inferences about people with OC-related phenomena. Therefore, in the light of these studies, the current research used a community sample to understand the etiological factors of OCD. But, still the current study should be replicated with a clinical sample consisting of OCD patients in order to support these ideas and also, to understand how specific the results are to OCD, other diagnostic categories can be used.

Moreover, since the current analyses were correlational in nature and provided potential relationships between variables, the results do not indicate causal directions. Furthermore, current study has cross-sectional design, which also prohibits to draw any direct cause-effect relationship.

Procedure of data gathering can be also considered as the limitation of the current study. Collecting data via electronic and internet sources prevent the control of the external conditions of the participants and whether they completed the instruments in one session or multiple sessions. As these factors could not be

held constant, it might have had an influence on the internal validity of the study. Another limitation of the study is related with the use of self-report instruments. Since self-report instruments are based on person's own reporting, they require insight to a certain extent. Thus, some possible biases including limited awareness about the self, cognitive biases, and social desirability might have intervened with the person's responses. Therefore, future studies should use other data collection tools, such as interviews and observations to validate the self-report data.

4.7 Clinical Implications

Firstly, the adaptation of the Self-Ambivalence Measure into Turkish can support the clinical work. In addition to research purposes, the instrument might be used as an assessment tool during the psychotherapy process of OCD patients. Besides, it can also be used to evaluate improvements within the therapeutic process.

The results of this study emphasize the importance of perceived parental attitudes, being ambivalent about self-concept, obsessive appraisals, and maladaptive emotion regulation strategies in the development and maintenance of obsessive-compulsive symptoms. The findings of the present study not only highlight the cognitive and emotional domains related with OC symptoms, but also clarify the probable origins of these symptoms. Thus, current findings have essential implications for clinical practices by suggesting including experiences with parents, self-perception, emotion regulation strategies, and the maladaptive appraisals in the therapeutic process of OCD patients.

Recent cognitive behavioral formulation of OCD that combined core features of earlier cognitive models (Clark & Purdon, 1993; Rachman, 1997; Salkovskis, 1985) emphasized the importance of appraisals of intrusions as the major source of anxiety, rather than the content of intrusions. It was suggested that negative appraisals of intrusions occur as negative automatic thoughts (Salkovskis, 1985). Salkovskis (1985) and Rachman (1997) suggested that treatment of OCD should focus on changing the misinterpretations of the significance of the intrusive thoughts without ignoring the behavioral techniques.

According to the researchers only targeting the modification of intrusions might result in temporary effect, so treatment plan should include modification of automatic thoughts that are the consequences of intrusions. Consistently, the current findings showing beliefs concerning inflated responsibility, intolerance for uncertainty, perfectionism, overestimation of threat, significance of thoughts play a central or pivotal role in obsessive-compulsivity indicate that therapeutic strategies for treatment of OCD should aim to modify these beliefs to more realistic and rational levels in order to decrease the OC symptoms. The current study also revealed that different belief domains are associated with different symptom dimensions. Therefore, clinical work may especially focus on challenging and changing specific beliefs associated with the symptom dimensions reported by the patients. For instance, according to current findings, when working with patients showing more contamination symptoms, the focus should be on beliefs on inflated responsibility, overestimation of threat, perfectionism, and intolerance to uncertainty. On the other hand, if a patient show only obsessional thoughts about harm, it is important to address beliefs concerning inflated responsibility, overestimation of threat, and importance and control of thoughts.

Even though the modification of obsessive belief domains may be an important factor to consider for therapeutic applications, the present study also highlights the importance of targeting maladaptive emotion regulation strategies. The findings of the present study showed that patients who deal with negative and/or undesired emotion by suppressing the behavioral expressions show more OC symptoms. Therefore, therapeutic procedures of OCD should also aim to modify underdeveloped emotion regulation strategies, by finding better ways of clarifying, accepting, and coping with feelings that seem overwhelming. As a therapist, it is important to validate and accept the feelings of the patients, and to help them get a clearer vision on what their emotions are telling them (Gilbert & Leahy, 2007). Linehan, Heard, and Armstrong (1993) showed that individuals with under-regulated emotion system benefit from interpersonal validation in addition to learning about emotion regulation and distress tolerance skills. It is

also important to note that self-soothing develops as a result of internalization of the soothing function of the protective others (Stern, 1977; cited in Gilbert & Leahy, 2007). Likewise, Gilbert and Leahy (2007) stated that providing a safe, supportive, and empathic environment in the therapy helps soothing automatically generated distress. Thus, not only the techniques used, but also therapists' overall attitudes are important in terms of patients' responses and ways of regulating their emotions.

Additionally, the present study showed that ambivalent sense of self has a central or pivotal role in obsessive-compulsivity, indicating that therapeutic strategies for treatment of OCD should also target the resolution of self-ambivalence via both restructuring the irrational beliefs about self and the interpersonal aspects of therapy, such as trust, empathy, unconditional positive regard with the therapist. Bhar (2004) investigated the association between changes in self-ambivalence, OCD symptoms and OCD-related belief domains during a 16-week course of OCD specific cognitive-behavioral therapy (CBT) with patients having a primary diagnosis of OCD. He showed that reduction in self-ambivalence was related with reductions in obsessive-compulsive symptoms and OCD-related belief domains. With the detailed analysis, Bhar (2004) concluded that changes in self-ambivalence were more likely to be associated with the growing sense of security and acceptance within the therapeutic relationship and the adoption of new ways of thinking about oneself.

Furthermore, as the findings of the present study supported, the origins of vulnerability factors, namely self-ambivalence, obsessive appraisals, and underdeveloped emotion regulation, predicting OC symptoms are mostly formed and shaped during childhood by overly protective, controlling, critical, rejecting and expressing low emotional warmth parenting style. Salkovskis, Shafran, Rachman, and Freeston (1999) suggested that incorporating core vulnerability factors of OCD to the therapy process is important for the clinical progress of the patients. Both the literature findings and the present results imply that developmental experiences should be questioned within therapy in order not to only modify the faulty assumptions, maladaptive coping styles but also to help

patients meet their basic emotional needs via the establishment of a secure attachment with the therapist (Young, Klosko, & Weishaar, 2003).

In addition to therapy process, understanding the parental factors and related self-concepts that make individuals more prone to develop obsessional problems could also be used in the preparation of educational and interventional programs for both parents and patients. Hence, parents should be educated for the negative impacts of being overly protective, interfering with the child's boundary via controlling attitudes, and also the impact of being critical on the development and maintenance of obsessive-compulsive symptoms.

4.8 Suggestions for Future Studies

The current study also suggests some ideas for future research. The sample of the present study consists of a non-clinical community sample. Therefore, in order to clarify the associations between factors, the current model should be replicated in the patients who have formal OCD diagnosis and other anxiety disorders (e.g., generalized anxiety disorders) or depression. The current study investigated the role of parenting styles, self-ambivalence, and emotion regulation strategies as predictors for only obsessive-compulsive symptoms. Their specificity to obsessive-compulsive symptoms was not examined. Therefore, future studies should investigate whether these factors are specific to OC symptoms or not, by including other types of psychopathology groups. Furthermore, studies should also focus on the effects of perceived parenting styles, self-ambivalence, emotion regulation strategies, maladaptive appraisals and psychological well-being. This would give beneficial information about protective factors even after experiencing negative parenting from parents.

Additionally, future research should also address the issues of causality implied in this study. Due to its cross-sectional nature, this study did not directly test the causal links between vulnerability factors and OC symptoms. However it is likely that the relationships may be multi-directional. Thus, in order to reach a stronger conclusion about the vulnerability factors underlying OCD, a longitudinal design examining these factors at different times over time might

provide insights that are more valuable. In addition, due to some practical and methodological reasons, the current study included only some specific vulnerability factors; so, the inclusion of other related variables (e.g. attachment style, thought-action fusion) may extend the current findings.

Contrary to the literature findings which posits that cognitive reappraisal is an adaptive way of regulating emotions (Gross, 2001); the present study found that cognitive reappraisal predicted contamination/washing and grooming/dressing subtypes of OCD, despite being a weak predictor. To our knowledge, this is the first study to show such a relationship. Therefore, future research might investigate the effect of cognitive reappraisal as an emotion regulation strategy with different methodology and samples, especially, in clinical samples. In addition, cognitive reinterpretation of individuals with OC may need to be evaluated in depth.

Current study showed the role of perceived maternal rejection and paternal overprotection in the development and maintenance of OC symptoms. But, it is not clear whether their combination creates a toxic effect for psychopathology or one of them is much more destructive. Therefore, future studies should examine the combination effects of maternal rejection and paternal overprotection on OC symptoms via group comparisons. Relevant findings, then, might be taken into consideration in the educational programs for parents. Additionally, in future studies, the investigation of the perception of same sex and opposite sex parents' rearing attitudes may provide important information about developmental factors related to OCD.

Additionally, self-ambivalence was found to play a crucial role in obsessive-compulsive symptoms. In order to integrate self-ambivalence into the therapeutic process, therapeutic approaches and strategies that effectively lead to the resolution of self-ambivalence within the treatment process should be explored in future research.

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APPENDICES

APPENDIX A: PILOT STUDY-QUESTIONNAIRES

INFORMED CONSENT FORM

Bu çalışma, Orta Doğu Teknik Üniversitesi Psikoloji Bölümü, Klinik Psikoloji Doktora öğrencisi Filiz Özekin-Üncüer tarafından, Psikoloji Bölümü öğretim üyelerinden Prof. Dr. Nuray Karancı'nın danışmanlığında, tez çalışması kapsamında yürütülmektedir ve katılım gönüllülük esasına dayanmaktadır. Ankette, sizden kimlik belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız tamamıyla gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir; elde edilecek bilgiler bilimsel yayımlarda kullanılacaktır.

Araştırma sonuçlarının sağlıklı olabilmesi için verdiğiniz yanıtlarda samimi olmanız büyük önem arz etmektedir. Soruların başındaki yönergeleri okuyunuz ve size en uygun seçeneği işaretleyiniz. Sorular için doğru ya da yanlış cevap yoktur. Önemli olan sizin neler hissettiginiz ve düşündüğünüzdür. Anket, genel olarak kişisel rahatsızlık verecek soruları içermemektedir. Ancak, katılım sırasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz cevaplama işini yarıda bırakabilirsiniz. Böyle bir durumda anketi uygulayan kişiye, anketi tamamlamadığınızı söylemek yeterli olacaktır. Anket sonunda, bu çalışmayla ilgili sorularınız cevaplanacaktır. Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz. Çalışma hakkında daha fazla bilgi almak için Psikoloji Bölümü öğretim üyelerinden Prof. Dr. Nuray Karancı (Oda: B214; Tel: 210 3127; e-posta: karanci@metu.edu.tr) ya da Filiz Özekin-Üncüer (Tel: 0535680535; e-posta: ozekin86@yahoo.com) ile iletişim kurabilirsiniz. Katkılarınızdan dolayı teşekkür ederiz.

DEMOGRAPHICAL INFORMATION FORM

1. Cinsiyetiniz: () Kadın () Erkek
2. Yaşınız:
3. Medeni Durumunuz : Evli () Bekar () Boşanmış () Dul ()
4. Meslek:
5. Eğitim Durumunuz: İlköğretim () Lise () Lisans () Yüksek Lisans () Doktora ()
6. Eğitime devam ediliyorsa, devam edilmekte olunan Bölüm/ Sınıf:
7. Çalışıyor musunuz: () Evet (kaç senedir/ hangi işte):/ () Hayır
8. Siz dahil kaç kardeşiniz:
9. Siz kaçınıcı çocuksunuz:
10. Annenizin eğitim düzeyi: () Okuma-yazma bilmiyor () Okur-yazar () İlkokul () Ortaokul () Lise () Üniversite () Üniversite üzeri
11. Babanızın eğitim düzeyi: () Okuma-yazma bilmiyor () Okur-yazar () İlkokul () Ortaokul () Lise () Üniversite () Üniversite üzeri

12. Ailenizin gelir düzeyi:

- Yüksek Orta Düşük

13. Yaşamınızın çoğunu geçirdiğiniz yer:

- Büyük Şehir (İstanbul/Ankara/İzmir)
 Şehir
 Kasaba
 Köy

14. Şu an yaşadığınız yer:

- Aileyle/Akrabalarla birlikte
 Arkadaşlarla evde
 Tek başıma evde
 Yurtta
 Diğer:

15. Bugüne kadar herhangi bir psikiyatrik tanı aldınız mı:

- Evet (belirtiniz): Hayır ()

16. Şu an herhangi bir psikiyatrik ya da psikolojik destek alıyor musunuz?

- Evet Hayır ()

17. 16. Soruya cevabınız evet ise; tedavi türünüzü şu anki tedavi türünüzü belirtiniz.

- Psikoterapi (Ne kadar süredir):
 İlaç tedavisi (belirtiniz):
 Hem psikoterapi hem ilaç tedavisi

BECK DEPRESSION INVENTORY (BDI)

Aşağıda gruplar halinde bazı cümleler ve önünde sayılar yazılıdır. Her gruptaki cümleleri dikkatle okuyunuz. **BUGÜN DAHİL, GEÇEN HAFTA İÇİNDE** kendinizi nasıl hissettiğinizi en iyi anlatan cümleyi seçin ve yanındaki şıkkı işaretleyin. Seçiminizi yapmadan önce gruptaki cümlelerin hepsini dikkatle okuyunuz ve yalnızca bir maddeyi işaretleyin.

1.

- a) Kendimi üzüntülü ve sıkıntılı setmiyorum.
- b) Kendimi üzüntülü ve sıkıntılı hissediyorum.
- c) Hep üzüntülü ve sıkıntılıyım. Bundan kurtulamıyorum.
- d) O kadar üzüntülü ve sıkıntılıyım ki artık dayanamıyorum.

2.

- a) Gelecek hakkında umutsuz ve karamsar değilim
- b) Gelecek hakkında karamsarım
- c) Gelecekte beklediğim hiçbir şey yok.
- d) Geleceğim hakkında umutsuzum ve sanki hiçbir şey düzelmeyecekmiş gibi geliyor.

3.

- a) Birçok şeyden eskisi kadar zevk alıyorum.
- b) Eskiden olduğu gibi herşeyden hoşlanmıyorum.
- c) Artık hiçbir şey bana tam anlamıyla zevk vermiyor
- d) Herşeyden sıkılıyorum

4.

