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Attention-Deficit/Hyperactivity Disorder Symptoms in Adults With Obsessive-Compulsive Disorder: Associations With Symptom Dimensions

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Objective Obsessive-compulsive disorder (OCD) and attention-deficit/hyperactivity disorder (ADHD) share overlapping cognitive and neurobiological features, yet data on ADHD symptomatology in adults with OCD remain limited. This study aimed to examine the association between ADHD symptom severity and OCD symptom dimensions in an adult OCD sample.

Methods Ninety-four adults diagnosed with OCD according to Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition criteria were recruited from an outpatient psychiatry clinic. OCD severity and symptom dimensions were assessed using the Yale–Brown Obsessive Compulsive Scale (Y-BOCS). ADHD symptom severity was evaluated with the Adult ADHD Self-Report Scale (ASRS), including inattention and hyperactivity subscales. Correlation and multiple linear regression analyses were conducted to examine relationships between ADHD symptom dimensions and OCD severity.

Results Higher ASRS total scores were significantly associated with greater Y-BOCS total scores ($r=0.40$, $p<0.001$). Inattention symptoms were more strongly associated with total obsession ($\beta=0.37$, $p=0.008$) and total compulsion scores ($\beta=0.41$, $p=0.003$) than hyperactivity symptoms. Regression models indicated that inattention, but not hyperactivity, independently predicted OCD symptom severity. ADHD symptom severity was negatively associated with global improvement scores.

Conclusion ADHD symptoms, particularly inattention, were associated with greater OCD symptom severity within this OCD sample. These findings suggest that ADHD symptoms, particularly inattention, may be relevant in understanding variability in OCD severity within clinical samples. Further studies are needed to clarify underlying mechanisms and clinical implications.

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Keywords Obsessive-compulsive disorder; ADHD symptoms; Inattention; Hyperactivity; Adult psychiatry.

INTRODUCTION

Obsessive-compulsive disorder (OCD) is a condition involving obsessions and compulsions, typically chronic and sometimes marked by periodic exacerbations, significantly impairing the individual's daily functioning. Obsessions are intrusive, unwanted, repetitive thoughts, images, or impulses that cause distress and cannot be voluntarily dismissed. Compulsions are repetitive behaviors performed involuntarily in an attempt to neutralize or relieve the distress caused by obsessions.[1]

Attention-deficit/hyperactivity disorder (ADHD) is a lifelong neurodevelopmental disorder that disrupts family, occupational, and social functioning. It consists of inattention and/or hyperactivity–impulsivity components. In the 2013 Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), ADHD was categorized under "Neurodevelopmental Disorders" and acknowledged as a condition that may co-occur with Autism Spectrum Disorder. The onset age was changed to 12 years. In adults over age 17, the presence of five symptoms became sufficient for diagnosis, and ADHD was recognized as a lifelong condition.[2]

Worldwide research indicates an ADHD prevalence of 5.3%–7.1% in children and adolescents, and 3.4%–5% in adults.[3] OCD and ADHD are common developmental neuropsychiatric conditions that significantly affect functioning. Although reports of ADHD symptoms co-occurring with OCD in younger pop-

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ulations have increased, relatively few studies have examined ADHD symptom dimensions in adult OCD populations.[4] OCD and ADHD differ markedly in pathophysiology, phenomenology, and treatment strategies.

The prevalence of ADHD symptom dimensions in individuals with OCD has been reported to range from 30% in children and adolescents to 2%–22% in adults.[5] A history of childhood ADHD symptoms has been associated with increased risk of OCD in adulthood. In early-onset OCD, ADHD-related symptoms are commonly observed and may be linked to more severe and persistent clinical presentations, including hoarding-related features.[6] In the present study, "childhood ADHD" refers to the presence of ADHD symptoms or a clinical diagnosis before the age of 18, consistent with DSM-5 criteria, while "childhood-onset OCD" refers to the onset of obsessive–compulsive symptoms before the age of 18.

From a cognitive perspective, both conditions are associated with deficits in attentional processing, executive functioning, and frontostriatal circuitry, although individuals with prominent ADHD symptoms may exhibit broader impairments. In particular, inattention has been linked to maladaptive coping styles such as excessive control and perfectionism.[7]

Similarities between OCD and ADHD—impairments in reward processing, inhibitory control, cognitive flexibility, and dysfunction in overlapping neurotransmitter pathways—suggest potential shared genetic vulnerability. OCD, ADHD, and Tourette syndrome have also been linked to autoimmune etiologies under the term "Pediatric Acute-Onset Neuropsychiatric Syndrome."

