

Development and Psychometric Properties of the Dimensional Obsessive-Compulsive Scale Short Form

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ABSTRACT

The Dimensional Obsessive-Compulsive Scale (DOCS) is a measurement tool that assesses the severity of different symptom clusters in patients with obsessive-compulsive disorder (OCD) in a dimensional manner. This study aims to examine the psychometric properties of the behavioral and emotional response subdimensions defined based on items 1 and 3 of the Turkish version of the DOCS and to contribute to a dimension-based assessment of OCD severity. The study included 100 consecutive patients who were admitted to a psychiatry outpatient clinic and were diagnosed with OCD according to the Diagnostic and Statistical Manual of Mental Disorders-5 diagnostic criteria, as well as 100 participants in the control group. The DOCS and the Obsessive-Compulsive Inventory-Revised (OCI-R) were administered to the participants. The construct validity of the behavioral response and emotional response subdimensions, created based on items 1 and 3 of the DOCS, was evaluated using confirmatory factor analysis; internal consistency was examined using Cronbach's alpha and McDonald's omega coefficients. Correlations between the total OCI-R score and the DOCS behavioral response and DOCS emotional response dimensions were calculated within the framework of convergent validity. Confirmatory factor analysis results indicated that the behavioral and emotional response subdimensions had acceptable construct validity. In the reliability analyses, Cronbach's $\alpha=0.781$ and McDonald's $\omega=0.786$ for the behavioral response and Cronbach's $\alpha=0.744$ and McDonald's $\omega=0.748$ for the emotional response were calculated, demonstrating acceptable internal consistency for both subdimensions. The total OCI-R score was highly and significantly correlated with the DOCS behavioral response and emotional response dimensions ($r=0.882$ and $r=0.888$, respectively; $p<0.001$). The findings indicate that the response-based restructuring of the items in the Turkish short form of the DOCS is psychometrically valid and reliable. Evaluating behavioral and emotional responses as separate subdimensions allows for a more detailed and clinically meaningful, dimension-based OCD severity assessment.

Keywords: Behavioral response, dimensional assessment, emotional response, OCD, psychometrics.

ÖZ

Boyutsal Obsesif Kompulsif Ölçeği Kısa Formu (BOKÖ-KF) Geliştirilmesi ve Psikometrik Özellikleri

Boyutsal obsesif kompulsif ölçeği (BOKÖ), obsesif kompulsif bozuklukta (OKB) farklı belirti kümelerine eşlik eden şiddeti boyutsal olarak değerlendiren bir ölçme aracıdır. Bu çalışmanın amacı, BOKÖ'nün Türkçe formunda yer alan birinci ve üçüncü maddeler temel alınarak tanımlanan davranış tepkisi ve duyuş tepkisi alt boyutlarının psikometrik özelliklerini incelemek ve boyutsal temelli OKB şiddet değerlendirme-



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sine katkı sağlamaktır. Çalışmaya, psikiyatri polikliniğine ardışık olarak başvuran ve DSM-5 tanı ölçütlerine göre OKB tanısı alan 100 hasta ve 100 kontrol grubu dâhil edildi. Katılımcılara BOKÖ ile birlikte obsesif kompulsif ölçek revize edilmiş (OKÖ-R) uygulandı. BOKÖ'nün birinci ve üçüncü maddeleri temel alınarak oluşturulan davranış tepkisi ve duygu tepkisi alt boyutlarının yapı geçerliliği doğrulayıcı faktör analiziyle değerlendirildi; iç tutarlılık Cronbach alfa ve McDonald omega katsayıları kullanılarak incelendi. Benzer ölçek korelasyonları kapsamında, ölçeğin OKE-R toplam puanı ile BOKÖ davranış tepkisi ve BOKÖ duygu tepkisi boyutları arasındaki korelasyonlar hesaplandı. Doğrulayıcı faktör analizi sonuçları, davranış tepkisi ve duygu tepkisi alt boyutlarının kabul edilebilir düzeyde yapı geçerliliğine sahip olduğunu gösterdi. Güvenilirlik analizlerinde davranış tepkisi için Cronbach $\alpha=0,781$ ve McDonald $\omega=0,786$; duygu tepkisi için Cronbach $\alpha=0,744$ ve McDonald $\omega=0,748$ olarak hesaplandı ve her iki alt boyut için de kabul edilebilir iç tutarlılık değerleri elde edildi. Benzer ölçek korelasyonları ise OKE-R toplam puanı, BOKÖ'nün davranış tepkisi ve duygu tepkisi boyutlarıyla yüksek ve anlamlı düzeyde korelasyon gösterdi (sırasıyla $r=0,882$ ve $r=0,888$; $p<0,001$). Elde edilen bulgular, BOKÖ-KF Türkçe formunda yer alan maddelerin tepki temelli yeniden yapılandırılmasının psikometrik açıdan geçerli ve güvenilir olduğunu göstermektedir. Davranışsal ve duygusal tepkilerin ayrı alt boyutlar halinde değerlendirilmesi, boyutsal temelli OKB şiddetinin daha ayrıntılı ve klinik olarak anlamlı biçimde ölçülmesine olanak sağlamaktadır.