- a) Kendimi başarısız bir insan olarak görmüyorum
- b) Çevremdeki birçok kişiden daha çok başarısızlıklarım olmuş gibi hissediyorum
- c) Geçmişime baktığımda başarısızlıklarla dolu olduğunu görüyorum
- d) Kendimi tümüyle başarısız bir kişi olarak görüyorum.

5.

- a) Kendimi herhangi bir şekilde suçlu hissetmiyorum
- b) Kendimi zaman zaman suçlu hissediyorum
- c) Çoğu zaman kendimi suçlu hissediyorum
- d) Kendimi her zaman suçlu hissediyor

6.

- a) Başkalarından daha kötü olduğumu sanmıyorum
- b) Zayıf yanlarım veya hatalarım için kendi kendimi eleştiririm
- c) Hatalarımdan dolayı her zaman kendimi kabahatli bulurum.
- d) Her aksilik karşısında kendimi kabahatli bulurum.

7.

- a) Kendimden memnunum.
- b) Kendi kendimden pek memnun değilim.
- c) Kendime çok kızıyorum
- d) Kendimden nefret ediyorum

8.

- a) Kendimi öldürmek gibi düşüncelerim yok.
- b) Zaman zaman kendimi öldürmeyi düşündüğüm oluyor, fakat yapmıyorum
- c) Kendimi öldürmek isterdim
- d) Fırsatını bulsam kendimi öldürürüm

9.

- a) Her zamankinden fazla içimden ağlamak gelmiyor.
- b) Zaman zaman içimden ağlamak geliyor.
- c) Çoğu zaman ağlıyorum.
- d) Eskiden ağlayabilirdim şimdi istesem de ağlayamıyorum.

10.

- a) Şimdi her zaman olduğumdan sinirli değilim.
- b) Eskisine kıyasla daha kolay kızıyorum.
- c) Şimdi hep sinirliyim.
- d) Bir zamanlar beni sinirlendiren şeyler şimdi hiç sinirlendirmiyor.

11.

- a) Başkaları ile görüşmek, konuşmak isteğimi kaybetmedim.
- b) Başkaları ile eskisinden daha az konuşmak, görüşmek istiyorum.
- c) Başkaları ile konuşma ve görüşme isteğimi kaybettim
- d) Hiç kimseyle görüşüp, konuşmak istemiyorum

12.

- a) Eskiden olduğu kadar kolay karar verebiliyorum.
- b) Eskiden olduğu kadar kolay karar veremiyorum.
- c) Karar verirken eskisine kıyasla çok güçlük çekiyorum.
- d) Artık hiç karar veremiyorum.

13.

- a) Aynada kendime baktığımda bir değişiklik görmüyorum.
- b) Daha yaşlanmışım ve çirkinleşmişim gibi geliyor.
- c) Görünüşümün çok değiştiğini ve daha çirkinleştiğimi hissediyorum.
- d) Kendimi çok çirkin buluyorum.

14.

- a) Eskisi kadar iyi çalışabiliyorum
- b) Birşeyler yapamak için gayret göstermek gerekiyor
- c) Herhangi birşeyi yapabilmek için kendimi çok zorlamama gerekiyor
- d) Hiçbir şey yapamıyorum

15.

- a) Her zamanki gibi iyi uyuyabiliyorum.
- b) Eskiden olduğu gibi iyi uyuyamıyorum.
- c) Her zamankinden bir-iki saat daha erken uyanıyorum ve tekrar uyuyamıyorum.
- d) Her zamankinden çok daha erken uyanıyorum ve tekrar uyuyamıyorum.

16.

- a) Her zamankinden daha çabuk yorulmuyorum.
- b) Her zamankinden daha çabuk yoruluyorum.
- c) Yaptığım hemen herşey beni yoruyor.
- d) Kendimi hiçbir şey yapamayacak kadar yorgun hissediyorum.

17.

- a) İştahım her zamanki gibi
- b) İştahım eskisi kadar iyi değil
- c) İştahım çok azaldı.
- d) Artık hiç iştahım yok.

18.

- a) Son zamanlarda kilo vermedim.
- b) İki kilodan fazla kilo verdim.
- c) Dört kilodan fazla kilo verdim.
- d) Altı kilodan fazla kilo verdim.

19.

- a) Sağlığım beni fazla endişelendirmiyor.
- b) Ağrı, sancı, mide bozukluğu veya kabızlık gibi rahatsızlıklar beni endişelendiriyor.
- c) Sağlığım beni endişelendirdiği için başka şeyler düşünmek zorlaşıyor.
- d) Sağlığım hakkında o kadar endişeliyim ki, başka hiçbir şey düşünemiyorum.

20.

- a) Son zamanlarda cinsel konulara olan ilgimde bir deęişme farketmedim
- b) Cinsel konularda eskisinden daha az ilgiliyim.
- c) Cinsel konularda Őimdi ok daha az ilgiliyim.
- d) Cinsel konulara olan ilgimi tamamen kaybettim.

21.

- a) Bana cezalandırılmışım gibi gelmiyor.
- b) Cezalandırılabilceęimi seziyorum.
- c) Cezalandırılmayı bekliyorum.
- d) Cezalandırıldığımı hissediyorum.

SELF-AMBIVALENCE MEASURE (SAM)

Lütfen her bir maddeyi okuduktan sonra, o maddede belirtilen fikre katılma derecenizi 4 (Tamamen Katılıyorum) ve 0 (Hiç Katılmıyorum) arasında değişen rakamlardan size uygun olanını işaretleyerek belirtiniz.

Hiç Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Tamamen Katılıyorum	
0	1	2	3	4	
1. Diğer insanların beni gerçekten sevdiklerinden şüphe duyarım.	0	1	2	3	4
2. Kendi değerimle ilgili özgüvenim vardır.	0	1	2	3	4
3. Kendimi kişiliğimin farklı yönleri arasında dağılmış hissederim.	0	1	2	3	4
4. Korkunç bir şey yapabileceğimden korkarım.	0	1	2	3	4
5. İnsan olarak kendi değerim hakkında düşünürüm.	0	1	2	3	4
6. Sürekli olarak diğerlerinin beni nasıl algıladıklarını düşünürüm.	0	1	2	3	4
7. Çelişkilerle dolu olduğumu hissederim..	0	1	2	3	4
8. Diğerlerinin bana yakın olmayı ne kadar istediklerini sorgularım.	0	1	2	3	4
9. Kendimi “iyi” ya da “kötü” gibi kategorilere koyarak düşünme eğilimindeyim.	0	1	2	3	4
10. Kendi öz-değerimle ilgili karışık duygularım vardır.	0	1	2	3	4
11. Ahlaklı bir insan olup olmadığımı sorgularım.	0	1	2	3	4
12. Kendimi nasıl geliştirebileceğimi düşünürüm.	0	1	2	3	4
13. Eğer istemeden de olsa başkalarına zarar gelmesine izin verirsem, bu benim güvenilmez biri olduğumu kanıtlar.	0	1	2	3	4
14. Kendimle ilgili düşüncelerimde bir uçtan diğerine kayma eğilimindeyim.	0	1	2	3	4
15. Diğer insanlar tarafından nasıl görüldüğüme dikkat ederim..	0	1	2	3	4
16. Düzgün bir insan olup olmadığım konusu,sürekli zihnimi meşgul eder.	0	1	2	3	4
17. İyi mi yoksa kötü bir insan mı olduğum konusunda sürekli olarak kaygılanırım.	0	1	2	3	4
18. Ahlaki açıdan iyi ya da kötü bir insan olup olmadığımı sorgularım .	0	1	2	3	4
19. Hayatta bir yerlere gelip gelemeyeceğim konusunda sürekli endişelenirim	0	1	2	3	4

BECK ANXIETY INVENTORY (BAI)

Aşağıda insanların kaygılı ya da endişeli oldukları zamanlarda yaşadıkları bazı belirtiler verilmiştir., Lütfen her maddeyi dikkatle okuyunuz. Daha sonra, her maddedeki belirtinin **BUGÜN DAHİL SON BİR HAFTADIR** sizi ne kadar rahatsız ettiğini yandaki uygun yere (x) işareti koyarak belirleyiniz.

	Hiç (0)	Hafif Düzeyde (1)	Orta Düzeyde (2)	Ciddi (3)
1. Bedeninizin herhangi bir yerinde uyuşma veya				
2. Sıcak / ateş basmaları				
3. Bacaklarda halsizlik, titreme				
4. Gerginlik, Gevşeyememe				
5. Çok kötü şeyler olacak korkusu				
6. Baş dönmesi veya sersemlik				
7. Kalp çarpıntısı				
8. Dengenizi kaybetme duygusu				
9. Dehşete, korkuya kapılma				
10. Sinirlilik				
11. Boğuluyormuş gibi olma				
12. Ellerde titreme				

	Hiç (0)	Hafif Düzye (1)	Orta Düzye (2)	Ciddi (3)
13. Titreklik, huzursuzluk				
14. Kontrolü kaybetme korkusu				
15. Nefes almada güçlük				
16. Ölüm korkusu				
17. Korku içinde olma hissi				
18. Midede hazımsızlık ya da rahatsızlık hissi				
19. Baygınlık hissi				
20. Yüz kızarması				
21. Terleme (sıcaklığa bağlı olmayan)				

**EYSENCK PERSONALITY QUESTIONNAIRE-REVISED &
ABBREVIATED (EPQR-A)**

Yönerge: Lütfen aşağıdaki her bir soruyu, 'Evet' yada 'Hayır'ı yuvarlak içine alarak cevaplayınız. Doğru veya yanlış cevap ve çeldirici soru yoktur. Hızlı cevaplayınız ve soruların tam anlamları ile ilgili çok uzun düşünmeyiniz.

1. Duygu durumunuz sıklıkla mutlulukla mutsuzluk arasında	Evet	Hayır
2. Konuşkan bir kişi misiniz?	Evet	Hayır
3. Borçlu olmak sizi endişelendirir mi?	Evet	Hayır
4. Oldukça canlı bir kişi misiniz?	Evet	Hayır
5. Hiç sizin payınıza düşenden fazlasını alarak açgözlülük yaptığınız	Evet	Hayır
6. Garip yada tehlikeli etkileri olabilecek ilaçları kullanır	Evet	Hayır
7. Aslında kendi hatanız olduğunu bildiğiniz birşeyi yapmakla hiç başka	Evet	Hayır
8. Kurallara uymak yerine kendi bildiğiniz yolda gitmeyi mi tercih	Evet	Hayır
9. Sıklıkla kendinizi her şeyden bıkmış hisseder misiniz?	Evet	Hayır
10. Hiç başkasına ait olan bir şeyi (toplu iğne veya düğme bile olsa)	Evet	Hayır
11. Kendinizi sinirli bir kişi olarak tanımlar mısınız?	Evet	Hayır
12. Evliliğin modası geçmiş ve kaldırılması gereken bir şey olduğunu	Evet	Hayır
13. Oldukça sıkıcı bir partiye kolaylıkla canlılık getirebilir	Evet	Hayır
14. Kaygılı bir kişi misiniz?	Evet	Hayır
15. Sosyal ortamlarda geri planda kalma eğiliminiz var	Evet	Hayır
16. Yaptığınız bir işte hatalar olduğunu bilmeniz sizi	Evet	Hayır
17. Herhangi bir oyunda hiç hile yaptınız mı?	Evet	Hayır

18. Sınırlarınızdan şikayetçi misiniz?	Evet	Hayır
19. Hiç başka birini kendi yararınıza kullandınız mı?	Evet	Hayır
20. Başkalarıyla birlikte iken çoğunlukla sessiz misinizdir?	Evet	Hayır
21. Sık sık kendinizi yalnız hisseder misiniz?	Evet	Hayır
22. Toplum kurallarına uymak, kendi bildiğinizi yapmaktan daha mı iyidir?	Evet	Hayır
23. Diğer insanlar sizi çok canlı biri olarak düşünürler mi?	Evet	Hayır
24. Başkasına önerdiğiniz şeyleri kendiniz her zaman	Evet	Hayır

ROSENBERG SELF-ESTEEM SCALE (RSES)

Aşağıda 10 ifade yer almaktadır. Yine aşağıdaki 1-4'lü ölçeği kullanarak, her bir maddeye ne kadar katıldığınızı gösteren rakamı yuvarlak içine alarak belirtiniz. Cevaplarınızda lütfen açık ve dürüst olunuz. 4'lü ölçek şöyledir:

1 = Tamamen katılıyorum

2 = Katılıyorum

3 = Katılmıyorum

4 = Tamamen Katılmıyorum

1. Kendimi en az diğer insanlar kadar değerli buluyorum	1	2	3	4
2. Birçok olumlu özelliğimin olduğunu düşünüyorum	1	2	3	4
3. Genelde kendimi başarısız bir kişi olarak görme eğilimindeyim	1	2	3	4
4. Bende çoğu insan gibi işleri iyi yapabilirim	1	2	3	4
5. Kendimle gurur duyacak fazla birşey bulamıyorum	1	2	3	4
6. Kendime karşı olumlu bir tutum içindeyim	1	2	3	4
7. Genel olarak kendimden memnunum	1	2	3	4
8. Kendime karşı daha fazla saygı duyabilmeyi isterdim	1	2	3	4
9. Bazı zamanlar, kesinlikle bir işe yaramadığımı düşünüyorum	1	2	3	4
10. Bazı zamanlar, hiç yeterli biri olmadığımı düşünüyorum	1	2	3	4

SHORT-EMBU (EGNA MINNEN BETTRAFENDE UPPFOSTRAN- MY MEMORIES OF UPBRINGING)

Aşağıda çocukluğunuz ile ilgili bazı ifadeler yer almaktadır.

Anketi doldurmadan önce aşağıdaki yönergeyi lütfen dikkatle okuyunuz:

1. Anketi doldururken, anne ve babanızın size karşı olan davranışlarını nasıl algıladığınızı hatırlamaya çalışmanız gerekmektedir. Anne ve babanızın çocukken size karşı davranışlarını tam olarak hatırlamak bazen zor olsa da, her birimizin çocukluğumuzda anne ve babamızın kullandıkları prensiplere ilişkin bazı anılarımız vardır.
2. Her bir soru için anne ve babanızın size karşı davranışlarına uygun seçeneği yuvarlak içine alın. Her soruyu dikkatlice okuyun ve muhtemel cevaplardan hangisinin sizin için uygun cevap olduğuna karar verin. Soruları anne ve babanız için ayrı ayrı cevaplayın.