Blanco-Vieira et al.[8] reported that adults with OCD presenting with ADHD symptoms were younger, had earlier onset of OCD symptoms, greater academic impairment, more frequent rheumatic fever history, higher symptom severity on the Yale–Brown Obsessive Compulsive Scale (Y-BOCS), more sensory phenomena, higher levels of co-occurring psychiatric symptoms, greater anxiety and depression severity, increased suicide attempts, and a higher risk of Tourette syndrome.

An early study conducted in Türkiye examining ADHD symptoms in OCD reported that patients presenting with ADHD symptoms more frequently exhibited checking compulsions, whereas washing compulsions were more common in those without such symptoms.[9] The same study also indicated that ADHD symptoms were associated with earlier onset of OCD and higher levels of co-occurring psychiatric symptoms, including dysthymia, post-traumatic stress disorder, and social anxiety.

Another study by Sheppard et al.[10] reported higher levels of ADHD symptoms in childhood-onset OCD, accompanied by greater bipolar disorder rates, more severe clinical presentations, and more frequent employment instability and impulsive behavior patterns. The most common compulsions were checking and washing, and hoarding behaviors were more frequent in patients presenting with ADHD symptoms.

In addition, OCD patients have been reported to exhibit elevated ADHD symptom levels, with hoarding behaviors appearing more frequently in the presence of broader psychiatric symptom burden.[10] The inattentive dimension of ADHD symptoms has been particularly associated with hoarding-related features.

Recent studies suggest that ADHD symptoms observed in OCD may reflect a distinct familial pattern, highlighting the need for further family-based and twin studies.[10]

These findings raise several questions: do the two disorders truly co-occur, do they mimic each other, or does one increase susceptibility to the other? Shared dopaminergic and serotonergic dysfunctions have been proposed in OCD, ADHD, and restless legs syndrome, and genetic markers as well as the therapeutic efficacy of dopaminergic agents have been emphasized.[11] OCD patients feel compelled to perform compulsions when prevented from doing so, whereas individuals with ADHD may engage in repetitive behaviors for immediate reward. Brain-mapping studies indicate that both disorders exhibit deficits in interference inhibition and attentional control. Both conditions share frontostriatal dysfunction; however, ADHD is characterized by hypoactivation, whereas OCD shows hyperactivation.[12] Despite these opposite patterns, both disorders demonstrate similar executive dysfunctions, particularly deficits in inhibition.

Distinct neurobiological processes may therefore lead to comparable impairments. Reward-based learning and decision-making deficits observed in both disorders reflect dysfunction in medio-fronto-striato-limbic circuits. Disorder-specific dysfunctions include ventromedial orbitofrontal cortex impairment in OCD and right putamen dysfunction in ADHD.[13] Some studies have suggested that stimulant medications used in the treatment of ADHD may exacerbate OCD symptoms.[9]

ADHD symptoms are particularly relevant in early-onset OCD and checking compulsions and may have important implications for treatment and prognosis. Although ADHD and OCD present with distinct clinical features, both conditions involve deficits in attention, impulsivity, and executive functioning.

Given the limited research on ADHD symptom dimensions in adult OCD populations, this study focused on examining the relationship between ADHD symptoms and OCD severity.

The primary aim of this study was to examine the association between ADHD symptom dimensions and OCD severity in an adult OCD sample. The secondary aim was to evaluate whether inattention and hyperactivity symptom dimensions differentially predict OCD symptom severity. We hypothe-

sized that 1) ADHD symptom severity would be positively associated with OCD severity, and 2) inattention symptoms would demonstrate a stronger association with OCD symptom dimensions than hyperactivity symptoms.

METHODS

Participants and study design

This cross-sectional, observational study was conducted with 94 adult patients diagnosed with OCD according to DSM-5 diagnostic criteria. The study focused on within-sample associations and did not include a control group.

Participant recruitment and data collection were conducted between February 2022 and February 2023, following ethics committee approval. During this period, patients presenting to the psychiatry outpatient clinic were routinely evaluated through standard clinical assessment procedures, and eligible individuals were consecutively invited to participate in the study.

A post-hoc power analysis was conducted using G*Power 3.1 (Heinrich Heine University Düsseldorf) to evaluate whether the sample size was adequate for the main regression analyses. Based on a sample size of 94 participants, an alpha level of 0.05, two main predictors, and a medium effect size (f^2=0.15), the statistical power was estimated to be 0.93. This indicates that the study had sufficient power to detect significant associations.[14]

Diagnostic procedures

All psychiatric diagnoses were established using the Structured Clinical Interview for DSM-5 Clinician Version (SCID-5-CV), administered by a psychiatrist with clinical experience in structured diagnostic assessment. The interviews were conducted face-to-face during the initial clinical evaluation prior to study inclusion.