Anahtar Kelimeler: Davranışsal tepki, boyutsal değerlendirme, duygusal tepki, obsesif kompulsif bozukluk, psikometri.

INTRODUCTION

Obsessive-compulsive disorder (OCD) is a disorder characterized by obsessions and compulsions that often follow a chronic course with exacerbations and lead to significant impairment in an individual's social, occupational, academic, and overall functioning (Sadock, Sadock, & Ruiz, 2000). Obsessions are ego-dystonic, intrusive thoughts, images, or impulses that produce feelings of anxiety and distress. Compulsions are defined as repetitive behaviors or mental acts that arise in response to obsessions and are perceived as necessary to be performed (American Psychiatric Association, 2013).

OCD is a psychiatric disorder that occurs in approximately 1% of the general population, with symptoms typically beginning in young adulthood (Mahjani et al., 2020). Clinically, OCD is a heterogeneous disorder with respect to symptom manifestation, due to the presence of different obsessions and compulsions (Abramowitz et al., 2010).

Important attempts have been made to effectively measure the dimensional structure of OCD. Among these are the Dimensional version of the widely used Yale–Brown OC Scale and the Dimensional OC Scale (Abramowitz et al., 2010; Rosario-Campos et al., 2006).

The DOCS is a contemporary measurement tool that assesses obsessive-compulsive symptom domains at a dimensional level; however, some items within the scale's structure have a multilayered measurement potential, encompassing not only symptom content but also behavioral and emotional response components. Item 1 provides direct information about the

behavioral response to the obsessive stimulus and the amount of time allocated to this behavior, whereas Item 3 reflects the individual's tendency to avoid the obsessive experience and the accompanying level of emotional distress. Theoretical rationale suggests that these items may capture a broader repertoire of functional responses beyond the classical content-focused structure of the DOCS; however, this potential has not yet been psychometrically investigated. In addition, the scale assesses each of the four dimensions with five items (i.e., time spent on mental preoccupation and compulsions, avoidance, level of anxiety in the absence of compulsions, social functioning, and overimportance given to thoughts). This means that the scale consists of 20 items. Previous studies have shown that the length of the scale can increase respondent burden and that short forms may provide advantages in clinical use (Rolstad et al., 2011). In large-scale meta-analytic studies, brief screening tools can maintain diagnostic accuracy (Levis et al., 2020).

Whether behavioral and emotional responses can be measured through single-item indicators constitutes an important area of research in the development of brief screening tools. From a cognitive-behavioral perspective, obsessions are not inherently pathological. Obsessions and compulsions are associated with obsessions becoming more emotionally charged (Veale & Roberts, 2014). Compulsive activities are considered central to the pathology because they create a burden and prevent the testing of obsessive beliefs. Based on these considerations, we propose that the time spent on behavioral and mental activities and the negative emotions generated by obsessions in the absence of compulsions may serve as valid and sufficient indicators for OCD assessment.

Accordingly, this study aims to develop a shorter and more practical measurement tool that assesses emotional and behavioral responses across all dimensions, based on items 1 and 3 of the DOCS. Previous research has found that all items of the DOCS are adequate for measuring OCD severity (Uğurlu et al., 2024). In this study, we aimed to evaluate the properties of a measurement tool that was developed using only items that reflect emotional and behavioral responses.

METHODS

Participants and Procedure

Ethical approval was obtained from the Ethics Committee of Dışkapı Yıldırım Beyazıt Training and Research Hospital (Decision No. 98/04, dated October 19, 2020). Written informed consent was obtained from all participants, and the study was conducted in accordance with the Declaration of Helsinki. During the data collection phase, the sociodemographic information form, the Structured Clinical Interview for DSM-5 Axis I Disorders (SCID-5-CV), the Dimensional Obsessive-Compulsive Scale, and the Obsessive-Compulsive Inventory–Revised (OCI-R) were administered to patients with OCD. The study included 100 patients diagnosed with OCD who met the inclusion criteria and presented to the psychiatry outpatient clinic of Dışkapı Yıldırım Beyazıt Training and Research Hospital between November 19, 2020, and November 1, 2021, as well as 100 individuals in the control group. Patients with OCD included in the study were selected from consecutive individuals presenting to the psychiatry outpatient clinic, whereas the control group was selected from healthy volunteers using a convenience sampling method. All participants were informed in detail, and written informed consent was obtained. The researcher administered the Structured Clinical Interview for DSM-5 (SCID-5-CV) (Elbir et al., 2019) to patients referred from the outpatient clinics, and the diagnosis of OCD was confirmed. Comorbid diagnoses that could be present were also assessed. Inclusion criteria were as follows: diagnosed of OCD according to DSM-5 based on clinical interviews, was older than 18 years and younger than 65 years, was literate, and had the capacity to provide informed consent. Exclusion criteria were as follows: presence of a primary neurological disorder or intellectual disability; diagnosis of bipolar disorder (manic, depressive, mixed episode, or hypomania), substance use disorder, or psychotic disorder according to DSM-5 criteria; and presence of a cognitive mental disorder (dementia, delirium).