Örneğin;

Annem ve babam bana iyi davranırlardı

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

1. Anne ve babam, nedenini söylemeden bana kızarlardı ya da ters davranırlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

2. Anne ve babam beni överlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

3. Anne ve babamın yaptıklarım konusunda daha az endişeli olmasını isterdim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

4. Anne ve babam bana hak ettiğimden daha çok fiziksel ceza verirlerdi

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

5. Eve geldiğimde, anne ve babama ne yaptığının hesabını vermek zorundaydım.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

6. Anne ve babam ergenliğimin uyarıcı, ilginç ve eğitici olması için çalışırlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

7. Anne ve babam, beni başkalarının önünde eleştirirlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

8. Anne ve babam, bana birşey olur korkusuyla başka çocukların yapmasına izin verilen şeyleri yapmamı yasaklardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

9. Anne ve babam, herşeyde en iyi olmam için beni teşvik ederlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

10. Anne ve babam davranışları ile, örneğin üzgün görünerek, onlara kötü davrandığım için kendimi suçlu hissetmeme neden olurlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

11. Anne ve babamın bana birşey olacağına ilişkin endişeleri abartılıydı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

12. Benim için birşeyler kötü gittiğinde, anne ve babamın beni rahatlatmata ve yüreklendirmeye çalıştığını hissettim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

13. Bana ailenin “yüz karası” ya da “günah keçisi” gibi davranılırdı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

14. Anne ve babam, sözleri ve hareketleriyle beni sevdiklerini gösterirlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

15. Anne ve babamın, erkek ya da kız kardeşimi(lerimi) beni sevdiklerinden daha çok sevdiklerini hissedirdim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

16. Anne ve babam, kendimden utanmama neden olurlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

17. Anne ve babam, pek fazla umursamadan, istediğim yere gitmeme izin verirlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

18. Anne ve babamın, yaptığım herşeye karıştıklarını hissedirdim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

19. Anne ve babamla, aramda sıcaklık ve sevecenlik olduğunu hissedirdim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

20. Anne ve babam, yapabileceklerim ve yapamayacaklarımla ilgili kesin sınırlar koyar ve bunlara titizlikle uyarlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

21. Anne ve babam, küçük kabahatlarım için bile beni cezalandırırlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

22. Anne ve babam, nasıl giyinmem ve görünmem gerektiği konusunda karar vermek isterlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

23. Yaptığım birşeyde başarılı olduğumda, anne ve babamın benimle gurur duyduklarını hissedirdim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

APPENDIX B: MAIN STUDY- QUESTIONNAIRES

INFORMED CONSENT FORM

Bu çalışma, Orta Doğu Teknik Üniversitesi Psikoloji Bölümü, Klinik Psikoloji Doktora öğrencisi Filiz Özekin-Üncüler tarafından, Psikoloji Bölümü öğretim üyelerinden Prof. Dr. Nuray Karancı'nın danışmanlığında, tez çalışması kapsamında yürütülmektedir ve katılım gönüllülük esasına dayanmaktadır. Ankette, sizden kimlik belirleyici hiçbir bilgi istenmemektedir. Cevaplarınız tamamıyla gizli tutulacak ve sadece araştırmacılar tarafından değerlendirilecektir; elde edilecek bilgiler bilimsel yayımlarda kullanılacaktır.

Araştırma sonuçlarının sağlıklı olabilmesi için verdiğiniz yanıtlarda samimi olmanız büyük önem arz etmektedir. Soruların başındaki yönergeleri okuyunuz ve size en uygun seçeneği işaretleyiniz. Sorular için doğru ya da yanlış cevap yoktur. Önemli olan sizin neler hissettiginiz ve düşündüğünüzdür. Anket, genel olarak kişisel rahatsızlık verecek soruları içermemektedir. Ancak, katılım sırasında sorulardan ya da herhangi başka bir nedenden ötürü kendinizi rahatsız hissederseniz cevaplama işini yarıda bırakabilirsiniz. Böyle bir durumda anketi uygulayan kişiye, anketi tamamlamadığınızı söylemek yeterli olacaktır. Anket sonunda, bu çalışmayla ilgili sorularınız cevaplanacaktır. Bu çalışmaya katıldığınız için şimdiden teşekkür ederiz. Çalışma hakkında daha fazla bilgi almak için Psikoloji Bölümü öğretim üyelerinden Prof. Dr. Nuray Karancı (Oda: B214; Tel: 210 3127; e-posta: karanci@metu.edu.tr) ya da Filiz Özekin-Üncüler (Tel: 0535680535; e-posta: ozekin86@yahoo.com) ile iletişim kurabilirsiniz. Katkılarınızdan dolayı teşekkür ederiz.

DEMOGRAPHICAL INFORMATION FORM

1. Cinsiyetiniz: () Kadın () Erkek
2. Yaşınız:
3. Medeni Durumunuz : Evli () Bekar () Boşanmış () Dul ()
4. Meslek:
5. Eğitim Durumunuz: İlköğretim () Lise () Lisans () Yüksek Lisans () Doktora ()
6. Eğitime devam ediliyorsa, devam edilmekte olunan Bölüm/ Sınıf:
7. Çalışıyor musunuz: () Evet (kaç senedir/ hangi işte):/ () Hayır
8. Siz dahil kaç kardeşiniz:
9. Siz kaçınca çocuksunuz:
10. Annenizin eğitim düzeyi: () Okuma-yazma bilmiyor () Okur-yazar () İlkokul () Ortaokul () Lise () Üniversite () Üniversite üzeri
11. Babanızın eğitim düzeyi: () Okuma-yazma bilmiyor () Okur-yazar () İlkokul () Ortaokul () Lise () Üniversite () Üniversite üzeri

12. Ailenizin gelir düzeyi:

- Yüksek Orta Düşük

13. Yaşamınızın çoğunu geçirdiğiniz yer:

- Büyük Şehir (İstanbul/Ankara/İzmir)
 Şehir
 Kasaba
 Köy

14. Şu an yaşadığınız yer:

- Aileyle/Akrabalarla birlikte
 Arkadaşlarla evde
 Tek başıma evde
 Yurtta
 Diğer:

15. Bugüne kadar herhangi bir psikiyatrik tanı aldınız mı:

- Evet (belirtiniz): Hayır ()

16. Şu an herhangi bir psikiyatrik ya da psikolojik destek alıyor musunuz?

- Evet Hayır ()

17. 16. Soruya cevabınız evet ise; tedavi türünüzü şu anki tedavi türünüzü belirtiniz.

- Psikoterapi (Ne kadar süredir):
 İlaç tedavisi (belirtiniz):
 Hem psikoterapi hem ilaç tedavisi

**TURKISH VERSION OF THE SELF-AMBIVALENCE MEASURE
(SAM-T)**

Lütfen her bir maddeyi okuduktan sonra, o maddede belirtilen fikre katılma derecenizi 4 (Tamamen Katılıyorum) ve 0 (Hiç Katılmıyorum) arasında değişen rakamlardan size uygun olanını işaretleyerek belirtiniz.

Hiç Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Tamamen Katılıyorum	
0	1	2	3	4	
1. Diğer insanların beni gerçekten sevdiklerinden şüphe duyarım	0	1	2	3	4
2. Değerli olduğum konusunda endişelerim vardır	0	1	2	3	4
3. Kendimi kişiliğimin farklı yönleri arasında dağılmış hissedirim	0	1	2	3	4
4. Korkunç bir şey yapabileceğimden korkarım	0	1	2	3	4
5. İnsan olarak kendi değerim hakkında düşünürüm	0	1	2	3	4
6. Sürekli olarak diğerlerinin beni nasıl algıladıklarını düşünürüm	0	1	2	3	4
7. Çelişkilerle dolu olduğumu hissedirim	0	1	2	3	4
8. Diğerlerinin bana yakın olmayı ne kadar istediklerini sorgularım	0	1	2	3	4
9. Kendimi “iyi” ya da “kötü” gibi kategorilere koyarak düşünme eğilimindeyim	0	1	2	3	4
10. Kendi öz-değerimle ilgili karışık duygularım vardır	0	1	2	3	4
11. Ahlaklı bir insan olup olmadığımı sorgularım	0	1	2	3	4
12. Kendimi yeteri kadar geliştirdim mi diye sürekli düşünürüm	0	1	2	3	4
13. Eğer istemeden de olsa başkalarına zarar gelmesine izin verirsem, bu benim güvenilmez biri olduğumu kanıtlar	0	1	2	3	4
14. Kendimle ilgili düşüncelerimde bir uçtan diğerine kayma eğilimindeyim	0	1	2	3	4
15. Diğer insanlar tarafından nasıl görüldüğüme dikkat ederim	0	1	2	3	4
16. Düzgün bir insan olup olmadığım konusu,sürekli zihnimi meşgul eder	0	1	2	3	4
17. İyi mi yoksa kötü mü bir insan olduğum konusunda sürekli olarak kaygılanırım	0	1	2	3	4
18. Ahlaki açıdan iyi ya da kötü bir insan olup olmadığımı sorgularım	0	1	2	3	4
19. Hayatta bir yerlere gelip gelemeyeceğim konusunda sürekli endişelenirim	0	1	2	3	4

EMOTION REGULATION QUESTIONNAIRE

Lütfen her maddeyi okuduktan sonra, o maddede belirtilen fikre katılma derecenizi

7 (*Tamamen Katılıyorum*) ve 1 (*Hiç Katılmıyorum*) arasında değişen rakamlardan size uygun olanını işaretleyerek belirtiniz.

1 - Hiç Katılmıyorum, 2 - Katılmıyorum, 3 - Biraz katılmıyorum, 4 - Kararsızım, 5 - Biraz katılıyorum, 6 - Katılıyorum, 7 - Tamamen Katılıyorum

	Hiç Katılmıyorum						Tamamen Katılıyorum
1- İçinde bulunduğum duruma göre düşünme şeklini değiştirerek duygularımı kontrol ederim.	1	2	3	4	5	6	7
2- Olumsuz duygularımın az olmasını istersem, durumla ilgili düşünme şeklimi değiştiririm.	1	2	3	4	5	6	7
3- Olumlu duygularımın fazla olmasını istediğim zaman duruma ilgili düşünme şeklimi değiştiririm.	1	2	3	4	5	6	7
4- Olumlu duygularımın fazla olmasını istersem (mutluluk veya eğlence) düşündüğüm şeyi değiştiririm.	1	2	3	4	5	6	7
5- Olumsuz duygularımın az olmasını istersem (kötü hissetme veya kızgınlık gibi) düşündüğüm şeyi değiştiririm.	1	2	3	4	5	6	7
6- Stresli bir durumla karşılaştığımda, bu durumu sakin kalmamı sağlayacak şekilde düşünmeye çalışırım.	1	2	3	4	5	6	7
7- Duygularımı ifade etmeyerek kontrol ederim.	1	2	3	4	5	6	7
8- Olumsuz duygular hissettiğimde onları ifade etmediğimden emin olmak isterim	1	2	3	4	5	6	7
9- Duygularımı kendime saklarım.	1	2	3	4	5	6	7
10- Olumlu duygular hissettiğimde onları ifade etmemeye dikkat ederim	1	2	3	4	5	6	7

**REVISED VERSION OF THE OBSESSIVE-COMPULSIVE BELIEFS
QUESTIONNAIRE (OBQ-44)**

Bu envanterde, insanların zaman zaman takındıkları bir dizi tutum ve inanış sıralanmıştır. Her bir ifadeyi dikkatlice okuyunuz ve ifadeye ne kadar katılıp katılmadığınızı belirtiniz.

Her bir ifade için, nasıl düşündüğünüzü en iyi tanımlayan cevaba karşılık gelen rakamı seçiniz. İnsanlar birbirinden farklı olduğu için envanterde doğru veya yanlış cevap yoktur.

Sunulan ifadenin, tipik olarak yaşama bakış açınız yansıtıp yansıtmadığına karar vermek için sadece çoğu zaman nasıl olduğunuzu göz önünde bulundurunuz.

Derecelendirme için aşağıdaki ölçeği kullanınız:

1	2	3	4	5	6	7
Kesinlikle Katılmıyorum	Katılmıyorum	Biraz Katılmıyorum	Ne katılıyorum Ne katılmıyorum	Biraz Katılıyorum	Katılıyorum	Tamamen Katılıyorum

Derecelendirme yaparken, ölçekteki orta değeri işaretlemekten (4) kaçınmaya çalışınız; bunun yerine, inanış ve tutumlarınızla ilgili ifadeye genellikle katılıp katılmadığınızı belirtiniz.