All participants underwent a comprehensive psychiatric evaluation prior to inclusion in the study. Inclusion criteria were as follows: a DSM-5 diagnosis of OCD, age between 18 and 65 years, sufficient cognitive capacity to understand and complete the assessments, and literacy.

Exclusion criteria were determined based on structured clinical evaluation using the SCID-5-CV. Participants with comorbid psychiatric disorders, including psychotic disorders, bipolar disorder, and current substance use disorders, were excluded from the study. Substance use was evaluated through clinical interview. In addition, individuals with neurological disorders, intellectual disability, significant cognitive impairment, or severe medical conditions that could interfere with assessment reliability were excluded.

Participants who were pregnant or breastfeeding or who had used psychiatric medication within the previous 6 months were also excluded. The study sample consisted primarily of newly diagnosed OCD patients who had not yet initiated pharmacological treatment, as well as individuals who were not receiving active psychiatric treatment during the study period. This approach was adopted to minimize the potential confounding effects of psychotropic medications on symptom assessment. These criteria were applied to ensure a clinically homogeneous sample.

Childhood ADHD history was assessed based on participant self-report obtained during the clinical interview. Participants were asked whether they had received a diagnosis of ADHD during childhood or had experienced significant attention-related difficulties in earlier developmental periods. No structured diagnostic instrument or collateral information (e.g., parental reports or medical records) was used to confirm childhood ADHD retrospectively, which may limit the accuracy of this variable.

The study was conducted in the psychiatry outpatient clinic of Recep Tayyip Erdoğan University Training and Research Hospital, which serves the province of Rize, with an approximate population of 346,947. Rize is a relatively small province, and the study center is one of the main referral centers for psychiatric evaluation in the region.

During the study period, all newly diagnosed OCD patients who met the inclusion criteria were consecutively recruited. Therefore, the sample reflects a naturalistic clinical population within this setting. However, the exact number of patients who declined participation was not systematically recorded. Therefore, response rates and comparisons between participants and non-participants could not be determined.

Ethics committee approval was obtained from the Clinical Research Ethics Committee of Recep Tayyip Erdoğan University Faculty of Medicine on January 20, 2022 (Approval No: 2022/20). Following a mental status examination, patients diagnosed with OCD according to DSM-5 criteria provided written informed consent.

Procedure

Following diagnostic confirmation using the SCID-5, all participants underwent a structured clinical evaluation conducted by trained psychiatrists. Eligible patients were informed about the study procedures and provided written informed consent prior to participation.

Subsequently, participants completed the assessment instruments, including the Y-BOCS, the Adult ADHD Self-Report Scale (ASRS), and the sociodemographic data form, under clinician supervision. Clinical and sociodemographic data were collected during the same session in a standardized clinical setting. A flow diagram of the study sample is shown

in Figure 1.

Data collection tools

Sociodemographic data form

This information form was prepared by the researcher to obtain demographic information about the participating patients, including age, gender, educational level, occupation, marital status, income level, and sociocultural background. The form also collected information on medical history, such as whether participants had been diagnosed with ADHD or OCD during childhood.

SCID-5-CV

The SCID-5 was developed by First et al.[15] The Turkish adaptation and reliability study was conducted by Elbir et al.[16] The SCID-5 is a semi-structured diagnostic interview used to assess major psychiatric disorders according to DSM-5 criteria. Previous studies have demonstrated that the instrument has good validity and reliability.[16]

In the present study, SCID-5 interviews were conducted by a psychiatrist during the initial clinical evaluation prior to study inclusion. Administration of the structured clinical interview takes approximately 40–60 minutes.[17]

Y-BOCS

The Y-BOCS was developed by Goodman et al.[18] The Turkish validity and reliability study was conducted by Karamustafalıoğlu et al.[19] The scale consists of 19 items, of which the first 10 items are used for scoring. The first 5 items assess obsessions, while items 6–10 assess compulsions. Each item is rated on a scale from 0 to 4, with a total maximum score of 40.

The Y-BOCS has demonstrated good psychometric properties, including high internal consistency and validity in both original and Turkish versions.[19] In addition, the Y-BOCS Symptom Checklist is used to assess the presence of current and past obsessive-compulsive symptoms.