Measurements

Sociodemographic Data Form: A sociodemographic information form was used to obtain information about the participants, such as age, gender, occupation, place of residence, marital status, and psychiatric disorder diagnosis.

Structured Clinical Interview for DSM-5 Axis I Disorders (SCID-5-CV): The SCID-5-CV is a semi-structured interview guide developed to establish DSM-5 psychiatric diagnoses (First, 2014). It can be administered to individuals aged 18 years and older without severe cognitive impairment, severe psychotic symptoms, or psychomotor agitation. If the clinician deems it necessary, corrections can be made based on additional information, and the interview can be conducted over multiple sessions. The Turkish validity and reliability study of the SCID-5-CV was conducted by Elbir et al. (2019).

Dimensional Obsessive-Compulsive Scale (DOCS): Developed by Abramowitz et al. in 2010, the DOCS is a 20-item scale that evaluates obsessions and compulsions across four symptom dimensions (Abramowitz et al., 2010). The four symptom dimensions are contamination, responsibility for harm and mistakes, symmetry/ordering, and unacceptable thoughts. Each item has five response options scored between 0 and 4. The scale includes avoidance behavior and measures the severity of each symptom dimension. The Turkish validity and reliability adaptation of the scale was conducted by Şafak and colleagues (Şafak et al. 2018).

Obsessive-Compulsive Inventory–Revised (OCI-R): The OCI-R, developed by Foa et al., is a measure that assesses the severity and dimensions of obsessive-compulsive symptoms (Foa et al., 2002). Items are rated on a five-point Likert scale ranging from 0 (not at all) to 4 (extremely). The scale consists of 18 items and includes six subdimensions: washing, checking, ordering, obsessing, hoarding, and neutralizing. A Turkish validity and reliability adaptation was conducted. The internal consistency coefficients were reported as 0.89 for the total scale, 0.62 for washing, 0.78 for checking, 0.74 for ordering, 0.76 for obsessing, 0.69 for hoarding, and 0.55 for neutralizing (Yorulmaz et al., 2015). In this study, the severity of OCD symptoms was evaluated using the OCI-R, which was originally developed based on the DSM-IV diagnostic criteria. Hoarding symptoms were removed from the OCD diagnostic cluster in DSM-5 and classified as a separate disorder. Accordingly, the hoarding dimension was excluded from the analyses in the present study to ensure compatibility with the DSM-5 classification, and the total OCI-R score was calculated excluding the hoarding items. This approach ensures that the measurement more accurately reflects the OCD construct as defined by the DSM-5. This calculation method was referred to as “OCI-R (DSM-5 compatible).”

Statistical Analysis

In addition to the DOCS structure validated in the literature, a revised structure was examined in the present study, and reliability and validity analyses were conducted accordingly. Within this framework, the items under the four existing DOCS subdimensions were reorganized to define two composite

Table 1. Frequencies and percentages of the sociodemographic characteristics of participants

Variables	Variable levels	Group 1 (OCD)		Group 2 (Control)	
		f	%	f	%
Gender	Female	61	61.0	48	48.0
	Male	39	39.0	52	52.0
Age	18–23	19	19.0	20	20.0
	24–27	14	14.0	20	20.0
	28–31	17	17.0	30	30.0
	32–35	13	13.0	6	6.0
	36–42	16	16.0	6	6.0
	43 and above	21	21.0	18	18.0
Marital status	Single	42	42.0	56	56.0
	Married	51	51.0	40	40.0
	Divorced	7	7.0	4	4.0
Education level	Primary school	–	–	–	–
	Middle school	20	20.0	4	4.0
	High school	39	39.0	35	35.0
	University	41	41.0	61	61.0
Total		100	100	100	100

OCD: Obsessive-compulsive disorder.

subdimensions. The subdimension created by summing the first items across the four domains was labeled Behavioral Response, whereas the subdimension created by summing the third items was labeled Emotional Response. Construct validity was evaluated using confirmatory factor analysis (CFA), and reliability was assessed using Cronbach's alpha and McDonald's omega coefficients. Based on the obtained reliability and validity evidence, the behavioral and emotional response subdimensions provided reliable and valid measurements. Before CFA, the assumptions required for consistent parameter estimation, including outlier analysis, multivariate normality, multicollinearity, and linear relationships among variables, were examined. Examination of the data indicated the absence of outliers. Multivariate normality was evaluated using multivariate skewness (Zs), kurtosis (Zk), chi-square statistics, and relative multivariate kurtosis (RMK) values. The results indicated that the measurement tools did not exhibit a multivariate normal distribution (Behavioral Response: $Z_s=13.65$, $p=0.000$; $Z_k=7.23$, $p=0.000$; $\chi^2=238.56$, $p=0.000$; $RMK=1.576$; Emotional Response: $Z_s=9.36$, $p=0.000$; $Z_k=4.28$, $p=0.000$; $\chi^2=105.99$, $p=0.000$; $RMK=1.238$). Because multivariate normality assumptions were violated, robust maximum likelihood (MLR) estimation was employed in the CFA analyses. CFA analyses were performed using LISREL (version 8.8). When MLR estimation is used, the Satorra–Bentler