1. Sıklıkla çevremdeki şeylerin tehlikeli olduğunu düşünürüm	1	2	3	4	5	6	7
2. Birşeyden tamamıyla emin değilsem, kesin hata yaparım?	1	2	3	4	5	6	7
3. Benim standartlarıma göre, herşey mükemmel olmalıdır	1	2	3	4	5	6	7
4. Değerli biri olmam için yaptığım herşeyde mükemmel olmalıyım	1	2	3	4	5	6	7
5. Herhangi bir fırsat bulduğumda, olumsuz şeylerin gerçekleşmesini önlemek için harekete geçmeliyim	1	2	3	4	5	6	7
6. Zarar verme/görme olasılığı çok az olsa bile, bedeli ne olursa olsun onu engellemeliyim	1	2	3	4	5	6	7
7. Bana göre, kötü/uygunsuz dürtülere sahip olmak aslında onları gerçekleştirmek kadar kötüdür	1	2	3	4	5	6	7

8. Bir tehlikeyi önceden görmeme karşın bir harekette bulunmazsam, herhangi bir sonuç için suçlanacak kişi konumuna ben düşerim.	1	2	3	4	5	6	7
9. Birşeyi mükemmel biçimde yapamayacaksam hiç yapmamalıyım.	1	2	3	4	5	6	7
10. Her zaman sahip olduğum tüm potansiyelimi kullanmalıyım.	1	2	3	4	5	6	7
11. Benim için, bir durumla ilgili tüm olası sonuçları düşünmek çok önemlidir	1	2	3	4	5	6	7
12. En ufak hatalar bile, bir işin tamamlanmadığı anlamına gelir	1	2	3	4	5	6	7
13. Sevdiğim insanlarla ilgili saldırgan düşüncelerim veya dürtülerim varsa, bu gizlice onları incitmeyi istediğim anlamına gelir.	1	2	3	4	5	6	7
14. Kararlarımdan emin olmalıyım.	1	2	3	4	5	6	7
15. Her türlü günlük aktivitede, zarar vermeyi engellemede başarısız olmak kasten zarar vermek kadar kötüdür.	1	2	3	4	5	6	7
16. Ciddi problemlerden (örneğin, hastalık veya kazalar) kaçınmak, benim açımdan sürekli bir çaba gerektirir.	1	2	3	4	5	6	7
17. Benim için, zararı önlememek zarar vermek kadar kötüdür.	1	2	3	4	5	6	7
18. Bir hata yaparsam üzüntülü olmalıyım.	1	2	3	4	5	6	7
19. Diğerlerinin, kararlarım veya davranışlarımdan doğan herhangi bir olumsuz sonuçtan korunduğundan emin olmalıyım.	1	2	3	4	5	6	7
20. Benim için, herşey mükemmel olmazsa işler yolunda sayılmaz.	1	2	3	4	5	6	7
21. Müstehcen düşüncelerin aklımdan geçmesi çok kötü bir insan olduğum anlamına gelir.	1	2	3	4	5	6	7
22. İlave önlemler almazsam, ciddi bir felaket yaşama veya felakete neden olma ihtimalim, diğer insanlara kıyasla daha fazladır.	1	2	3	4	5	6	7
23. Kendimi güvende hissetmek için, yanlış gidebilecek herhangi bir şeye karşı olabildiğince hazırlıklı olmalıyım.	1	2	3	4	5	6	7
24. Tuhaf veya iğrenç düşüncelerim olmamalı.	1	2	3	4	5	6	7
25. Benim için, bir hata yapmak tamamen başarısız olmak kadar kötüdür.	1	2	3	4	5	6	7
26. En önemsiz konularda bile herşey açık ve net olmalıdır.	1	2	3	4	5	6	7
27. Din karşıtı bir düşünceye sahip olmak, kutsal şeylere karşı saygısız davranmak kadar kötüdür.	1	2	3	4	5	6	7

28. Zihnimdeki tüm istenmeyen düşüncelerden kurtulabilmeliyim.	1	2	3	4	5	6	7
29. Diğer insanlara kıyasla, kendime veya başkalarına kazara zarar vermem daha muhtemeldir.	1	2	3	4	5	6	7
30. Kötü düşüncelere sahip olmak tuhaf veya anormal biri olduğum anlamına gelir.	1	2	3	4	5	6	7
31. Benim için önemli olan şeylerde en iyi olmalıyım.	1	2	3	4	5	6	7
32. İstenmeyen bir cinsel düşünce veya görüntünün aklıma gelmesi onu gerçekten yapmak istediğim.	1	2	3	4	5	6	7
33. Davranışlarımın olası bir aksilik üzerinde en küçük bir etkisi varsa sonuçtan ben sorumluyum demektir.	1	2	3	4	5	6	7
34. Dikkatli olsam da kötü şeylerin olabileceğini sıklıkla düşünürüm.	1	2	3	4	5	6	7
35. İstenmeyen biçimde zihnimde beliren düşünceler, kontrolü kaybettiğim anlamına gelir.	1	2	3	4	5	6	7
36. Dikkatli olmadığım takdirde zarar verici hadiseler yaşanabilir.	1	2	3	4	5	6	7
37. Birşey tam anlamıyla doğru yapıncaya kadar üzerinde çalışmaya devam etmeliyim.	1	2	3	4	5	6	7
38. Şiddet içerikli düşüncelere sahip olmak, kontrolü kaybedeceğim ve şiddet göstereceğim anlamına gelir.	1	2	3	4	5	6	7
39. Benim için bir felaketi önlemekte başarısız olmak ona sebep olmak kadar kötüdür.	1	2	3	4	5	6	7
40. Bir işi mükemmel biçimde yapmazsam insanlar bana saygı duymaz.	1	2	3	4	5	6	7
41. Yaşamımdaki sıradan deneyimler bile tehlike doludur.	1	2	3	4	5	6	7
42. Kötü bir düşünceye sahip olmak, ahlaki açıdan kötü bir şekilde davranmaktan çok da farklı değildir.	1	2	3	4	5	6	7
43. Ne yaparsam yapayım, yaptığım iş yeterince iyi olmayacaktır.	1	2	3	4	5	6	7
44. Düşüncelerimi kontrol edemezsem cezalandırılıyorum.	1	2	3	4	5	6	7

SHORT-EMBU (MY MEMORIES OF UPBRINGING)

Aşağıda çocukluğunuz ile ilgili bazı ifadeler yer almaktadır.

Anketi doldurmadan önce aşağıdaki yönergeyi lütfen dikkatle okuyunuz:

1. Anketi doldururken, anne ve babanızın size karşı olan davranışlarını nasıl algıladığınızı hatırlamaya çalışmanız gerekmektedir. Anne ve babanızın çocukken size karşı davranışlarını tam olarak hatırlamak bazen zor olsa da, her birimizin çocukluğumuzda anne ve babamızın kullandıkları prensiplere ilişkin bazı anılarımız vardır.
2. Her bir soru için anne ve babanızın size karşı davranışlarına uygun seçeneği yuvarlak içine alın. Her soruyu dikkatlice okuyun ve muhtemel cevaplardan hangisinin sizin için uygun cevap olduğuna karar verin. Soruları anne ve babanız için ayrı ayrı cevaplayın.

Örneğin;

Annem ve babam bana iyi davranırlardı

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

1. Anne ve babam, nedenini söylemeden bana kızarlardı ya da ters davranırlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

2. Anne ve babam beni överlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

3. Anne ve babamın yaptıklarım konusunda daha az endişeli olmasını isterdim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

4. Anne ve babam bana hak ettiğimden daha çok fiziksel ceza verirlerdi

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

5. Eve geldiğimde, anne ve babama ne yaptığımın hesabını vermek zorundaydım.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

6. Anne ve babam ergenliğimın uyarıcı, ilginç ve eğitici olması için çalışırlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

7. Anne ve babam, beni başkalarının önünde eleştirirlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

8. Anne ve babam, bana birşey olur korkusuyla başka çocukların yapmasına izin verilen şeyleri yapmamı yasaklardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

9. Anne ve babam, herşeyde en iyi olmam için beni teşvik ederlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

10. Anne ve babam davranışları ile, örneğin üzgün görünerek, onlara kötü davrandığım için kendimi suçlu hissetmeme neden olurlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

11. Anne ve babamın bana birşey olacağına ilişkin endişeleri abartılıydı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

12. Benim için birşeyler kötü gittiğinde, anne ve babamın beni rahatlatmata ve yüreklendirmeye çalıştığını hissettim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

13. Bana ailenin “yüz karası” ya da “günah keçisi” gibi davranılırdı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

14. Anne ve babam, sözleri ve hareketleriyle beni sevdiklerini gösterirlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

15. Anne ve babamın, erkek ya da kız kardeşimi(lerimi) beni sevdiklerinden daha çok sevdiklerini hissedirdim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

16. Anne ve babam, kendimden utanmama neden olurlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

17. Anne ve babam, pek fazla umursamadan, istediğim yere gitmeme izin verirlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

18. Anne ve babamın, yaptığım herşeye karıştıklarını hissedirdim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

19. Anne ve babamla, aramda sıcaklık ve sevecenlik olduğunu hissedirdim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

20. Anne ve babam, yapabileceklerim ve yapamayacaklarımla ilgili kesin sınırlar koyar ve bunlara titizlikle uyarlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

21. Anne ve babam, küçük kabahatlarım için bile beni cezalandırırlardı.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

22. Anne ve babam, nasıl giyinmem ve görünmem gerektiği konusunda karar vermek isterlerdi.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

23. Yaptığım birşeyde başarılı olduğumda, anne ve babamın benimle gurur duyduklarını hissedirdim.

	Hayır, hiçbir zaman	Evet, arada sırada	Evet, sık sık	Evet, çoğu zaman
Baba	1	2	3	4
Anne	1	2	3	4

PADUA INVENTORY- Washington State University Revision (PI-WSUR)

Aşağıda ifadeler, günlük hayatta herkesin karşılaşılabileceği düşünce ve davranışlar ile ilgilidir. Her bir ifade için, bu tür düşünce ve davranışların sizde yaratacağı rahatsızlık düzeyini göz önüne alarak size en uygun olan cevabı seçiniz.

Cevaplarınızı aşağıdaki gibi derecelendiriniz:

0 = Hiç 1 = Biraz 2 = Oldukça 3 = Çok 4 = Çok Fazla

	Hiç	Biraz	Oldukça	Çok	Çok Fazla
1. Paraya dokunduğum zaman ellerimin kirlendiğini hissedirim.	0	1	2	3	4
2. Vücut sıvıları (ter, tükürük, idrar gibi) ile en ufak bir temasın bile giysilerimi kirleteceğini düşünürüm.	0	1	2	3	4
3. Bir nesneye yabancıların yada bazı kimselerin dokunduğunu biliyorsam, ona dokunmakta zorlanırım.	0	1	2	3	4
4. Çöplere veya kirli şeylere dokunmakta zorlanırım.	0	1	2	3	4
5. Kirlenmekten ya da hastalanmaktan korktuğum için umumi tuvaletleri kullanmakta kaçınırım.	0	1	2	3	4
6. Hastalıklardan veya kirlenmekten korktuğum için umumi telefonları kullanmaktan kaçınırım.	0	1	2	3	4
7. Ellerimi gerektiğinden daha sık ve daha uzun süre yıkarım.	0	1	2	3	4
8. Bazen kendimi, sırf kirlenmiş olabileceğim ya da pis olduğum düşüncesiyle yıkanmak ya da temizlenmek zorunda hissediyorum.	0	1	2	3	4
9. Mikrop bulaşmış veya kirli olduğunu düşündüğüm bir şeye dokunursam hemen yıkanmam veya temizlenmem gerekir.	0	1	2	3	4
10. Bir hayvan bana değerse kendimi kirli hissedirim ve hemen yıkanmam yada elbiselerimi değiştirmem gerekir.	0	1	2	3	4
11. Giyinirken, soyunurken ve yıkanırken kendimi belirli bir sıra izlemek zorunda hissedirim.	0	1	2	3	4
12. Uyumadan önce bazı şeyleri belli bir sırayla yapmak zorundayım.	0	1	2	3	4

13. Yatmadan önce, kıyafetlerimi özel bir şekilde asmalı yada katlamalıyım.	0	1	2	3	4
14. Doğru dürüst yapıldığını düşünmem için yaptıklarımı bir kaç kez tekrarlamam gerekir.	0	1	2	3	4
15. Bazı şeyleri gereğinden daha sık kontrol etme eğilimindeyim.	0	1	2	3	4
16. Gaz ve su musluklarını, elektrik düğmelerini kapattıktan sonra tekrar tekrar kontrol ederim.	0	1	2	3	4
17. Düzgün kapatılıp kapatılmadıklarından emin olmak içineve dönüp kapıları, pencereleri ve çekmeceleri kontrol ederim.	0	1	2	3	4
18. Doğru doldurduğumdan emin olmak için formları, evrakları, ve çekleri ayrıntılı olarak tekrar tekrar kontrol ederim.	0	1	2	3	4
19. Kibrit, sigara vb'nin iyice söndürüldüğünü görmek için sürekli geri dönerim.	0	1	2	3	4
20. Elime para aldığım zaman birkaç kez tekrar sayarım.	0	1	2	3	4
21. Mektupları postalamadan önce bir çok kez dikkatlice kontrol ederim.	0	1	2	3	4
22. Aslında yaptığımı bildiğim halde, bazen yapmış olduğumdan emin olamam.	0	1	2	3	4
23. Okurken, önemli bir şeyi kaçırdığımdan dolayı geri dönmem, ve aynı pasajı iki veya üç kez okumam gerektiği izlenimine kapılırım.	0	1	2	3	4
24. Dalgınlığının ve yaptığım küçük hataların felaketle sonuçlanacağını hayal ederim.	0	1	2	3	4
25. Bilmeden birini incittiğim konusunda çok fazla düşünürüm veya endişelenirim.	0	1	2	3	4
26. Bir felaket olduğunu duyduğum zaman onun bir şekilde benim hatam olduğunu düşünürüm.	0	1	2	3	4
27. Bazen sebepsiz yere kendime zarar verdiğime veya bir hastalığım olduğuna dair fazlaca endişelenirim.	0	1	2	3	4
28. Bıçak, hançer ve diğer sivri uçlu nesnelere gördüğümde rahatsız olur ve endişelenirim.	0	1	2	3	4
29. Bir intihar veya cinayet vakası duyduğumda, uzun süre üzülür ve bu konuda düşünmekten kendimi alamam.	0	1	2	3	4
30. Mikroplar ve hastalıklar konusunda gereksiz endişeler yaratırım.	0	1	2	3	4
31. Bir köprüden veya çok yüksek bir pencereden aşağı baktığımda kendimi boşluğa atmak için bir dürtü hissedirim.	0	1	2	3	4

32. Yaklaşmakta olan bir tren gördüğümde, bazen kendimi trenin altına atabileceğimi düşünürüm.	0	1	2	3	4
33. Bazı belirli anlarda umuma açık yerlerde kıyaferlerimi yırtmak için aşırı bir istek duyarım.	0	1	2	3	4
34. Araba kullanırken, bazen arabayı birinin veya bir şeyin üzerine sürme dürtüsü duyarım.	0	1	2	3	4
35. Silah görmek beni heyecanlandırır ve şiddet içeren düşünceleri aklıma getirir.	0	1	2	3	4
36. Bazen hiçbir neden yokken bir şeyleri kırma ve zarar verme ihtiyacı hissederim.	0	1	2	3	4
37. Bazen işime yaramasa da, başkalarına ait olan şeyleri çalma dürtüsü hissederim.	0	1	2	3	4
38. Bazen süpermarketten bir şey çalmak için karşı konulmaz bir istek duyarım.	0	1	2	3	4
39. Bazen savunmasız çocuklara ve hayvanlara zarar vermek için bir dürtü hissederim.	0	1	2	3	4

APPENDIX C

TURKISH SUMMARY

GİRİŞ

Obsessif-Kompulsif Bozukluk (OKB), kişinin günlük hayatı ve işlevselliğinde belirgin bozulmaya yol açan obsesyonlar ve bunlara eşlik eden kompulsiyonların varlığı ile karakterize kronik bir psikiyatrik bozukluktur (DSM-V: American Psychological Association (APA), 2013). Sıklık çalışmalarında, Obsessif Kompulsif Bozukluğun % 2,5 oranla, majör depresyon, fobi ve madde bağımlılığından sonra dördüncü en sık rastlanan psikiyatrik bozukluk olduğu belirlenmiştir (Weismann, Bland, Canino, Greenwald et. al., 1994).