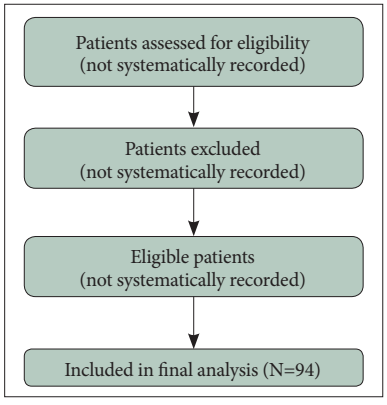


Figure 1. Flow diagram of participant recruitment.

ASRS

The ASRS (v1.1) is a screening instrument developed by the World Health Organization to assess ADHD symptoms in adults.[20] The scale consists of 18 items corresponding to DSM criteria and is divided into two parts: Part A (6 items) and Part B (12 items), with Part A including the most predictive items for ADHD screening.

The ASRS evaluates two main symptom dimensions: inattention and hyperactivity–impulsivity. Each item is rated on a 5-point Likert scale ranging from 0 (never) to 4 (very often), reflecting symptom frequency over the past 6 months. In the present study, ASRS total and subscale scores (inattention and hyperactivity) were analyzed as continuous variables to assess ADHD symptom severity.

The ASRS was used as a screening tool and not for establishing a formal ADHD diagnosis. While OCD diagnoses were established using the SCID-5, ADHD was not assessed using a structured clinical diagnostic interview. This dimensional approach was adopted to better capture variability in symptom severity. The Turkish version of the ASRS has demonstrated good validity and reliability.[21]

Statistical analysis

All analyses were performed using IBM SPSS Statistics 26 (IBM Corp.) and Python 3.13 (Python Software Foundation). Descriptive statistics are presented as mean±standard deviation for continuous variables and as frequency and percentage for categorical variables.

Normality was assessed using skewness and kurtosis values (±1.5) and visual inspection. Pearson correlation coefficients (r) were used for variables that met parametric assumptions, whereas Spearman rank correlation coefficients (ρ) were used for variables that did not meet normality assumptions.

Correlation analyses were conducted to evaluate the relationships between ASRS and Y-BOCS subscales. All correlation analyses were two-tailed, and the level of significance was set at $p<0.05$.

Multiple linear regression analyses were performed to examine the extent to which ASRS subscale scores predicted Y-BOCS subscale scores. The models were constructed in two stages: in Model 1, ASRS-Hyperactivity scores were included, and in Model 2, ASRS-Inattention scores were added. Unstandardized coefficients (B), standardized coefficients (β), 95% confidence intervals, coefficient of determination (R^2), and F-statistics are reported for all models.

Multicollinearity was assessed using variance inflation factor (VIF) and tolerance values, with VIF <5 and tolerance >0.20

indicating no multicollinearity. Regression assumptions, including normality, independence of errors, and homoscedasticity, were evaluated using residual distributions and diagnostic plots.

A general linear model (GLM) with multiple dependent variables was conducted to examine the effects of ASRS subscales and childhood ADHD history on Y-BOCS subscale scores. The dependent variables included Yale insight, global severity, global improvement, reliability, total obsessions, and total compulsions. ASRS-Hyperactivity and ASRS-Inattention scores were included as covariates, and childhood ADHD history was included as a fixed factor.

Box's M test indicated homogeneity of covariance matrices, and Levene's tests confirmed equality of error variances. Effect sizes are reported as partial eta squared (η^2). Statistical significance was set at $p<0.05$.

Table 1. Sociodemographic and clinical characteristics of the participants (N=94)

	Value
Gender	
Female	69 (75.0)
Male	23 (25.0)
Marital status	
Married	48 (52.2)
Single	43 (46.7)
Divorced	1 (1.1)
Occupation	
Public	9 (9.8)
Private	14 (15.2)
Self-employed	7 (7.6)
Retired	2 (2.2)
Student	14 (15.2)
Unemployed	46 (50.0)
Age (yr)	33.04±11.11 (18.0–65.0)
Family history	
Present	42 (45.7)
Absent	50 (54.3)
Childhood OCD symptoms	
Present	41 (45.1)
Absent	50 (54.9)
Childhood ADHD history	
Present	15 (16.3)
Absent	77 (83.7)

Values are presented as mean±SD (min–max) or number (%). Data were missing for some variables in two participants; therefore, totals may be less than 94 for certain characteristics. OCD, obsessive-compulsive disorder; ADHD, attention-deficit/hyperactivity disorder.

RESULTS

The sociodemographic and clinical characteristics of the participants are presented in Table 1. The mean age of the sample was 33.04±11.11 years, and the majority of participants were female (75.0%). Nearly half of the participants reported childhood-onset OCD symptoms (45.1%), while 16.3% reported a history of childhood ADHD.