scaled chi-square (S–B χ^2) statistic is recommended instead of the conventional χ^2 value (Brown, 2015); therefore, robust fit indices were reported. Pairwise correlations between items were examined, and no correlations greater than 0.80 were observed, indicating the absence of multicollinearity and supporting linear relationships among variables. A sample size of approximately 200 is considered sufficient for non-complex models (Bentler & Bonett, 1980; Brown, 2015); therefore, the sample size was deemed adequate. Overall, all the assumptions required for the CFA were satisfied. Model fit was evaluated using multiple goodness-of-fit indices, including χ^2/df , CFI, GFI, AGFI, NFI, NNFI (TLI), RMSEA, and SRMR. In accordance with established guidelines (Browne & Cudeck, 1992; Kline, 2011), χ^2/df values below 3 indicate an acceptable fit; CFI, NFI, and NNFI values ≥ 0.90 were considered acceptable and ≥ 0.95 indicative of a good fit; RMSEA and SRMR values ≤ 0.08 indicated acceptable fit and ≤ 0.05 indicated excellent fit. No post hoc model modifications were performed based on modification indices, and the hypothesized model was retained as originally specified. In addition to the primary analyses, further statistical procedures were conducted to comprehensively evaluate the scale's psychometric properties. Test–retest reliability analyses were performed using measurements obtained at a two-week interval to assess temporal stability. Criterion-related validity was examined through correlation analyses between

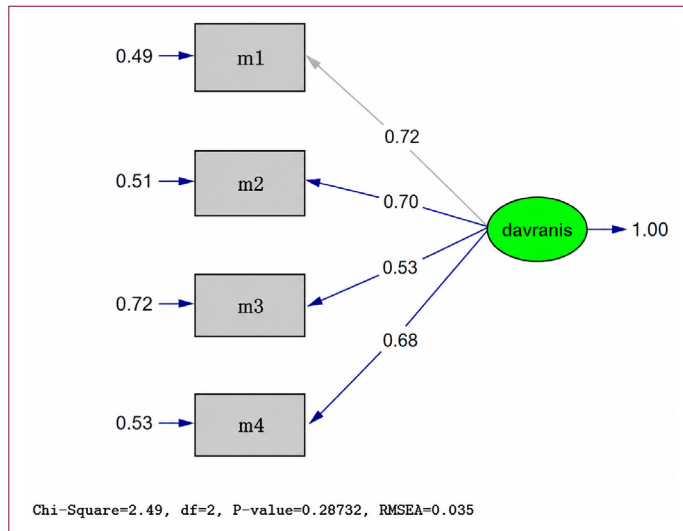


Figure 1. The measurement model defined for the factor structure of the behavioral response subdimension (standardized solutions).

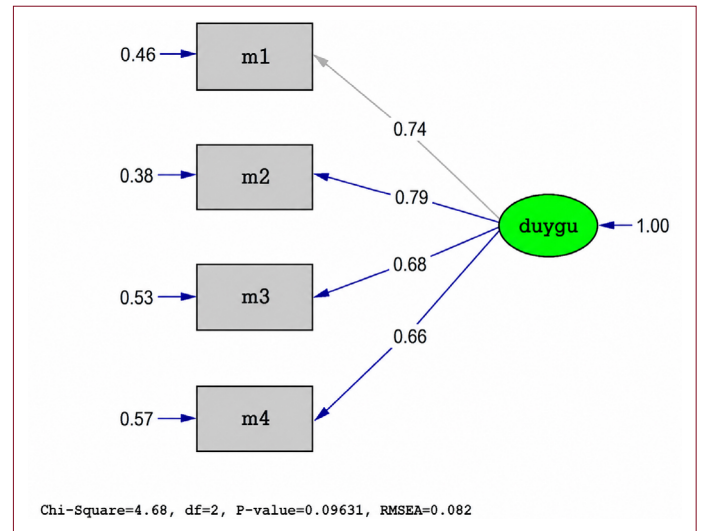


Figure 2. A measurement model defined for the emotional response subdimension's factor structure (standardized solutions).

the DOCS-SF subdimensions and the subdimensions of the Obsessive-Compulsive Inventory–Revised (OCI-R). Receiver operating characteristic (ROC) curve analyses were conducted to determine the discriminative ability and optimal cut-off scores of the short form, and the corresponding sensitivity and specificity values were calculated. Furthermore, to control for potential confounding effects in group comparisons, analyses of covariance (ANCOVA) was performed using education duration included as a covariate.

RESULTS

Demographic Data

The mean age of the OCD group included in the study was 33.10±10.07, whereas the mean age of the control group was 31.59±10.47. In our study, 61% (n=61) of the patients with OCD were female and 39% (n=39) were male; in the control group, 48% (n=48) were female and 52% (n=52) were male. Approximately 60% of the OCD group and 50% of the control group were female.