Obsesyon, belirgin stres ve kaygıya sebep olan girici (intrüsif), ego-distonik, ısrarlı istem dışı düşünce, imge ya da dürtüler ve bunların etkisini baskılama ya da nötrleme motivasyonu olarak tanımlanmıştır. Kompulsiyon ise; obsesyondan kaynaklı gerilimi azaltmak veya korkulan sonuçları engellemek amacıyla yapılan açık (örn; el yıkama) ya da örtük (örn; düşüncenin yer değiştirilmesi) biçimde ortaya çıkan tekrar edici, stereotipik davranışlardır. DSM-V'de, kompulsiyonların sadece davranışsal değil zihinsel de olabileceği ve kişinin bunların aşırılığı ya da anlamsızlığını kabul ettiği belirtilmiştir. Obsessif-kompulsif bozukluk tanısı için gerekli bir diğer ölçüt de obsesyon ve kompulsiyonların zamanın boşa harcanmasına neden olması (e.g. günde bir saatten fazla) ya da kişinin olağan günlük işlerini ya da ilişkilerindeki işlevselliğini önemli ölçüde etkilemesidir. Ayrıca başka bir eksen-1 bozukluğu varsa obsesyon ya da kompulsiyonların içeriğinin bununla sınırlı olmaması gerektiği vurgulanmıştır (APA, 2013). Epidemiyoloji araştırmalarında, obsessif-

kompulsif bozukluğun başlangıç yaşının erken yetişkinlik (18-24 yaş) dönemine denk geldiği ve kadın erkek arasındaki dağılımın eşit olduğu saptanmıştır (Karno & Golding, 1991; Ruscio, Stein, Chiu, & Kessler, 2010). Bunlara ek olarak, yapılan meta-analiz sonuçlarına göre en sık rastlanan obsesyon ve kompulsiyon türleri simetri/düzenleme, kirlenme/bulaşma, kontrol etme ve biriktirme olarak belirlenmiştir (Ball, Baer, & Otto, 1996).

Obsessif-kompulsif bozukluğun doğasını açıklamak amacıyla farklı ekoller tarafından çeşitli teoriler (örn; biyolojik, nöropsikolojik, davranışsal-öğrenme kuramı vs.) öne sürülmüştür. Bunlar arasında, bilimsel çalışmalarla desteklenen bilişsel-davranışçı teoriler, obsessif-kompulsif bozukluk için etkin tedavi yöntemlerinin geliştirilmesine katkı sağlamaları açısından da önemli bir yere sahiptirler (Franklin ve ark., 2000). Bilişsel-davranışçı kuram, klinik obsesyonların normal, istem dışı düşünce, dürtü ve imgelerden türediğini varsaymaktadır (Wells, 1997). Bilişsel modele göre, obsessif-kompulsif semptomların gelişimi ve sürdürülmesinde istem dışı düşüncelerin içeriğinden çok hatalı yorumlanması rol oynamaktadır (Rachman, 1997; Salkovskis, 1985). Başka bir deyişle, neredeyse herkes tarafından yaşanan bu tür istem dışı deneyimlere atfedilen anlam ve olası olumsuz sonuçlarına ilişkin işlevsel olmayan yorumlamaları, sıradan deneyimler ile obsesyonlar arasındaki farkı oluşturmaktadır (Salkovskis, 1985). Bunlara bağlı olarak, birey artan sıkıntı ve kaygısını gidermek için kompulsif tarzda davranışlar veya düşünce kontrol stratejileri geliştirmektedir, bu stratejilerin kısa dönemde kaygıyı azaltıp kişinin kontrol algısını artırdığı, fakat uzun vadede girici düşüncelerin şiddetini ve sıklığını artırdığı bulunmuştur. (Rachman, 1997; Salkovskis, 1985). Obsessif-Kompulsif Bilişleri Çalışma Grubu (OCCWG; 1997) hatalı ve işlevsel olmayan yorumlamaların uyumsuz bilişsel-duygusal şemalardan kaynaklandığı öne sürerek, altı temel inanç alanı belirlemiştir. Abartılmış tehdit ve sorumluluk algısı, kesinlik, mükemmeliyetçilik, düşüncelerin önemi ve kontrolü gibi inanış alanlarının istem dışı düşüncelerin hatalı yorumlanmasında etkin rol oynadıkları ileri sürülmüştür (OCCWG, 1997). Obsessif-kompulsif bozukluğun etiyolojisinde

bilişlerin rolünü açıklayan birçok bilişsel-davranışçı modelin temel farklarını bilişsel-duygusal şemalardan hangisini ön planda vurguladıkları belirlemiştir. Örneğin, Salkovskis (1985) abartılmış sorumluluk algısına vurgu yaparken, Rachman (1997) istem dışı düşünceleri tehditkâr görüp kişisel anlam katarak felaketleştirmenin önemini vurgulamıştır.

Obsessif-kompulsif bozukluğun formülize edilmesi ve tedavisi konusunda alana önemli katkı sağlayan bu teoriler temelinde, bilişsel-davranışçı terapi, irrasyonel düşüncelere ve hatalı yorumlamalara işaret eden bilişsel müdahalelere ek olarak maruz bırakma ve tepki önlemeyi içeren davranışçı müdahaleler çerçevesinde geliştirilmiştir (Wells, 1997). Fakat, bu modeller, obsesyona yönelik inançların sürdürümüne katkıda bulunan süreçleri saptamaya odaklanmaları ve hastalığın başlangıç noktasına işaret eden gelişimsel ve motivasyonel faktörleri göz ardı etmeleri sebebi ile eleştirilmektedirler (Doron ve Kyrios, 2005; O'Kearney, 2001). Bu eleştirilere cevaben yapılan çalışmalarda algılanan ebeveyn tutumlarının, benlik algısının ve duygu düzenlemede kullanılan stratejilerin önemli rol oynadığı saptanmıştır (örn; Doron ve Kyrios, 2005). Bundan sonraki kısımda, obsessif-kompulsif bozukluk ile bu faktörlerin ilişkisine kısaca değinilecektir.

Gross'un (1999) duygu düzenleme modeline göre duygunun ortaya çıkışı bir süreç içerisinde gerçekleşmekle birlikte, bu süreçlerde iki genel yönetim şekli bahsedilebilir. Bunlardan ilki "öncül-odaklı" düzenlemedir ve duygu tam olarak oluşmadan o duygunun yönetilmesini sağlayan stratejileri içermektedir. Bir diğeri ise "tepki-odaklı" düzenleme olarak isimlendirilmekte ve duygunun oluşumuna yakın ya da oluşuktan sonraki davranışsal ve/veya fizyolojik tepkilerin kontrolünü sağlamak için kullanılan yöntemleri içermektedir (Gross, 2001). Gross (2001)'a göre duygu düzenleme süreci içerisinde bireyler beş farklı strateji kullanabilirler. Bunlar durum seçimi, duruma müdahale, dikkati yönlendirme, bilişsel değerlendirme ve tepki ayarlamadır. Bu çalışmada, Gross (1999) tarafından öne sürülen duygu düzenleme sürecinde kullanılan bilişsel yeniden değerlendirme ve bastırma yöntemleri kullanılmıştır. Bir çeşit öncül-

odaklı duygu düzenleme yöntemi olan bilişsel yeniden değerlendirilmede birey yaşanan durumu yeniden değerlendirir ve olaya bakış açısını değiştirerek duygusal tepki ortaya çıkmadan önce azaltmayı amaçlar. Bastırma ise bir çeşit tepki-odaklı duygu düzenleme yöntemidir ve yaşanan duygunun dışavurumunun engellenmesini içerir.Yapılan çalışmalarda, bilişsel yeniden değerlendirmenin bastırma ile karşılaştırıldığında psikolojik iyilik hali, uyum becerisi ve yüksek benlik algısı açısından daha olumlu sonuçlar verdiği gösterilmiştir (Hsieh & Stright, 2010; Nezlek & Kuppens, 2008). Obsessif-kompulsif bozukluk açısından değerlendirildiğinde ise bastırma yöntemini daha çok kullanan bireylerde OKB belirtilerine daha sık rastlandığı görülmüştür (Aka, 2011). Buna ek olarak, Jacob ve arkadaşları, OKB grubu hastaların bastırma gibi işlevsel olmayan duygu düzenleme yöntemlerini daha sık kullandıklarını ve duygusal yaşantılara karşı düşük toleransa sahip olduklarını göstermişlerdir (Jacob, Morelen, Suveg, Jacobsen, ve Whiteside, 2012).

Obsessif-kompulsif bozukluk ile ilişkili temel inanç alanları ve duygu düzenleme yöntemlerine ek olarak, bu tezde kişilerin benlik algılarında yaşadıkları ikilemin obsessif- kompulsif bozukluk semptomları ile ilişkisi de incelenmektedir. Harter ve Whitesell (2003)'e göre kendilik algısı olumsuz olan bireyler işlevsel olmayan inançlar geliştirmeye ve çevrelerini olduğundan daha olumsuz değerlendirmeye daha yatkındırlar. Geliştirdikleri modelde, Guidano ve Liotti (1983) obsessif-kompulsif bozukluğa sahip bireylerin kendilik değerleri konusunda ikilem yaşadıklarını ve girici düşünceleri olumsuz kendiliklerine bir kanıt olarak yorumladıklarını öne sürmektedirler. Bu modele göre, benlik-ikilemi bireylerin benlik değerleri konusunda birbiri ile çelişen inançlara sahip olmaları, kişisel özellikleri konusunda belirsizlikler yaşamaları ve benlik değerlerini destekleme konusunda sürekli uğraş halinde olmalarına bağlı olarak tanımlanmaktadır. Benlik-ikilemine sahip olan bireylerin kendilerini değerlendirmelerinin bir uçtan diğerine kayma eğiliminde olduğu belirtilmektedir (Guidano & Liotti, 1983). Benlik-ikilemi ile ilgili yapılan çalışmalarda obsessif-kompulsif bozukluk semptomlarına ek olarak, obsessif- kompulsif bozukluk ile

ilişkili bulunan inanç alanlarında bu kavramla ilişkili olduğu gösterilmiştir (Bhar & Kyrios, 2007). Buna ek olarak, Guidano ve Liotti (1983), obsessif-kompulsif bozukluğa sahip bireylerin sevebilirlikleri, değerlilikleri ve ahlaki duruşları konusunda ikilemler yaşadıklarını öne sürmekte ve mükemmeliyetçilik ve düşünce kontrolü gibi inanış alanlarının ambivalansın çözümünde kullanıldığını belirtmektedirler. Kendilik değerinin zarar görmesine neden olan düşünceler ve olaylar, bireyleri bu zararın tamirine, eksikliklerin telafisine ve duyguların düzenlenmesine yönlendirmektedir. Fakat, obsessif-kompulsif bozukluğa sahip bireylerde, bu durumlarla baş etmek için verilen tepkiler istenmeyen girici düşüncelerin ve kendilik ile ilgili olumsuz inançların (örn; kötüyüm/ değersizim) daha da artmasına neden olmaktadır (Doron ve Kyrios, 2005).

Literatürde, benlik karmaşası, duygu düzenleme, inanış alanları ve psikopatolojinin çocukluk dönemindeki aile tutumlarından kaynaklandığını ileri süren ve gösteren bir çok çalışma bulunmaktadır (Guidano ve Liotti, 1983). Sağlıklı kişiliğin gelişiminde, ailede sıcaklığın ve sevginin direkt yollarla ifadesi ile aşırı koruyuculuk, kontrol ve eleştiriden kaçınan ebeveyn tutumlarının önemli bir role sahip olduğu belirtilmiştir. Fakat, korku ve kaçınma davranışlarına model oluşturan ve tehlike algısını artıran aşırı koruyucu/kollayıcı tutumların bireyin kendisini tehlike anında yetersiz olarak algılamasına neden olduğu ileri sürülmüştür (Salkovskis, Shafran, Rachman, ve Freeston, 1999). Ebeveyn tutumları ile OKB arasındaki ilişkiyi klinik örneklem üzerinden inceleyen araştırmacılar, katılımcı sayısı ve kullanılan ölçeklerden kaynaklı çelişkili sonuçlar rapor etmişlerdir. Hacıömeroğlu (2008) yaptığı çalışmada benlik sınırlarının oluşum sürecini bozduğu düşünülen annelerin aşırı koruyucu davranışlarının sorumluluk algıları aracılığıyla obsessif-kompulsif semptomları yordadığını bulmuştur. Genel olarak bu bulgular değerlendirildiğinde, obsessif-kompulsif belirti gösteren hastaların ebeveynlerinin aşırı koruyucu, eleştirel, mükemmeliyetçi oldukları ve bu tarzları ile çocuklarında suçluluk duygusunun oluşumuna neden oldukları sonucuna varılmıştır.

Literatürde anne- baba tutumları, benlik algıları ve obsessif-kompulsif bozukluk arasındaki ilişki kuramsal açıdan da incelenmiştir. Örneğin, Guidano ve Liotti (1983)'e göre obsessif- kompulsif bozukluğa sahip bireylerin çevrelerini kontrol altında tutmak için gösterdikleri çaba dünyayı tehlikeli fakat kontrol edilebilir bir yer olarak algılamalarından kaynaklanmaktadır. Doron ve Kyrios (2005)'a göre istenmeyen girici düşüncelerin obsessif düşünce tarzına dönüşmesinde ve kaygının oluşmasında dünyanın ve benliğin nasıl algılandığı kısacası bilişsel-duygusal yapılar rol oynamaktadır. Bireylerin, kendilik algıları ve çevreleri ile ilgili olumsuz varsayımları sonucunda benliğe karşı olan ve/veya oluşabilecek tehdidi abarttıkları bununla birlikte belli türde istenmeyen girici düşüncelerin arttığı ve sonuç olarak da obsesyonların ve kompulsif tepkilerin tetiklendiği belirtilmiştir (Doron ve Kyrios, 2005; Mikulincer ve Shaver, 2007). Örneğin, kişinin çevresinde oluşabilecek sıkıntı ve talihsizlikleri önleyebileceğine dair inancı tehlike ile ilişkili istem dışı düşüncelere (örn; mikrop kapacağı düşüncesi) göre davranma olasılığını ve sonuç olarak da kompulsif tarzdaki davranışlarını (örn; el yıkama) artırmaktadır. Çevrenin ve benliğin olumsuz olarak algılanmasının ve bunun sonucunda ortaya çıkan kontrol etme davranışlarının erken bağlanma örüntülerinin izlerini taşıdığı ileri sürülmüştür (Guidano ve Liotti, 1983). Buna ek olarak, kişinin hayatındaki stresli olayların bağlanma stilleri ile psikopatoloji arasındaki ilişkiye aracılık ettiği bulunmuş olup kaygılı ve kaçınan bağlanma biçimine sahip bireylerin başlarından geçen olayları daha tehditkâr algılayarak psikopatolojiye daha yatkın hale geldikleri belirtilmiştir (Pielage, Gerlsma, ve Schaap, 2000).