Correlation analyses (Table 2) indicated that ASRS total and inattention scores were significantly associated with Y-BOCS total, obsession, and compulsion scores. Inattention demonstrated stronger and more consistent associations compared to hyperactivity. In addition, global improvement scores were negatively associated with ADHD symptom levels, whereas no significant associations were observed for insight and reliability.

Multiple linear regression analyses (Table 3) showed that inattention symptoms significantly predicted obsession, compulsion, and total Y-BOCS scores. In contrast, hyperactivity

Table 2. Correlations between ASRS and Y-BOCS scores (N=94)

	ASRS	ASRS-hyperactivity	ASRS-inattention
Y-BOCS-insight			
r	0.096	0.128	-0.008
p	0.365	0.222	0.939
Y-BOCS-global severity			
r	0.266*	0.174	0.276
p	0.010*	0.097	0.008
Y-BOCS-global improvement			
r	-0.389*	-0.376*	-0.350*
p	<0.001*	<0.001*	0.001*
Y-BOCS-reliability			
ρ	-0.076	0.001	-0.159
p	0.473	0.992	0.129
Y-BOCS-total obsession			
r	0.297*	0.230*	0.356*
p	0.004*	0.028*	0.001*
Y-BOCS-total compulsion			
r	0.378*	0.282*	0.410*
p	<0.001*	0.007*	<0.001*
Y-BOCS total			
r	0.395*	0.299*	0.447*
p	<0.001*	0.004*	<0.001*

Holm–Bonferroni correction was not required as all correlations were limited to two measurement tools and their subscales. *significant results. ASRS, Adult ADHD Self-Report Scale; Y-BOCS, Yale–Brown Obsessive Compulsive Scale; r, Pearson correlation; ρ, Spearman correlation.

did not remain significant in multivariate models. The proportion of explained variance was consistently higher for inattention than for hyperactivity.

GLM analyses (Table 4) further supported these findings, indicating that inattention symptoms were significantly associated with multiple Y-BOCS subscales, including global severity,

Table 3. Predictive effects of ASRS subscale scores on Y-BOCS symptoms

Variable	B	SE	β	t	p	95% CI	R^2	F	p (model)
Global severity									
Model 1							0.03	2.81	0.097
Fixed	2.952	0.231	-	12.781	<0.001	2.493–3.410			
Hyperactivity	0.022	0.013	0.174	1.678	0.097	-0.004–0.048			
Model 2							0.08	3.68	0.029
Fixed	2.755	0.245	-	11.234	<0.001	2.267–3.242			
Hyperactivity	-0.004	0.018	-0.028	-0.201	0.841	-0.038–0.031			
Inattention	0.042	0.020	0.295	2.107	0.038	0.002–0.082			
Global improvement									
Model 1							0.14	14.84	<0.001
Fixed	3.473	0.242	-	14.380	<0.001	2.993–3.953			
Hyperactivity	-0.052	0.014	-0.376	-3.853	<0.001	-0.079–0.025			
Model 2							0.16	8.32	<0.001
Fixed	3.602	0.260	-	13.838	<0.001	3.085–4.119			
Hyperactivity	-0.036	0.019	-0.257	-1.924	0.058	-0.073–0.001			
Inattention	-0.027	0.021	-0.174	-1.298	0.198	-0.070–0.015			
Total obsession									
Model 1							0.05	4.98	0.028
Fixed	3.570	0.347	-	10.290	<0.001	2.881–4.259			
Hyperactivity	0.044	0.020	0.230	2.232	0.028	0.005–0.083			
Model 2							0.13	6.41	0.003
Fixed	3.185	0.363	-	8.765	<0.001	2.463–3.907			
Hyperactivity	-0.004	0.026	-0.021	-0.152	0.880	-0.055–0.047			
Inattention	0.081	0.029	0.370	2.735	0.008	0.022–0.139			
Total compulsion									
Model 1							0.08	7.70	0.007
Fixed	3.029	0.338	-	8.955	<0.001	2.357–3.701			
Hyperactivity	0.053	0.019	0.282	2.775	0.007	0.015–0.092			
Model 2							0.17	8.89	<0.001
Fixed	2.623	0.350	-	7.502	<0.001	1.928–3.318			
Hyperactivity	0.001	0.025	0.007	0.051	0.960	-0.049–0.051			
Inattention	0.087	0.028	0.405	3.059	0.003	0.030–0.143			
Total									
Model 1							0.09	8.63	0.004
Fixed	6.586	0.584	-	11.268	<0.001	5.424–7.747			
Hyperactivity	0.099	0.034	0.299	2.937	0.004	0.032–0.165			
Model 2							0.20	10.89	<0.001
Fixed	5.786	0.597	-	9.687	<0.001	4.599–6.973			
Hyperactivity	-0.001	0.043	-0.002	-0.015	0.988	-0.085–0.084			
Inattention	0.167	0.048	0.448	3.470	0.001	0.071–0.263			

ASRS, Adult ADHD Self-Report Scale; Y-BOCS, Yale–Brown Obsessive Compulsive Scale; SE, standard error; CI, confidence interval.

total obsessions, and total compulsions. Hyperactivity showed more limited effects, and childhood ADHD history was not a significant predictor.