When educational levels were examined, it was observed that most participants in both the OCD and control groups were university graduates, whereas the number of middle school graduates was very low. A statistically significant difference was observed between the two groups (p=0.001). The educational duration of both groups was compared using a non-parametric test, and a statistically significant difference was also detected. The mean duration of education was 12.78±3.02 years in the OCD group and 14.28±2.29 years in the control group (Table 1).

Factor Structure, Content Validity, and Convergent Validity

When Figure 1 is examined, it can be seen that the factor loadings of the items in the measurement tool ($\lambda=0.53-0.72$) and the error variance values ($\epsilon=0.49-.72$) are within acceptable ranges. Factor loadings of 0.30 or higher indicate that the items are appropriate for measuring the latent construct, and error variances below 0.90 indicate an acceptable amount of measurement error for assessing the latent construct (Kline, 2011).

When Figure 2 is examined, it can be seen that the factor loadings of the items in the measurement tool ($\lambda=0.66-0.79$) and the error variance values ($\epsilon=0.38-0.57$) are within acceptable ranges. Factor loadings of 0.30 or higher indicate that the items are appropriate for measuring the latent construct, and error variances below 0.90 indicate an acceptable amount of measurement error for assessing the latent construct (Kline, 2011).

Reliability Analysis

When Table 2 is examined, it can be seen that the reliability values obtained from the measurement instruments are greater than 0.70, indicating acceptable reliability (Salvucci et al., 1997). In conclusion, the behavioral response and emotional response subdimensions provide reliable and valid measurements.

Correlations Between the Behavioral and Emotional Response Dimensions and OCI-R

When Table 3 is examined, a high and significant relationship between the behavioral and emotional response dimensions ($r=0.900, p<0.001$). Both dimensions showed high and

Table 2. Estimated reliability values for the measurement instrument in the present and original studies

Subdimensions	Cronbach α	McDonald ω
Behavioral response	0.781	0.786
Emotional response	0.744	0.748

statistically significant correlations with the OCI-R DSM-5 compatible total scores ($r=0.866$ – 0.888 , all $p<0.001$). The very high correlation between the DSM-IV and DSM-5 compatible total scores of the OCI-R ($r=0.992$, $p<0.001$) indicates that the core construct measured by the scale was largely preserved despite the exclusion of the hoarding dimension. Correlations between the DOCS-SF and OCI-R subdimensions (obsessing, washing, hoarding, ordering, checking, and neutralizing) were examined and presented. The behavioral response subdimension demonstrated strong positive correlations with OCI-R obsessing ($r=0.783$), washing ($r=0.734$), ordering ($r=0.705$), checking ($r=0.718$), and neutralizing ($r=0.702$), whereas a comparatively weaker association was observed with hoarding ($r=0.410$). Similarly, the emotional response subdimension showed strong correlations with obsessing ($r=0.797$), washing ($r=0.726$), ordering ($r=0.736$), checking ($r=0.711$), and neutralizing ($r=0.697$), and a lower correlation with hoarding ($r=0.416$).

Additional analyses, including ANCOVA to control for potential confounding variables, ROC analyses to evaluate discriminative ability, and test–retest analyses to assess temporal stability, were conducted to further support the psychometric properties of the scale.

ANCOVA analyses were conducted for all subdimensions, with duration of education included as a covariate. After controlling for education duration, the differences between individuals with OCD and healthy controls remained statistically significant across all subdimensions: cleaning ($F(1.197)=116.29$, $p<0.001$), responsibility ($F(1.197)=147.66$, $p<0.001$), intrusive thoughts ($F(1.197)=115.38$, $p<0.001$), and symmetry ($F(1.197)=45.52$, $p<0.001$). These findings demonstrate that the observed group differences are not attributable to differences in duration of education.

ROC curve analyses were conducted to evaluate the ability of the subdimensions to discriminate individuals with OCD from healthy controls. The area under the curve (AUC) for the behavioral response subdimension was 0.962 (95% CI=0.940–0.983, $p<0.001$), indicating excellent diagnostic accuracy. The optimal cut-off score was 2.50, yielding a sensitivity of 0.86 and a specificity of 0.90. The AUC for the emotional response subdimension was 0.937 (95% CI=0.907–0.967, $p<0.001$), reflecting excellent discriminative power. The optimal cut-off score was 4.50, with a sensitivity of 0.75 and a specificity of 0.91. These

Table 3. Correlations of the behavioral and emotional response dimensions with the OCI-R DSM-IV and DSM-5 compatible scores

	Behavioral response	Emotional response	OCI-R (DSM-IV compatible)	OCI-R (DSM-5 compatible)
Behavioral response				
Pearson correlation	1	0.900**	0.866**	0.882**
Sig. (2-tailed)		0.000	0.000	0.000
N	200	200	200	200
Emotional response				
Pearson correlation	0.900**	1	0.872**	0.888**
Sig. (2-tailed)	0.000		0.000	0.000
N	200	200	200	200
OCI-R (DSM-IV compatible)				
Pearson correlation	0.866**	0.872**	1	0.992**
Sig. (2-tailed)	0.000	0.000		0.000
N	200	200	200	200
OCI-R (DSM-5 compatible)				
Pearson correlation	0.882**	0.888**	0.992**	1
Sig. (2-tailed)	0.000	0.000	0.000	
N	200	200	200	200

N=200. The Pearson correlation coefficients are presented in Table 1. The total score of the OCI-R (DSM-5 compatible) was calculated by excluding the hoarding subdimension, in line with the removal of hoarding disorder from the OCD diagnostic cluster in DSM-5.** $p<0.01$ (two-tailed).

findings demonstrate that both subdimensions of the short form possess strong diagnostic accuracy and may be clinically useful in differentiating individuals with OCD from healthy controls.