Kendilik değerinin zarar görmesine neden olan düşünceler ve olaylar, bireyleri bu zararın tamirine, eksikliklerin telafisine ve duyguların düzenlenmesine yönlendirmektedir. Fakat, obsessif-kompulsif bozukluğa sahip bireylerde, bu durumlarla baş etmek için verilen tepkiler istenmeyen girici düşüncelerin ve kendilik ile ilgili olumsuz inançların (örn; kötüyüm/ değersizim) daha da artmasına neden olmaktadır (Doron ve Kyrios, 2005).

Yukarıda sunulan literatür kapsamında, bu çalışmanın genel olarak amacı algılanan ebeveyn tutumları, benlik-ikilemi/karmaşası, işlevsel olmayan inanış alanları, duygu düzenleme yöntemleri ile obsessif-kompulsif semptomlar (OKS) arasındaki ilişkiyi incelemektedir. Bu amaca bağlı olarak, ebeveynlerden algılanan yüksek düzeydeki aşırı koruyucu ve reddedici tutumlar ile düşük düzeydeki aile sıcaklığının daha fazla benlik ikilemi, işlevsel olmayan inanış alanlarının kullanımı, bastırma ve sonuç olarak yüksek düzeyde obsessif-kompulsif bozukluk ile ilişkili olacağı varsayılmıştır. Bir pilot çalışma olarak da bu çalışmanın amacı kapsamında Benlik-İkilemi Ölçeği (Self-Ambivalence Measure) Türkçe'ye adapte edilmiş ve psikometrik özellikleri incelenmiştir.

Bu çalışmanın hipotezleri dört temel grupta toplanmıştır ve şu şekildedir;

Grup 1: Benlik-İkilemi Ölçeği'nin Adaptasyonu ile ilgili Hipotezler

Hipotez 1: Benlik-İkilemi Ölçeği'nin Türkçe versiyonunun güvenli ve geçerli bir ölçek olacağı öngörülmektedir.

Grup 2: Obsessif- Kompulsif Semptomatolojinin Yordayıcıları

Hipotez 2: Algılanan ebeveyn tutumları, benlik-ikilemi, bilişsel yorumlamalar ve duygu düzenleme stratejilerinin hem birbirleriyle hem de obsessif-kompulsif semptomlar ile ilişkili olacaktır.

Hipotez 3: Algılanan ebeveyn tutumları, benlik-ikilemi faktörleri, bilişsel yorumlamalar ve duygu düzenleme stratejilerinin obsessif-kompulsif semptomları hem genel olarak yordayacağı hem de OKB'nin alt boyutlarını yordayacağı beklenmektedir.

Grup 3: Aracı Değişkenler aracılığı ile Obsessif- Kompulsif Semptomların Yordanması

Hipotez 4: Algılanan anne- baba tutumları obsessif- kompulsif semptomları benlik- ikilemi faktörleri aracılığı ile açıklayacaktır.

Hipotez 5: Obsessif inançlar ve duygu düzenleme stratejileri, benlik-ikilemi faktörleri ve obsessif- kompulsif semptomları arasındaki ilişkiye aracılık edecektir.

Grup 4: Obsessif- Kompulsif Semptomlar için Önerilen Kapsamlı Model

Hipotez 6: Aileden algılanan yüksek düzey reddedici ve aşırı koruyucu

tutumlar ile yine aileden algılanan düşük düzeydeki sıcaklığın benlik algısındaki ikilemi artıracığı ve bunun aracılığı ile obsessif yorumlamaları ve bastırma stratejisinin kullanımını artıracığı ön görülmektedir. Artan obsessif yorumlamalar ve bastırma stratejisinin kullanımı ise sonuç olarak obsessif- kompulsif semptomları artıracaktır.

PİLOT ÇALIŞMA

Bu çalışma, Benlik-İkilemi Ölçeği'nin (Bhar & Kyrios, 2007) Türkçe adaptasyonu, dil yapısı ve psikometrik özelliklerinin incelenmesi ve değerlendirilmesi amacı ile yapılmıştır.

Örneklem

Çalışmaya Orta Doğu Teknik Üniversitesi'nin çeşitli bölümlerinde okuyan lisans öğrencileri ($N = 280$) katılmıştır. Bu katılımcıların, 174'ü kadın (%62.1), 105'i erkek (%37.5), yaş ortalaması ise 20.83 ($Ss = 1.75$) ve yaş aralığı 18-33'tür.

Veri Toplama Araçları

Araştırmada, Benlik-İkilemi Ölçeğinin geçerlilik çalışması kapsamında katılımcılara demografik bilgi formu, Beck Depresyon Ölçeği, Beck Anksiyete Ölçeği, Eysenck Kisilik Anketi-Revize edilmiş ve Kısaltılmış Formu, Rosenberg Öz-Güven Ölçeği, ve Algılanan Anne-Baba Tutumları- Kısa Formu verilmiştir.

Benlik-İkilemi Ölçeği

Ölçek 2007'de Bhar ve Kyrios tarafından Guidano ve Liotti'nin modeli esas alınarak geliştirilmiştir. 19 maddelik bu ölçek anketi dolduran kişinin benlik değeri ile ilgili yaşadığı karmaşayı, çatışmayı ve ambivalansı ölçmektedir. Katılımcılar 0 (hiç katılmıyorum) ile 4 (tamamen katılıyorum) arasında değişen 5'li Likert tarzı ölçekte değerlendirme yapmaktadırlar. Maddeler, kendilik konusunda belirsizlik, iki-uçlu değerlendirme ve aşırı meşguliyeti içeren cümleler içermektedir.

Ölçeğin orijinal olarak öne sürülen iki alt-ölçeği bulunmaktadır. Bunlardan biri benlik-değeri ikilemi (Cronbach alfa değeri .88) diğeri de ahlaki ikilemdir

(Cronbach alfa değeri .85) (Bhar & Kyrios, 2007). Ölçek, bu çalışma kapsamında Türkçe'ye çevrilmiş ve adaptasyon çalışması yapılmıştır.

Beck Depresyon Envanteri

Beck ve arkadaşları tarafından 1979'da geliştirilmiş ve Hisli tarafından 1988'de Türkçe'ye çevrilen ölçek 21 madde sayısından oluşmaktadır. Katılımcılar her bir madde için 4'lü bir ölçek üzerinden kendilerini değerlendirmektedirler. Yüksek puanlar daha yüksek düzeyde depresif belirtileri göstermektedir. Ölçeğin hem orijinal hem de Türkçe versiyonu kabul edilebilir güvenilirlik ve geçerlilik değerleri göstermektedir.

Beck Anksiyete Envanteri

Beck, Epstein, Brown ve Steer (1988) tarafından anksiyetenin bilişsel ve somatik belirtilerini ölçmek amacıyla geliştirilmiştir. Türkçe'ye Ulusoy, Şahin ve Erkmen (1998) tarafından çevrilen ölçek 21 madde sayısı 3'lü Likert tarzından oluşmaktadır. Çeşitli çalışmalar tarafından, ölçeğin hem Türkçe versiyonunun hem de orijinal versiyonunun güvenli ve geçerli olduğu bulunmuştur (Beck, Epstein, Brown, & Steer, 1988; Ulusoy, Şahin, & Erkmen, 1998).

Algılanan Ebeveyn Tutumları-Kısa Formu

Ölçek, Arrindell et. al. (1999) tarafından algılanan ebeveynlik stillerini ölçmek için geliştirilmiştir. 23 maddelik 4'lü Likert tarzı olan bu ölçek 3 ebeveynlik boyutuyla ilgili anne ve babalar için ayrı ayrı ölçüm yapmaktadır. Bu boyutlar; reddedici tutum, aşırı koruyuculuk ve sıcaklık olarak isimlendirilmektedir. Ölçekte, katılımcılar çocukluklarını düşünerek anne ve babalarının ebeveynlik stilleriyle ilgili algılarını rapor ederler. Dirik, Karanci ve Yorulmaz (2015) tarafından Türkçe'ye çevrilmiş ve aynı faktör yapısı kullanılmıştır. Yapılan analizlerde ölçeğin tatminkar düzeyde psikometrik özellikler gösterdiği bulunmuştur (Dirik, Karanci, & Yorulmaz, 2015).

Rosenberg Öz-Güven Ölçeği

Rosenberg (1965) tarafından öz güveni değerlendirmek üzere hazırlanan 10 maddelik bir ölçektir. 4'lü Likert tarzından oluşan bu ölçek, Türkçe'ye Çuhadaroğlu (1985) tarafından uyarlanmıştır. Ölçeğin Türkçe versiyonunun tatminler iç tutarlılığı olduğu bulunmuştur.

Eysenck Kişilik Anketi- Revize edilmiş ve Kısaltılmış Form

Eysenck ve arkadaşları tarafından 1985 yılında geliştirilen ölçek 24 maddeden oluşmaktadır. Evet/Hayır biçiminde cevapları olan dört temel alt boyuttan oluşmaktadır; psikotizm, yalan, nörotizm ve dışadönüklük. Türkçe'ye Karanci, Dirik ve Yorulmaz (2007) tarafından adapte edilen envanterin hem orijinal hem de Türkçe formunun psikometrik açıdan geçerli ve güvenilir özelliklere sahip olduğu bulunmuştur (Francis, Brown, & Phillipchalk, 1992; Karanci, Dirik, & Yorulmaz, 2007).

İşlem

Öncelikle Orta Doğu Teknik Üniversitesi Etik Komiteye başvurularak gerekli izinler alınmıştır. Ölçeğin Türkçe'ye uyarlanması sürecinde çeviri-geri çeviri yöntemi (Brislin, 1980) uygulanmıştır. Ölçeğin orijinal formu farklı alanlardan olan iki farklı kişi tarafından Türkçe'ye çevrilmiş, sonrasında Türkçe form tekrardan orijinal diline çevrilmiştir.

Ölçeğin test-tekrar test güvenilirliğini analiz etmek amacıyla, ilk uygulamadan üç hafta sonra rastgele seçilen 50 katılımcıya Benlik-İkilemi Ölçeği yeniden uygulanmıştır.

Bulgular

19 maddelik Benlik-İkilemi Ölçeğinin Türkçe versiyonunun psikometrik çalışması kapsamında, öncelikle Bhar ve Kyrios (2007) tarafından önerilen iki boyutlu orijinal faktör yapısı kullanılarak Doğrulayıcı Faktör Analizi yapılmıştır. Bulgular, önerilen orijinal faktör yapısının bizim örneklemimizle örtüşmediğini göstermektedir. Madde dağılım parametreleri incelendiğinde, iki maddenin (2. Madde: “Kendi değerimle ilgili özgüvenim vardır; 12. Madde: “Kendimi nasıl geliştirebileceğimi düşünürüm”) yük değerlerinin beklenen ranjın altında olduğu gözlemlenmiştir. Bu sonuçlar doğrultusunda bu iki maddenin çevirileri yeniden incelenmiş ve ana çalışmada kullanılmak üzere yeniden düzenlenmiştir. (2.

Madde: “Değerli olduğum konusunda endişelerim vardır”; 12. Madde: Kendimi yeteri kadar geliştirdim mi diye sürekli düşünürüm”). Buna ek olarak,

ölçekteki tek ters kodlanan madde olan ikinci madde diğer 18 madde ile uyumlu hale getirilmek amacıyla düz kodlanacak hale dönüştürülmüştür.

ANA ÇALIŞMA

YÖNTEM

Örneklem

Bu çalışmaya Türkiye'nin çeşitli bölgelerinde ikamet eden 877 kişi katılmıştır. Bu katılımcıların, 555'i kadın (%63), 322'si erkek (%37), yaş ortalaması ise 29.69 ($S_s = 10.09$) ve yaş aralığı 18-72'dir. Katılımcılardan 508'i (%57.9) bekar, 322'si (%36.7) evli, 167'si (%19) lise, ve 532'si (%60.7) üniversite, 114'ü (13%) yüksek lisans mezunudur. Ayrıca, 209 katılımcı (%23.8) hayatlarının herhangi bir döneminde psikiyatrik tanı aldıklarını, ve bunların 32'si (15.3%) halen psikoterapiye gittiğini, 74'ü (%35.4) ilaç tedavisi görmekte olduğunu, 20'si (9.5%) ise hem psikoterapi hem de ilaç tedavisi aldığını belirtmiştir.

Veri Toplama Araçları

Araştırmada katılımcılara demografik bilgi formu dahil 8 adet anket seti uygulanmıştır. Benlik-İkilemi Ölçeği, Algılanan Ebevyin Tutumları-Kısa Formu, Beck Depresyon Envanteri ve Rosenberg Öz-Güven Ölçeği bir önceki bölümde tanıtılmış olduğundan bu kısımda bu ölçeklerden tekrardan bahsedilmeyecektir. Diğer ölçüm araçları şu şekildedir;

Duygu Düzenleme Ölçeği

Ölçek, Gross ve John (2003) tarafından bireylerin duygu düzenleme becerilerini ölçmek amacıyla geliştirilmiştir. 10 maddelik 7'li Likert tarzı olan bu ölçek 2 alt boyuttan oluşmaktadır. İlk alt boyut olan bilişsel yeniden değerlendirme (Cronbach alfa değeri .79) 6 maddeden oluşurken, diğer alt boyut olan bastırma (Cronbach alfa değeri .88) ise 4 maddeden oluşmaktadır. Aka (2011) tarafından Türkçe'ye çevrilen versiyonu bu çalışmada kullanılmıştır. Ölçeğin, Türkçe versiyonun güvenilir ve geçerli olduğu gösterilmiştir (Aka, 2011).