DISCUSSION

The present study examined the relationship between ADHD symptom dimensions and OCD severity in an adult OCD sample. The main findings indicated that ADHD symptoms, particularly inattention, were significantly associated with greater OCD symptom severity. Inattention demonstrated stronger and more consistent associations with obsession, compulsion, and total Y-BOCS scores compared to hyperactivity. Regression analyses further showed that inattention, but not hyperactivity, independently predicted OCD severity. In addition, inattention symptoms were associated with multiple OCD symptom dimensions, whereas hyperactivity showed more limited effects. Previous studies have similarly reported that inattentive symptoms may be more closely associated with OCD severity than hyperactivity symptoms. Prior research has also highlighted the contribution of executive dysfunction to both ADHD and OCD, particularly in frontostriatal circuits.

Inattention symptoms showed a stronger relationship with OCD severity than hyperactivity symptoms, suggesting greater clinical relevance in adult OCD populations. The higher levels of ADHD symptoms observed among male and single participants may be interpreted in the context of both developmental and psychosocial factors. Previous studies have shown that ADHD symptoms, particularly inattention and impulsivity, are more frequently reported in males and may persist into adulthood, contributing to functional impairment.[3,4] In addition, being single may reflect difficulties in interpersonal functioning, occupational instability, and executive dysfunction, which are commonly associated with ADHD symptom dimensions.[3,4] These findings suggest that sociodemographic

Table 4. GLM results examining the effects of ASRS subscales and childhood ADHD on Y-BOCS subscales

Dependent variable	Source	F	p	Partial η^2
Yale insight	Hyperactivity	1.75	0.190	0.020
	Inattention	1.60	0.209	0.018
	Childhood ADHD	0.35	0.559	0.004
	Model (R^2=0.035)	1.03	0.383	-
Global severity	Hyperactivity	0.00	0.973	0.000
	Inattention	4.06	0.047	0.045
	Childhood ADHD	0.00	0.948	0.000
	Model (R^2=0.080)	2.50	0.065	-
Global improvement	Hyperactivity	4.09	0.046	0.045
	Inattention	1.34	0.251	0.015
	Childhood ADHD	0.67	0.414	0.008
	Model (R^2=0.149)	5.01	0.003	-
Reliability	Hyperactivity	0.90	0.345	0.010
	Inattention	4.89	0.030	0.054
	Childhood ADHD	1.51	0.223	0.017
	Model (R^2=0.073)	2.26	0.087	-
Total obsession	Hyperactivity	0.01	0.941	0.000
	Inattention	7.35	0.008	0.079
	Childhood ADHD	0.00	0.976	0.000
	Model (R^2=0.131)	4.32	0.007	-
Total compulsion	Hyperactivity	0.06	0.800	0.001
	Inattention	8.82	0.004	0.093
	Childhood ADHD	0.35	0.552	0.004
	Model (R^2=0.167)	5.73	0.001	-

Box's M test indicated equality of covariance matrices, and Levene's tests demonstrated homogeneity of error variances. Effect sizes are reported as partial eta squared (η^2); multiple comparisons were conducted using the LSD method. GLM, general linear model; ASRS, Adult ADHD Self-Report Scale; Y-BOCS, Yale–Brown Obsessive Compulsive Scale; LSD, least significant difference.

factors may influence the clinical expression and functional impact of ADHD symptoms in individuals with OCD.[22]

In a large-scale study conducted in Brazil involving adult patients with OCD, ADHD symptoms—particularly inattention—were associated with aggression-related obsessions and checking compulsions.[8] Consistent with this literature, our findings also suggest that higher ADHD symptom levels are linked to specific obsession and compulsion profiles, particularly aggression-related obsessions and repetitive behaviors.

A previous study reported an association between ADHD symptoms and hoarding behaviors, particularly highlighting the role of inattention in hoarding symptomatology.[10] Unlike previous reports, we did not observe a significant association between hoarding symptoms and ADHD symptom dimensions in the present study.