In addition to clarifying the clinical rationale for distinguishing behavioral and emotional responses, we have incorporated test–retest reliability findings. A subsample of participants ($n=31$) completed the DOCS-SF again after a 2-week interval. The behavioral response subdimension demonstrated excellent temporal stability ($r=0.908$, $p<0.001$), and the emotional response subdimension showed strong stability ($r=0.741$, $p<0.001$). These findings further support the reliability of the short form over time.

DISCUSSION

To the best of our knowledge, this study is the first to examine the “Behavioral Response” and “Emotional Response” subdimensions derived from items 1 and 3 of the DOCS, in addition to the original structure of the scale, which was built on four symptom dimensions. The DOCS is a robust measurement tool that classifies OCD symptoms according to content domains and uses a dimensional approach to evaluate the severity of these contents. However, in the original DOCS format, individuals’ behavioral and emotional responses to obsessions and compulsions are represented by single items and are not addressed as separate constructs. Therefore, this study aimed to expand the scope of the DOCS and contribute to the systematic assessment of reactive processes beyond symptom content.

The discriminant validity between the behavioral and emotional response dimensions was examined using the heterotrait–monotrait (HTMT=1.15) ratio. The results indicated a high association between the two dimensions, reflecting their close relationship. However, this finding is theoretically consistent with the nature of obsessive-compulsive symptomatology, in which emotional distress and behavioral responses are inherently intertwined. Similar patterns have been reported in established OCD measures. For instance, studies on the Yale–Brown Obsessive–Compulsive Scale (Y-BOCS) have demonstrated strong correlations between obsession and compulsion severity scores, yet the two-factor structure has been retained due to theoretical and clinical considerations (Goodman et al., 1989). Importantly, the CFA in this study supported the two-factor model with acceptable fit indices. The two-factor structure was preserved based on statistical findings and theoretical rationale, given the distinct clinical implications of behavioral and emotional responses in assessment and treatment planning.

The results of the CFA revealed that both the behavioral and emotional response subdimensions functioned consistently with the existing structure of the DOCS and demonstrated good model fit. The presence of significant and acceptable

factor loadings supports the strong capacity of these two items to represent reactive dimensions that already exist within the DOCS. The internal consistency values obtained for both the behavioral response and emotional response subscales indicate that the scale is highly reliable. Cronbach’s $\alpha=0.781$ and McDonald’s $\omega=0.786$ obtained for the behavioral response subdimension demonstrate that the subscale items are highly consistent in measuring the same construct.

Similarly, Cronbach’s $\alpha=0.744$ and $\omega=0.748$ were obtained for the emotional response subdimension, indicating that emotional distress and emotional reactions were strongly represented as a homogeneous factor. These findings are consistent with previous studies demonstrating that components of behavioral avoidance and emotional distress are distinctive and consistent parts of OCD symptomatology (Abramowitz et al., 2010; Obsessive-Compulsive Cognitions Working Group [OCCWG], 1997, 2005). The high α and ω values observed in the behavioral response subscale indicate that avoidance, checking, and compulsive behaviors observed in OCD share similar functional characteristics and can be consistently evaluated within the scale. This result supports the assumption in cognitive models that the behavioral components of OCD operate through a common functional mechanism (Rachman, 1998). The similarly strong coefficients obtained for the emotional response subscale are consistent with the literature indicating that OCD’s core emotional components are threat perception, anxiety, guilt, and intense emotional distress. The high homogeneity of the items in this subscale demonstrates that the emotional response represents an independent and clinically interpretable dimension. Within this framework, the findings of the study indicate that both the behavioral and emotional subdimensions of the scale are highly consistent and that the constructs they measure are well-differentiated psychometrically. Moreover, the strength of the ω coefficients supports that these subscales can be reliably used in clinical research and provide sensitive measurement in the evaluation of OCD symptom dimensions. This finding suggests that OCD involves a complex emotion–behavior interaction system that cannot be reduced solely to obsessions and compulsions. The contribution of emotional distress, threat perception, and avoidance tendencies to symptomatology is consistent with cognitive and metacognitive models. These results are also in line with the literature emphasizing that the components of “behavioral avoidance” and “emotional distress” are integral parts of OCD symptomatology, as highlighted in the initial studies in which the DOCS was developed (Abramowitz et al., 2009). Therefore, the findings of this study demonstrate that reactive patterns can also be measured independently, consistent with the theoretical foundations of the scale. Previous research has shown that response patterns related

to emotional distress and avoidance represent related yet separable components of OCD phenomenology, emphasizing that content-based dimensions cannot fully explain symptom severity (Ekici & Özdel, 2023). Consistent with these findings, the present study indicates that the emotional and behavioral responses derived from the DOCS can be reliably assessed as independent subdimensions. These results suggest that response-based processes, such as emotional distress and behavioral avoidance, play a central role in OCD and highlight the importance of evaluating not only symptom severity but also how symptoms are experienced in clinical assessments.