Obsessif-Kompulsif İnanışlar Ölçeği

Obsessif Kompulsif Bozukluk Çalışma Grubu (OKBÇG; 2001) tarafından OKB'nin başlangıcında ve sürdürülmesinde etkin olan işlevsel olmayan inanışları değerlendirmek üzere geliştirilmiştir. 44 maddelik son versiyonunda orijinal formundaki 6 boyut 3'lü yapıya dönüştürülmüştür. Bu alt boyutlar; sorumluluk/ abartılmış tehdit algısı, mükemmeliyetçilik/ belirsizlik, düşüncenin önemi/kontrolü olarak isimlendirilmiştir. Çeşitli çalışmalarda etkinliği araştırılmış ve tatmine edici bulgulara ulaşılmıştır (OKBÇG, 2003, 2005; Taylor ve ark., 2006; Woods ve ark., 2004). Yorulmaz ve Gençöz (2008) tarafından Türkçe'ye çevrilmiş olup bu çalışmada da bu versiyonu kullanılmaktadır.

Padua Envanteri- Washington Eyalet Üniversitesi Revizyonu

Ölçek, obsesyon ve kompulsiyonlardan duyulan rahatsızlığı ölçmek amacıyla hazırlanmıştır. 5'li Likert tipi 39 maddeden oluşan bir envanterdir (Sanavio, 1988; Burns ve ark., 1996). Ölçek Türkçe'ye Yorulmaz ve arkadaşları tarafından uyarlanmış olup Türkçe versiyonun psikometrik özelliklerinin de tatminkar düzeyde olduğu gösterilmiştir (Yorulmaz, Karanci, Dirik, Baştuğ, Kısa, Göka, & Burns, 2007).

Beck Depresyon Envanteri

Bu çalışmada Benlik-İkilemi Ölçeğinin psikometrik çalışmasının yapılması amacıyla kullanılmaktadır.

Rosenberg Öz Güven Ölçeği

Bu çalışmada Benlik-İkilemi Ölçeğinin psikometrik çalışmasının yapılması amacıyla kullanılmaktadır.

İşlem

Öncelikle etik komiteden gerekli izinler alınarak anketler oluşturulmuş ve online araştırma sitesi olan SurveyMonkey.com'a yüklenmiştir. Bu site üzerinden veri toplanılmış ve katılımcıların onamı online olarak alınmıştır.

TEMEL BULGULAR VE TARTIŞMA

Bu çalışma kapsamında çevrilen Benlik-İkilemi Ölçeği'nin (BİÖ) içsel tutarlılık ve madde-toplam korelasyon ranjlarının tatminkar olduğu gözlemlenmiştir. Orijinal faktör yapısı üzerinden uygulanan doğrulayıcı faktör analizi sonucunda ikili faktör yapısının örneklem ile uyumlu olmadığı görülmüştür ($\chi^2(151) = 2188.58, p \leq .001$; GFI = .79; NNFI = .78; AGFI = .74; CFI = .81; and RMSEA = .12). Bu doğrultuda Varimaks dönüştürmesi ile Açımlayıcı Faktör Analizi (Explanatory Factor Analysis) yapılmış ve faktör yükleri istatistiki olarak karşılaştırılmıştır. Yapılan faktör analizinde Kaiser ölçütü ve Cattell Scree grafiği ölçeğin Türkçe versiyonun, 3'lü faktör yapısına sahip olduğuna işaret etmektedir: “değerlilik ikilemi” (varyans = % 24.75, özdeğer = 4.70), “ahlaki ikilem” (varyans = % 14.06, özdeğer = 2.67), “sosyal kabul edilebilirlik” (varyans = % 17.34, özdeğer = 3.30). Bu faktör yapısının Guidano ve Liotti (1983) tarafından öne sürülen teori ile de uyumlu olduğu görülmektedir. Guidano ve Liotti (1983), obsesif-kompulsif belirtiler gösteren bireylerin sevilen biri olup olmadıkları, ahlaki değerlilikleri ve özdeğerleri konusunda belirsizlik ve ikilem yaşadıklarını belirtmişlerdir. Bu çalışmada saptanan üçüncü boyut olan sosyal kabul edilebilirliğin bu modeldeki sevilebilirlik boyutu ile uyumlu olduğu düşünülmekte ve bu bulguların ayrıca Tisher, Allen, & Crouch (2014) tarafından Benlik İkilemi Ölçeğinin orijinal formu üzerinden ortaya konan faktör yapısı ile de uyumlu olduğu görülmektedir. Yapılan diğer analizler, Benlik-İkilemi Ölçeği'nin Türkçe versiyonunun alfa katsayısı, test-tekrar test güvenilirliği, iki yarım güvvenirliği ve yapı geçerliği dikkate değer bir güvenilirlik ve geçerlik gösterdiğini ortaya koymuştur.

Ölçeğin kriter geçerliliği, PI-WEÜR'deki OKB semptom düzeyi yüksek ve düşük olan grup ve BDI'daki depresyon semptom düzeyi yüksek, orta ve düşük olan grup karşılaştırmalarıyla test edilmiştir. Beklenen yönde, yüksek düzey OKB semptom gösterenlerin düşüklere oranla daha fazla değerlilik, ahlaki değerler ve kabul edilebilirlik alanlarında ikilem ve belirsizlik yaşadıkları bulunmuştur. Buna ek olarak, yine beklenen yönde yüksek düzey depresif semptomlar gösterenlerin orta düzey ve düşük düzey gruplara oranla daha fazla ikilem yaşadıkları, benzer

şekilde orta düzey depresif belirtiler gösterenlerin düşüklere kıyasla daha fazla benlik ikilemi yaşadıkları gözlemlenmiştir. Özetle, depresif semptom düzeyi arttıkça bireylerin değerlilikleri, ahlaki duruşları ve kabul edilebilirlikleri konularında yaşadıkları ikilem ve belirsizlik de artmaktadır. Bu bulgular, Bhar ve Kyrios (2007) tarafından öne sürülen savı destekleyerek benlik-ikilemi kavramının obsessif kompulsif bozukluğa özgü olmadığını göstermektedir. Fakat, bu konuda daha ileri çalışmalara ihtiyaç vardır. Yapılan analizler sonucunda, Benlik-Ikilemi Ölçeği'nin Türkçe versiyonu güvenilirlik ve geçerlilik açısından yeterli bulunmuştur.

Bu çalışmanın bir diğer amacı da Obsessif-Kompulsif Semptomların (OKS) yordayıcıları, bu yordayıcıların birbirleri ve obsessif-kompulsif semptomlar ile ilişkilerini değerlendirmektir. Bu amaç doğrultusunda dört aşama halinde altı temel çoklu regresyon analizleri kullanılmıştır. Obsessif-kompulsif semptomların yordayıcılarını belirlemek için yapılan regresyon analizlerinde ilk blokta yaş, cinsiyet, eğitim düzeyi ve rapor edilen psikiyatrik durum kontrol değişkenleri olarak girilmiştir. İkinci blokta, anne ve babanın reddedici, aşırı koruyucu ve duygusal sıcaklık tutumları olmak üzere algılanan ebeveyn tutumları ölçeğinden elde edilen toplam altı alt ölçek puanı girilmiştir. Üçüncü blokta benlik-ikilemi ölçeğinin üç alt boyutuna ait puanlar, dördüncü blokta ise obsessif-kompulsif bozukluk ile ilişkili işlevsel olmayan üç inanç alanı ile iki duygu düzenleme stratejisi girilmiştir. Regresyon analizlerinin sonuçlarına göre annenin algılanan reddedici tutumu, babanın algılanan aşırı koruyucu tutumu, değerlilik ve kabul edilebilirlik konusunda yaşanan ikilem, üç inanç alanı (aşırı sorumluluk/ tehdit algısı, mükemmelliyetçilik/ belirsizliğe tahammülsüzlük, düşüncenin önemi/ kontrolü) ile bastırma genel obsessif kompulsif semptomatolojinin anlamlı düzeyde yordayıcıları olarak bulunmuştur. Çalışmanın bulguları genel olarak çalışmanın varsayımlarını desteklemekte ve literatürle tutarlı sonuçlar göstermektedir.

Analiz sonuçlarına göre, babadan algılanan duygusal ve davranışsal kontrol, aşırı koruyucu tutum, anneden algılanan reddedici, kritik eden tutumla bir araya geldiğinde obsessif-kompulsif semptomların oluşumuna olan yatkınlığa

katkıda bulunduğu söylenebilir. Obsessif Kompulsif Bozukluğun alt boyutları ile yapılan analizler incelendiğinde, kontrol etme ve obsessif düşünceler alt boyutlarının hem annenin reddecı tutumu hem de babanın aşırı koruyucu/kontrolcü tutumu tarafından yordandığı görülmektedir. Bunların yanı sıra, bulaştırma/krilenme ve düzen alt boyutları sadece babadan algılanan aşırı koruyuculuk ile ilişkili bulunurken; zarar verme/görme ile ilişkili obsessif dürtüler alt boyutu sadece anneden algılanan reddedici, kritik eden tutum ile ilişkili bulunmuştur. Aileden algılanan aşırı koruyucu ve reddedici tutumlar ile obsessif-kompulsif bozukluk arasındaki ilişki farklı çalışmalar tarafından da desteklenmiştir (Hacıömerođlu & Karancı, 2014; Yoshida, Taga, Matsumoto, & Fukui, 2005). Fakat, bu çalışma ile anne ve babadan algılanan farklı tutumların obsessif-kompulsif semptomlar ile nasıl bir ilişki içerisinde olduğu da gösterilmiştir. Anne ve babanın farklı tutumlarının etkisi, anne ve babanın çocuk yetiştirme konusunda sahip oldukları farklı rollerle açıklanabilir (Bögels & Phares, 2008). Annenin sağladığı koşulsuz kabul ile babadan algılanan beklentiye dayalı kabul anne ve baba arasındaki temel farkı oluşturmaktadır (Fromm, 1956). Sonuç olarak, anneden algılanan reddedici, eleştirel ve cezalandırıcı tutumun obsessif-kompulsif belirtilerin gelişimi açısından toksik bir etkiye sahip olduğu söylenebilir.

Benlik-ikilemi değişkeni açısından, kendi değerlilikleri ve sosyal olarak kabul edilebilirlikleri konusunda belirsizlik ve ikilem yaşayan bireylerin daha fazla kontrol etme davranışları gösterdikleri ve zarar verme/görme konusunda obsesif düşüncelere sahip oldukları bulunmuştur. Bunun yanı sıra, başkaları tarafından kabul görme konusunda yoğun çaba içerisinde olan ve bu konuda belirsizlikler yaşayan bireylerin daha çok gözlemlenebilir kompulsiyonlar (örn; temizlik/bulaşma, düzen) gösterdikleri bulunmuştur. Bu bulgular, literatürde yer alan ve ritüellerin kişilerin ambivalant duygularının düzenlenmesinde ve ideal, mükemmel benlik algılarının sürdürülmesinde rol aldığı bilgisini destekler niteliktedir (Guidano & Liotti, 1983).

Ayrıca bu çalışmada aşırı sorumluluk algısı, abartılmış tehdit algısı, mükemmelliyeçilik, belirsizliğe tahammülsüzlük, düşüncelerin önemini ve

düşüncelerin kontrol edilmesini içeren işlevsel olmayan inanç ve şemalara sahip olmanın obsessif-kompulsif semptomatolojiyi artıracığı varsayılmış ve bu hipotezler desteklenmiştir. Bu şema alanları ile obsessif-kompulsif semptomlar arasındaki ilişkiye yönelik bulgu, literatürde önerilen diğer bilişsel modelleri (Clark & Purdon, 1999; Rachman, 1997; Salkovskis, 1985) destekler niteliktedir. Obsessif kompulsif bozukluğun alt boyutları ve inanç sistemleri arasındaki ilişki detaylı bir şekilde incelendiğinde, abartılmış sorumluluk algısı ve tehdit algısı değerlendirmesinin obsessif düşünceler alt boyutunda % 17'lik, kontrol etme alt boyutunda % 10 ve temizlik/ bulaşma alt boyutunda ise % 7'li bir varyans açıkladığı bulunmuştur. Bu bulgular doğrultusunda, bu örnekleme bir başkasına zarar verme konusunda hissedilen sorumluluk algısının kirlenme ve hastalık bulaştırma konusunda hissedilen sorumluluk algısından daha ön planda olduğu sonucuna varılabilir. Literatür bulgularını destekler nitelikte, aşırı sorumluluk algısı, ritüeller ve kompulsif davranışlarla kıyaslandığında obsessif düşünceler alt boyutunun oluşumunda daha büyük bir role sahiptir (Yorulmaz, Altın, & Karancı, 2008; Salkovskis, 1985).

Tüm bunlara ek olarak duygu düzenleme stratejilerine ait bulgular incelendiğinde, duygu dışavurumunu bastıran bireylerin genel obsessif-kompulsif semptomlarının yanı sıra kontrol etme ve zarar verme/görme obsesyonlarını daha fazla gösterdikleri görülmektedir. Literatürdeki diğer araştırmalar ile tutarlı olan bu bulgu (Aka, 2011; Allen & Barlow, 2009) duygu dışavurumunun baskılanmasının paradoksal etkisinin olduğunu göstermektedir. Bireyler, duygunun tepkisel kısmını baskılamış olsa da duygunun yarattığı fiziksel hissiyatları yaşamaya devam ettiğinden bu hislerin olumsuz yorumlanması kaygıyı sürdürmekte hatta daha da artmasına yol açmaktadır. Diğer taraftan, beklenmedik bir şekilde, bilişsel yeniden değerlendirme duygu düzenleme yöntemini kullanan bireylerin obsessif-kompulsif bozukluğun bulaştırma/temizlenme ve düzen alt boyutlarını sıklıkla gösterdikleri tespit edilmiştir. Diğer çalışmalarında, bilişsel yeniden değerlendirmenin uyum, işlevsellik, ve iyilik hali ile ilişkili olduğu gösterilmiştir (Gross, 2001; Fergus & Bardeen, 2013). Bu bulgu, literatür bilgilerini desteklemese de,

temizlenme/bulaştırma ve düzen semptomlarına sahip bireylerin kaygı toleransları ve bilişsel süreçleri hakkında bilgi vermektedir. Bu semptomlara sahip bireylerin irrasyonel düşüncelerini rasyonel olanlarla değiştirmek yerine kaygının yarattığı içsel duyumları ve düşünceleri ile aşırı meşguliyetleri sonucunda semptomlarının arttığı öne sürülebilir. Bu konunun netleştirilmesi açısından, obsessif-kompulsif bozukluğa sahip hastalarının bilişsel yeniden değerlendirme süreçleri ile ilgili ileri çalışmaların yapılması önerilmektedir.