This discrepancy may reflect differences in sample characteristics, particularly age distribution and clinical heterogeneity, as hoarding symptoms have been suggested to show developmental variation and may be more strongly associated with ADHD in specific subgroups, such as childhood-onset OCD.[10]

One possible explanation is that hoarding symptoms may not be equally associated with ADHD symptoms across all OCD populations. Although inattention has been linked to hoarding behavior in previous studies, this relationship may vary depending on developmental factors, comorbid conditions, and clinical characteristics.[4] The relationship between ADHD symptoms and OCD may differ across symptom dimensions, with inattentive symptoms appearing to be more closely associated with certain OCD symptom profiles than others. This variability may reflect the heterogeneous nature of OCD and the contribution of attentional dysfunction to symptom expression.[4]

The clinical significance of ADHD symptoms in OCD may extend beyond categorical interpretations and reflect underlying cognitive processes that influence symptom severity. In particular, inattention-related symptoms may be linked to impairments in attentional control and increased cognitive load. Furthermore, ADHD symptom presentation may vary across developmental stages, with hyperactivity symptoms tending to decrease over time while inattentive symptoms may persist into adulthood. This developmental perspective may partly explain the stronger association between inattention and OCD severity observed in adult samples.

To our knowledge, limited studies in Türkiye have examined ADHD symptoms in adult OCD populations. One study conducted on adult OCD patients with ADHD symptoms was reported by Ertekin et al.[23] who found that checking compulsions were the most common compulsions in patients with ADHD symptoms, whereas cleaning compulsions predominated in those without ADHD symptoms.

Consistent with previous studies, contamination obsessions and checking compulsions were among the most common symptom types observed in our sample.[23,24] While earlier studies have particularly emphasized the association between ADHD symptoms and checking compulsions, our findings suggest that ritualistic compulsions may also be related to attentional difficulties in some patients with OCD.[9,23]

Reported rates of ADHD symptoms in OCD vary considerably across studies, likely due to methodological differences such as sample characteristics, assessment methods, and diagnostic approaches.[4-6,17,18,25] This variability highlights the importance of distinguishing between categorical diagnoses and dimensional symptom assessment in adult populations.[26]

In addition, the high rate of familial psychiatric history and the substantial proportion of childhood-onset OCD in our sample are consistent with previous findings indicating a neurodevelopmental component in OCD. These factors may further contribute to the heterogeneity of clinical presentation and support the notion that early-onset and familial forms of OCD represent more complex phenotypes.

Interestingly, childhood ADHD history did not significantly predict current OCD severity in the present study. This finding may be explained by several factors. First, childhood ADHD history was assessed retrospectively, which may limit its reliability. Second, ADHD symptom expression may change across developmental stages, and early-life symptoms may not directly correspond to adult clinical severity. Finally, current ADHD symptom levels, rather than past diagnostic history, may have a more direct impact on present OCD symptom severity, which may explain the stronger associations observed with current inattention symptoms.

Several authors have suggested that ADHD symptoms observed in individuals with OCD may reflect a distinct familial pattern, with potential shared genetic underpinnings.[4] According to Geller and colleagues,[27] these symptom profiles may be transmitted together, although large-scale familial studies in adult samples remain limited. The high rate of familial psychiatric history observed in our sample may further support the possibility of shared vulnerability factors. This perspective also aligns with neurodevelopmental models proposing overlapping genetic and neurobiological mechanisms underlying ADHD symptoms and OCD.

Abramovitch et al.[4] proposed the "Executive Overload Model," suggesting that excessive obsessive thoughts may overload executive functioning and contribute to neurocognitive deficits. Within this framework, ADHD symptoms observed in OCD may reflect overlapping cognitive processes, particularly involving attentional control and executive dysfunction, rather than representing distinct categorical conditions.

Recent studies have emphasized that ADHD symptom di-

mensions, particularly inattention, are closely associated with functional impairment and clinical outcomes across a range of adult psychiatric conditions.[28,29] Inattention symptoms may have particular clinical relevance because they have been associated with poorer functional outcomes and greater cognitive difficulties in adult psychiatric populations.[29]

Recent studies have also linked higher ADHD symptom levels to greater psychiatric symptom burden and illness severity.[30] In line with this, the association observed in our study between ADHD symptom levels and OCD severity supports the notion that attentional dysfunction may contribute to more severe and complex clinical presentations.

A critical methodological consideration concerns the distinction between structured diagnostic assessment and screening measures. The use of continuous ASRS scores in this study aligns with contemporary dimensional approaches, which emphasize symptom severity rather than categorical classification. ADHD diagnosis is based on clinical interviews, whereas screening tools such as the ASRS capture symptom burden dimensionally. Screening instruments may overestimate symptom prevalence due to their sensitivity, whereas structured diagnostic approaches provide greater specificity but may fail to capture subthreshold yet clinically significant symptom dimensions.

Overall, our results support a dimensional understanding of ADHD symptoms in adult OCD populations. Inattentive symptoms, in particular, appeared to show broader associations across multiple OCD symptom dimensions, which may partly reflect the role of attentional dysfunction in the clinical heterogeneity of OCD.

The findings of this study have several clinical implications. The association between inattention symptoms and OCD severity suggests that attentional processes may contribute to the clinical presentation of OCD. Clinicians may consider evaluating ADHD symptom dimensions, particularly inattention, when assessing patients with OCD, as these symptoms may be associated with increased symptom severity and functional impairment.

The coexistence of ADHD symptoms in OCD may also have implications for treatment planning. Previous studies have suggested that prominent attentional difficulties may be associated with poorer response to standard OCD treatments, including selective serotonin reuptake inhibitors and cognitive-behavioral therapy.[4,13]

In addition, the use of stimulant medications in individuals presenting with both ADHD symptoms and OCD requires careful consideration. Although stimulants are effective for ADHD, some studies have suggested that they may exacerbate obsessive–compulsive symptoms in certain individuals.[4,13] Therefore, clinicians should adopt an individualized treatment approach, carefully monitoring symptom changes and considering alternative or combined treatment strategies when necessary.

This study has several strengths. Unlike many previous studies focusing on categorical diagnoses, we examined ADHD symptoms dimensionally in an adult OCD sample.

This approach allowed us to evaluate the differential contributions of inattention and hyperactivity to OCD severity using both correlation and regression analyses. In addition, the study contributes to the limited literature on ADHD symptoms in adult OCD populations within a naturalistic clinical setting. A developmental perspective may also be relevant when interpreting these findings. Previous studies have reported that hyperactivity symptoms tend to decrease with age, whereas inattentive symptoms may persist into adulthood.[31-33] This may partly explain the stronger association observed between inattentive symptoms and OCD severity in our adult sample.

Limitations

This study has several limitations that should be considered when interpreting the findings. First, the relatively small sample size and the single-center design may limit the generalizability of the results to broader clinical populations. In addition, the inclusion of a clinically homogeneous sample consisting primarily of newly diagnosed and untreated patients may further restrict the applicability of the findings to more diverse clinical settings.

Second, several measurement-related limitations should be considered. Childhood ADHD history was based on retrospective self-report, and no structured diagnostic assessment or collateral information was used to confirm this variable, which may reduce its reliability and introduce recall bias. Furthermore, important clinical variables such as age of onset and duration of OCD were not systematically assessed, limiting the ability to evaluate their potential impact on symptom severity.

Third, the absence of a control group makes it difficult to determine whether the observed ADHD symptom levels are specific to OCD or reflect a more general psychiatric symptom burden.

Finally, the cross-sectional design of the study prevents causal interpretations of the observed associations and limits conclusions regarding the directionality of the relationships.

In conclusion, this study demonstrates that ADHD symptoms, particularly inattention, are significantly associated with OCD symptom severity in adults with OCD. Our findings may reflect the contribution of attentional and executive functioning difficulties to the clinical presentation of OCD. Regression findings further supported the differential contribution of ADHD symptom dimensions, with inattention explaining

a greater proportion of variance in both obsession and compulsion severity than hyperactivity. This pattern underscores the central role of attentional dysfunction in the severity and clinical expression of OCD.

Longitudinal studies may provide a better understanding of how ADHD symptom dimensions relate to the course and severity of OCD over time. In addition, studies including control groups and larger, multi-center samples would improve the generalizability of the findings. Furthermore, future research should incorporate structured diagnostic assessments alongside screening tools to better distinguish between categorical diagnoses and dimensional symptom burden. Finally, neurobiological and neuroimaging studies may help to elucidate the shared and distinct mechanisms underlying ADHD symptoms and OCD, and support the development of more targeted and individualized treatment approaches.

Availability of Data and Material

The datasets generated or analyzed during the study are available from the corresponding author on reasonable request.

Conflicts of Interest

The authors have no potential conflicts of interest to disclose.

Author Contributions

Conceptualization: Şule Gül Uysal, Bülent Bahçeci. Data curation: Şule Gül Uysal. Formal analysis: Şule Gül Uysal. Investigation: Şule Gül Uysal. Methodology: Şule Gül Uysal. Project administration: Şule Gül Uysal. Supervision: Bülent Bahçeci. Writing—original draft: Şule Gül Uysal. Writing—review & editing: Şule Gül Uysal, Bülent Bahçeci.

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