The study by Uğurlu and colleagues (2024) demonstrated the psychometric strength and clinical discriminative validity of the DOCS through its total score and original subdimensions, with a particular focus on determining cut-off points. In contrast to this holistic approach, this study focuses on the item-level structure of the DOCS and examines the behavioral and emotional responses accompanying OC symptoms as separate subdimensions based on items 1 and 3 of the scale. The acceptable validity and reliability indicators observed for the behavioral and emotional response subdimensions suggest that the DOCS can measure overall severity also differentiate the response domains through which this severity is experienced. This approach allows the scale to address not only the question of “how severe” but also “through which responses the severity is experienced.”

This study differentiates the behavioral and emotional components of dimension-based OCD severity and deepens the scale’s psychometric interpretability. The DOCS appears to be a multidimensional measurement tool that can be used for screening and diagnostic purposes as well as for detailed phenomenological and research-oriented assessments (Uğurlu et al., 2024).

Blakey et al. (2016) reported that experiential avoidance is strongly associated with obsessive content and that difficulties in regulating emotional responses predict both clinical and subclinical OCD symptoms. This study provides important evidence supporting the “emotional response–symptom severity” link observed in our findings.

Overall, this study demonstrates that behavioral and emotional responses should be evaluated together to achieve a more comprehensive understanding of OCD symptoms. The structure of the DOCS, which differentiates between Emotional Response and Behavioral Response dimensions, enables the individualization of emotion regulation processes and avoidance behaviors in both clinical assessment and treatment planning. The findings support the importance of targeting emotion tolerance, cognitive reappraisal, metacognitive awareness, and avoidance cycles, particularly in CBT- and MCT-based interventions.

Limitations

Several limitations should be considered when interpreting this study’s findings. First, the sample’s gender distribution was not fully balanced, which may limit the generalizability of the results across sexes. Second, the relatively restricted age and educational range of participants may constrain the applicability of the findings to broader populations. Additionally, the OCD sample was clinically heterogeneous in terms of illness duration, treatment status, and potential comorbid conditions, which may have influenced symptom presentation and response patterns. Nevertheless, the study also demonstrated important strengths. In particular, the inclusion of test–retest analyses provided evidence of temporal stability, with the behavioral response subdimension showing excellent reliability and the emotional response subdimension demonstrating strong stability over a 2-week interval. These findings support the robustness of the DOCS-SF and indicate that the scale yields consistent measurements over time, enhancing its suitability for repeated assessments and clinical follow-up evaluations.

CONCLUSION

In conclusion, this study provides evidence supporting the reliability and validity of the DOCS-SF by demonstrating a coherent factorial structure, strong internal consistency, satisfactory temporal stability, and excellent discriminative ability between individuals with OCD and healthy controls. The distinction between behavioral and emotional responses offers clinically meaningful information that may contribute to more individualized assessment and treatment planning. The DOCS-SF appears to be a practical tool for both research and clinical settings, particularly in contexts requiring rapid assessment or repeated measurement, given its brevity and strong psychometric performance. Future research should further examine the scale across diverse populations, longitudinal designs, and treatment outcome studies to better understand its sensitivity to change and long-term clinical applicability.

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Informed Consent: Informed consent was obtained from all individual participants included in the study.

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REFERENCES

- Abramowitz, J. S., Deacon, B. J., Olatunji, B. O., Wheaton, M. G., Berman, N. C., Losardo, D., ... Adams, T. (2010). Assessment of obsessive-compulsive symptom dimensions: Development and evaluation of the Dimensional Obsessive-Compulsive Scale. *Psychological Assessment, 22*(1), 180. [CrossRef]
- Abramowitz, J. S., Lackey, G. R., & Wheaton, M. G. (2009). Obsessive-compulsive symptoms: The contribution of obsessional beliefs and experiential avoidance. *Journal of Anxiety Disorders, 23*(2), 160–166. [CrossRef]
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing. [CrossRef]
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin, 88*(3), 588. [CrossRef]
- Blakey, S. M., Jacoby, R. J., Reuman, L., & Abramowitz, J. S. (2016). The relative contributions of experiential avoidance and distress tolerance to OC symptoms. *Behavioural and Cognitive Psychotherapy, 44*(4), 460–471. [CrossRef]
- Brown, T. A. (2015). *Confirmatory factor analysis for applied research* (2nd ed.). Guilford Press.
- Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods & Research, 21*(2), 230–258. [CrossRef]
- Ekici, E., & Ozdel, K. (2023). Measuring Disgust Proneness Using the Disgust Propensity and Sensitivity Scale-Revised: Psychometric properties with factorial invariance in obsessive-compulsive disorder and non-clinical samples. *Psychiatry and Behavioral Sciences, 13*(1), 39. [CrossRef]
- Elbir, M., Alp Topbaş, Ö., Bayad, S., Kocabaş, T., Topak, O. Z., Çetin, Ş., ... Aydemir, Ö. (2019). DSM-5 bozuklukları için yapılandırılmış klinik görüşmenin klinisyen versiyonunun Türkçeye uyarlanması ve güvenilirlik çalışması. *Türk Psikiyatri Dergisi, 30*(1), 51–56. [Article in Turkish]
- First, M. B. (2014). Structured clinical interview for the DSM (SCID). *The Encyclopedia of Clinical Psychology, 1*–6. [CrossRef]
- Foa, E. B., Huppert, J. D., Leiberg, S., Langner, R., Kichic, R., Hajcak, G., & Salkovskis, P. M. (2002). The Obsessive-Compulsive Inventory: Development and validation of a short version. *Psychological Assessment, 14*(4), 485. [CrossRef]
- Goodman, W. K., Price, L. H., Rasmussen, S. A., Mazure, C., Delgado, P. L., Heninger, G. R., & Charney, D. S. (1989). The Yale-Brown Obsessive Compulsive Scale: II. Validity. *Archives of General Psychiatry, 46*(11), 1012–1016. [CrossRef]
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). Guilford Press.
- Levis, B., Sun, Y., He, C., Wu, Y., Krishnan, A., Bhandari, P. M., ... Depression Screening Data (DEPRESSD) PHQ Collaboration. (2020). Accuracy of the PHQ-2 alone and in combination with the PHQ-9 for screening to detect major depression: Systematic review and meta-analysis. *JAMA, 323*(22), 2290–2300. [CrossRef]
- Mahjani, B., Hultman, C. M., Sandin, S., et al. (2020). Epidemiology and genetics of obsessive-compulsive disorder and chronic tic disorders in Sweden (EGOS). *Social Psychiatry and Psychiatric Epidemiology, 55*(11), 1383–1393. [CrossRef]
- Obsessive Compulsive Cognitions Working Group. (1997). Cognitive assessment of obsessive-compulsive disorder. *Behaviour Research and Therapy, 35*(7), 667–681. [CrossRef]
- Obsessive Compulsive Cognitions Working Group. (2005). Psychometric validation of the obsessive belief questionnaire and interpretation of intrusions inventory-Part 2: Factor analyses and testing of a brief version. *Behaviour Research and Therapy, 43*(11), 1527–1542. [CrossRef]
- Rachman, S. (1998). A cognitive theory of obsessions: Elaborations. *Behaviour Research and Therapy, 36*(4), 385–401. [CrossRef]
- Rolstad, S., Adler, J., & Rydén, A. (2011). Response burden and questionnaire length: Is shorter better? A review and meta-analysis. *Value in Health, 14*(8), 1101–1108. [CrossRef]
- Rosario-Campos, M. C., Miguel, E. C., Quatrano, S., Chacon, P., Ferrao, Y., Findley, D., ... Leckman, J. F. (2006). The Dimensional Yale-Brown Obsessive-Compulsive Scale (DY-BOCS): An instrument for assessing obsessive-compulsive symptom dimensions. *Molecular Psychiatry, 11*(5), 495–504. [CrossRef]
- Sadock, B. J., Sadock, V. A., & Ruiz, P. (2000). *Comprehensive Textbook of Psychiatry* (Vol. 1). Lippincott Williams & Wilkins.
- Şafak, Y., Say Öcal, D., Özdel, K., Kuru, E., & Örsel, S. (2018). Obsesif Kompulsif Bozuklukta Boyutsal Yaklaşım: Boyutsal Obsesif Kompulsif Bozukluk Ölçeği Türkçe'nin Psikometrik Özellikleri. *Türk Psikiyatri Dergisi, 29*(2), 122–130. [Article in Turkish]
- Salvucci, S., Walter, E., Conley, V., Fink, S., & Saba, M. (1997). *Measurement error studies at the National Center for Education Statistics*. Washington, DC: National Center for Education Statistics.

- Uğurlu, M., Özyurt, A. A., Deveci, N., Uğurlu, G. K., Şahin, E. K., Kamlı, G. Z., & Çayköylü, A. (2024). Determining the cut-off scores for the Maudsley Obsessional Compulsive Inventory and the Dimensional Obsessive Compulsive Scale and reviewing their psychometric properties: Which is more appropriate for the evaluation of obsessive-compulsive disorder? *Psychiatry and Behavioral Sciences*, 14(1), 11. [\[CrossRef\]](#)
- Veale, D., & Roberts, A. (2014). Obsessive-compulsive disorder. *BMJ*, 348, g2183. [\[CrossRef\]](#)
- Yorulmaz, O., Inozu, M., Clark, D. A., & Radomsky, A. S. (2015). Psychometric properties of the Obsessive-Compulsive Inventory-Revised in a Turkish analogue sample. *Psychological Reports*, 117(3), 781–793. [\[CrossRef\]](#)