Regresyon analizlerinin ardından benlik ikileminin ve bilişsel ve duygusal süreçlerin aracı rolünü test etmek amacıyla Hayes'in (2013) önerdiği prosedürlere göre ek analizler (Multiple Mediation Analysis) yapılmıştır. Analizler, değerlilik ikilemi ve sosyal kabul edilebilirlik değişkenlerinin hem anneden algılanan reddedici tutum ve genel obsessif-kompulsif semptomatoloji; hem de babadan algılanan aşırı koruyucu tutum ve genel obsessif-kompulsif semptomatoloji ilişkileri arasında açıklayıcı rolleri olduğunu ortaya koymuştur. Diğer bir deyişle, anneden algılanan reddedici, kritik eden tutum arttıkça bireylerin öz-değerleri ve başkaları tarafından kabul edilebilirlikleri konusunda yaşadıkları çatışma, ikilem artmakta ve bu artış obsessif- kompulsif semptomların ortaya çıkışında rol oynamaktadır. Buna ek olarak yapılan analizler, değerlilik ikilemi ve sosyal kabul edilebilirlik faktörlerinin obsessif- kompulsif semptomlar ile ilişkilerini ara değişken olarak işlevsel olmayan inanç sistemlerinin (aşırı sorumluluk/ abartılmış tehdit algısı, mükemmelliyetçilik/ belirsizlik, düşünce kontrolü/ önemi) ve duygu düzenleme yöntemi olarak bastırmanın açıkladığını göstermiştir. Bilişsel modeller ile tutarlı olan bu bulguların benlik konusundaki inançların ve şemaların bilişsel süreçleri ve dikkati tetikleyerek psikopatolojiye yatkınlığı artırdığı düşünülmektedir (örn; Guidano & Liotti, 1983; Beck, 1976).

Şimdiye kadar anlatılan analizlerle obsessif- kompulsif semptomların ortaya çıkışını yordayan faktörler belirlenmiş olmasına rağmen bu faktörlerin obsessif- kompulsif semptomlar ile ilişkisinin incelenmesi ve bu çalışmada önerilen kapsamlı modelin test edilmesi amacıyla Yapısal Eşitlik Modellemesi kullanılmıştır. Bulgular, her bir anne- baba tutumunun farklı bir yoldan obsessif-kompulsif semptomları etkilediğini göstermektedir. Örneğin, ebeveynlerden

algılanan reddedici, kritik eden tutumun hem doğrudan hem de başka değişkenler aracılığı ile dolaylı olarak obsessif- kompulsif semptomların oluşumuna katkı sağladığı bulunmuştur. Başka bir deyişle, aileden algılanan reddedici, kritik eden, aşağılayıcı tutum bireyin benlik değeri konusunda yaşadığı belirsizlikleri artırarak duygu dışavurumunu bastırmasına neden olmakta ve sonuç olarak obsessif-kompulsif belirtileri artırmaktadır. Aynı tutumun aynı zamanda işlevsel olmayan şemalar yoluyla da obsessif- kompulsif semptomları etkilediği gösterilmiştir. Aşırı koruyucu ve kontrol içeren anne, baba tutumlarının ise bireyin sevillebilirliği, değeri ve ahlaki duruşu konusunda yaşadığı belirsizlikleri, ikilemi artırarak duygu dışavurum davranışlarını bastırmasına neden olmakta ve sonuç olarak obsessif-kompulsif semptomatolojiyi artırmaktadır. Yine aileden algılanan düşük düzeydeki sıcaklık ve şevkat ise duygu dışavurumunun bastırılmasını artırarak obsessif-kompulsif semptomatolojinin oluşumunu etkilemektedir. Bu bulguları destekler nitelikte intrusif, aşırı koruyucu ve kontrolcü aile tutumlarının kaygıyı modelleyerek tehlike algısını artırdığı, kaçınma davranışlarını desteklediği ve sonuç olarak değersiz benlik algısını artırarak ambivalans duygulara yol açtığı gösterilmiştir (Ayçiçeği, Harris, & Dinn, 2002). Öte yandan, cezalandırıcı, eleştirel ve aşağılayan anne, baba tutumlarının ise mükemmel olma yönündeki kuralların ve inançların gelişiminde rol oynadığı ve bireyin kendisi ile ilgili değerlendirmelerini olumsuz etkilediği ortaya konmuştur (Arrindel et. al., 1999). Mevcut çalışmada, olumsuz ebeveyn tutumlarının obsessif- kompulsif semptomatolojinin oluşumunu etkilemesinde bireylerin değerlilikleri, kabul edilebilirlikleri ve ahlaki değerleri konusunda yaşadıkları ikilemin açıklayıcı faktör olduğu gösterilmiştir. Fakat, benlik ikilemi değişkeni obsessif kompulsif semptomları doğrudan etkilememekte, bastırma ve/veya işlevsel olmayan inançlar aracılığı ile yordamaktadır.

Guidano ve Liotti'nin (1983) de belirttiği gibi mükemmellikçilik, düşüncelerin kontrolü, düşüncelerin önemi, aşırı sorumluluk algısı ve abartılmış tehdit algısı gibi işlevsel olmayan yorumlamalar ile bireyler yaşadıkları ambivalansı ve belirsizliği netleştirmeye çalışmakta fakat bu tutum aynı zamanda obsessif kompulsif semptomların ortaya çıkışını tetiklemektedir. Guidano ve

Liotti (1983) benlik ikilemi kavramını diğer bilişsel ve duygusal süreçleri yöneten bir üst kavram olarak değerlendirmektedir. Bu çalışmadan elde edilen sonuçlar da bu varsayımı destekler niteliktedir. Benlik ikilemi işlevsel olmayan inançları ve duygu düzenleme yöntemlerini tetikleyerek dolaylı yoldan obsessif-kompulsif semptomların oluşumuna yol açmaktadır. Tüm bu bulgular ve teoriler doğrultusunda, benlik ikilemi kavramının obsessif kompulsif bozukluk açısından bir meta-yatkınlık faktörü olduğu söylenebilir.

Çalışmanın Güçlü Yönleri ve Klinik Alana Katkıları

Bu çalışma, obsessif-kompulsif bozukluğa özgü yorumlama süreçlerinin yanı sıra kendilik kavramını ve buna yol açan faktörleri ele almış, ve faktörler arası ilişkileri kapsamlı bir model ile incelemiştir. Ayrıca, benlik-ikilemine yönelik Türkçe'ye bir ölçüm aracı sunmaktadır. Sonuç olarak, uyarlanan bu araçla yapılacak araştırmalara katkı sağlamanın yanı sıra terapi sürecinde obsessif-kompulsif bozukluk tanısı alan hastaların değerlendirilmesinde kullanılabilecek yeni bir ölçüm aracı Türk literatürüne kazandırılmıştır. Daha da önemlisi, tespit edilen yatkınlık faktörleri obsessif kompulsif bozukluğa yönelik hazırlanacak psiko-eğitim ve müdahale programlarında ve obsessif kompulsif semptomların değerlendirilmesi ve terapisinde kullanılmak üzere önemli ipuçları sağlamaktadır.

Obsessif Kompulsif Bozukluğa sahip hastalarla çalışan terapistlerin, bilişsel davranışçı formülasyonlarında yer alan işlevsel olmayan düşünceler ve yorumlamaların yeniden değerlendirilmesi ve rasyonel olanlarla değiştirilmesinin yanı sıra bu değerlendirmeleri tetiklediği bulunan kendilik değeri konusunda yaşanan ambivalansa, ikileme de odaklanmaları gerekmektedir. Buna ek olarak, işlevsel olmayan duygu düzenleme stratejilerinin de bireylerin duygularını anlamaları sağlanarak değiştirilmesinin gerekliliği bu çalışma tarafından gösterilen bir diğer bulgudur.

Mevcut çalışmada bulunan algılanan anne, baba tutumlarının obsessif kompulsif semptomatoloji ile ilişkisi klinik ortamda terapistlere hastaların genel bağlanma tarzları ve temel duygusal ihtiyaçları konusunda bilgi vermektedir. Bu bilgiler ışığında, obsessif kompulsif hastaların tedavisinde şemaların çalışılması ve terapistlerle kurulan güvenli bağlanmanın hastaların duygusal ihtiyaçlarının

giderilmesinde önemli rol oynadığı düşünülmektedir (Young, Klosko & Weishaar, 2003).

Çalışmanın Kısıtlılıkları

Öte yandan, çalışmanın bazı sınırlılıkları da mevcuttur. İlk olarak, veriler internet üzerinden ve öz-değerlendirme araçları kullanılarak toplandığından katılımcıların kendilerini açmalarında zorluk yaşadığı söylenebilir. Buna ek olarak, katılımcıların anketleri tek seferde mi yoksa bir kaç seferde mi doldurdıkları bilinmediğinden bu durum bir diğer sınırlılık olarak kabul edilmektedir.

Buna ek olarak, örneklemin özellikleri açısından da bazı kısıtlılıklar mevcuttur. Örneğin; kadın katılımcıların sayısı erkek katılımcıların sayısının 1.5 katı kadardır. Bir diğer örnek ise örneklemin yüksek eğitim düzeyine sahip olmasıdır. Bu özellikler çalışmanın bulgularının genellenmesi konusunda bazı kısıtlılıklar oluşturmaktadır. Ayrıca, hasta grubu yerine tanısı olmayan grup ile çalışılmış olması bu çalışmanın bir diğer kısıtlılığıdır.

Öneriler

Araştırmacılara ve alanda çalışan klinisyenlere yapılabilecek bir öneri, bu çalışmanın bulguları doğrultusunda, olumsuz algılanan anne-baba tutumları, benlik değeri konusunda yaşanan belirsizlik, düşünce ve duygu düzenleme stratejilerinin olası etkilerini gösteren bir tedavi kılavuzu hazırlanmasıdır. Gelecekteki araştırmalarda ise, terapi sürecinde kendilik konusunda yaşanan ambivalansın ve çatışmaların çözümü ve benliğin stabilizasyonu konusunda gerekli olan yöntemlerin tespit edilmesi gerekmektedir.

Bu çalışmada elde edilen bulgular gelecekte farklı örneklemlerde, özellikle klinik örnekleme, çoğaltılmalıdır. Buna ek olarak, bu çalışmada test edilen modelin obsessif kompulsif bozukluğa özgü olup olmadığının test edilmesi amacıyla gelecek araştırmalarda aynı modelin depresyon ve diğer kaygı bozuklukları ile de test edilmesi önerilmektedir. Ayrıca, aynı değişkenlerin iyilik hali ile ilişkisinin incelenmesi koruyucu faktörlerin tespit edilmesi açısından önemlidir.

Bu çalışmada ayrıca, hangi anne ve baba tutumlarının obsessif kompulsif semptomlar ile ilişkili gösterilmiştir. Fakat, anneden algılanan reddedici tutumun babadan algılanan aşırı koruyucu tutum ile bir araya geldiğinde nasıl bir etkisinin olacağı bu çalışmanın kapsamında olmadığından incelenmemiştir. Gelecek araştırmalarda, bu iki faktörün etkisi grup karşılaştırmaları ile test edilmelidir. Aynı zamanda, anne baba tutumlarının cinsiyete göre farklı algılanabileceği göz önüne alındığında, sonraki çalışmalarda verilerin cinsiyetin etkisi kontrol edilerek toplanması önerilmektedir.

Son olarak, boylamsal çalışmaların gerekliliği özellikle anne, baba tutumlarının değerlendirilmesi açısından değerli katkılar sağlayacaktır.

APPENDIX D

CURRICULUM VITAE

PERSONAL INFORMATION

Surname, Name: Özekin-Üncüer, Filiz
Nationality: Turkish (TC)
Date and Place of Birth: 3 September 1986, Bursa
Marital Status: Married
Phone: +90 535 6800535
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EDUCATION

Degree	Institution	Year of Graduation
Ph.D.	METU Clinical Psychology;	2015
Candidate	Passed the Ph.D. Qualification Exam in November, 2012	
BS	METU Department of Psychology,	2009
High School	Milli Piyango Anadolu Lisesi, Bursa	2004

WORK EXPERIENCE

Year	Place	Enrollment
2013- Present	Martı Psikoterapi, Ankara	Clinical Psychologist
2011-2012	Bilkent Üniversitesi Psikolojik Danışma ve Gelişim Merkezi, Ankara	Clinical Psychologist

FOREIGN LANGUAGES

Advanced English,

PUBLICATIONS

Özekin-Üncüer, F. (2014). Yetişkin Bağlanma Biçimleri ile Obsesif-Kompulsif Bozukluk Arasındaki İlişkinin İncelenmesi: Psikoterapi Uygulamasına Bir Örnek. *AYNA Klinik Psikoloji Dergisi*, 1(1), 27-41.

INTERNATIONAL PRESENTATIONS

Özekin-Üncüer, F. & Karanci, A.N. (2015). *Reliability and Validity Studies of Turkish Translation of Self-Ambivalence Measure*. Oral Presentation at 14th European Congress of Psychology, Milan, Italy.

Özekin-Üncüer, F. & Maraş, A. (July, 2014). *Evaluation of a Case of Obsessive Symptomatology with Rorschach Test*. Poster Presented at XXI. International Congress of Rorschach and Projective Methods, İstanbul, Turkey.

Bozo, Ö., Gurol, İ., Ozbagriacik, P., Ozekin, F. (2007). *The Relationship between Religiosity and Death Anxiety: A cross-sectional study*. Oral Presentation at 10th European Congress of Psychology, Prague.

APPENDIX E

TEZ FOTOKOPİSİ İZİN FORMU

ENSTİTÜ

Fen Bilimleri Enstitüsü	<input type="checkbox"/>
Sosyal Bilimler Enstitüsü	<input checked="" type="checkbox"/>
Uygulamalı Matematik Enstitüsü	<input type="checkbox"/>
Enformatik Enstitüsü	<input type="checkbox"/>
Deniz Bilimleri Enstitüsü	<input type="checkbox"/>

YAZARIN

Soyadı : Özekin-Üncüer
Adı : Filiz
Bölümü : Klinik Psikoloji

TEZİN ADI: Perceived Parenting Styles, Self-Ambivalence, Cognitive and Emotional Regulation in Relation to Obsessive-Compulsive Symptomatology

TEZİN TÜRÜ : Yüksek Lisans Doktora

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir.
2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir.
3. Tezimden bir bir (1) yıl süreyle fotokopi alınamaz.

TEZİN KÜTÜPHANEYE TESLİM TARİHİ: