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CLARIFYING THE CONVERGENCE BETWEEN OBSESSIVE COMPULSIVE PERSONALITY DISORDER CRITERIA AND OBSESSIVE COMPULSIVE DISORDER

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Abstract

In this study we examined the convergence between obsessive-compulsive personality disorder (OCPD) criteria and obsessive-compulsive disorder (OCD). Baseline assessments of 629 participants of the Collaborative Longitudinal Personality Disorders Study were used to examine the associations between OCPD criteria and diagnoses of OCD. Three of the eight OCPD criteria—hoarding, perfectionism, and preoccupation with details—were significantly more frequent in subjects with OCD (n = 89) than in subjects without OCD (n = 540). Logistic regressions were used to predict the probability of each OCPD criterion as a function of Axis I diagnoses (OCD, additional anxiety disorders, and major depressive disorder). Associations between OCD and these three OCPD criteria remained significant in the logistic regressions, showing unique associations with OCD and odds ratios ranging from 2.71 to 2.99. In addition, other anxiety disorders and major depressive disorder showed few associations with specific OCPD criteria. This study suggests variability in the strength of the relationships between specific OCPD criteria and OCD. The findings also support a unique relationship between OCPD symptoms and OCD, compared to other anxiety disorders or major depression. Future efforts to explore the link between Axis I and Axis II disorders may be enriched by conducting analyses at the symptom level.

Beginning with Pierre Janet (1904), there has been longstanding interest in clarifying the relationship between certain temperamental traits such as perfectionism and rigidity and the development of clear-cut obsessions and compulsions. Janet, in his description of the stage preceding the full development of obsessive-compulsive disorder (OCD), described traits of perfectionism, indecisiveness, and restricted emotional expression; these characteristics were incorporated into early *DSM* descriptions of obsessive-compulsive personality disorder (OCPD). The criteria for OCPD have changed considerably over the past several decades; Of Janet's three traits, only perfectionism has been retained in our current conceptualization of OCPD as described in *DSM-IV* (American Psychiatric Association, 1994). Criteria such as rigidity, miserliness, preoccupation with details, inability to throw out worn-out or worthless objects (hoarding), and reluctance to delegate tasks stem from Freud's original notion of the anal character characterized by orderliness, parsimony, and obstinacy (Freud, 1908) and were expanded by Abraham's description of the anal character (Abraham, 1921).

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The prevalence of OCPD in community samples has been estimated to be .9% to 2% (Samuels et al., 2002; Torgersen, Kringlen, & Cramer, 2001), while OCD is thought to affect 2% to 3% of the general population (Karno & Golding, 1991). Comorbidity between OCPD and OCD has been investigated in studies examining the frequency of OCPD in individuals with OCD. Several studies using the stringent *DSM-III* criteria, which required four out of five OCPD criteria to be present, found low rates (0–6%) of OCPD in OCD subjects (Baer, Jenike, Ricciardi, & Holland, 1990; Black, Yates, Noyes, & Pfohl, 1989; Joffee, Swinson, & Regan, 1988); however, also using *DSM-III* criteria for OCPD, Eisen and Rasmussen (1991) found that 19% of OCD subjects met criteria for OCPD. Investigations using the more lenient *DSM-III-R* criteria (American Psychiatric Association, 1980), which required five out of nine OCPD criteria to be present, found frequencies of OCPD as high as 30% in samples of OCD patients (Diaferia et al., 1997). Alluding to the impact of evolving definitions of OCPD, based on a literature review, Pfohl (1996) noted that studies using the *DSM-III-R* criteria diagnosed OCPD at approximately double the rate of studies using *DSM-III* criteria. While the precise estimates of OCPD in subjects with OCD have varied considerably, the results all suggest that the diagnosis of compulsive personality is not a developmental precondition for OCD; however, OCPD has been found to occur with greater frequency in individuals with OCD than in individuals with panic disorder or major depressive disorder (Diaferia et al., 1997).

Additional support of the association between OCD and OCPD has been found in a general clinical sample and primary personality disordered samples. For example, in a study examining the relationship between anxiety disorders and personality disorders in a general clinical sample, Skodol, Oldham, Hyler, and Stein (1995) reported an elevated odds ratio (OR = 4.1) for OCD in association with OCPD. More recently, reports based on the Collaborative Longitudinal Personality Disorders Study (CLPS; Gunderson et al., 2000) have investigated the link between the two disorders in individuals with personality disorders. McGlashan and colleagues (2000) reported that 20.9% of their subjects with *DSM-IV* OCPD met criteria for OCD. This is elevated compared to community samples (2–3%; Karno, Golding, Sorenson, & Burnam, 1988). In terms of longitudinal associations, using the CLPS data, Shea and colleagues (2004) recently failed to find a clear association between the course of OCD and the course of OCPD.

Additional work using family designs and retrospective reports of childhood traits also suggests a link between OCPD and OCD. Examining a familial link between the disorders, Samuels and colleagues (2000) found a significantly greater frequency of OCPD in first degree relatives of OCD probands compared to relatives of control probands (11.6% vs. 5.8%, respectively). Examining the course of development of OCD, Rasmussen and Eisen (1998) used retrospective assignment of childhood traits in 90 adults with OCD. Results showed that a substantial proportion of the OCD patients endorsed having perfectionism, hypermorality, ambivalence, and excessive devotion to work prior to the onset of their OCD. This constellation of traits, similar to those described by Janet, may be the precursor of the adult OCPD (Rasmussen & Eisen, 1998). This finding also suggests that there may be a subtype or phenotype of OCD characterized by OCPD traits as well as compulsions related to perfectionism (e.g., symmetry compulsions, the need to do things “just right,” or compulsions driven by a sense of incompleteness).

Building from the existing literature, the current study examined the presence of OCPD criteria in individuals with and without OCD. To our knowledge, this is the first study using *DSM-IV* criteria that focuses on the relationship between specific OCPD criteria and OCD, and, as such, it may clarify which components of OCPD are associated with OCD. The current study utilized a large sample of subjects recruited for a longitudinal personality disorders project, thereby encouraging careful evaluation of personality disorder criteria and increasing statistical power. We hypothesized that certain OCPD criteria, specifically perfectionism and hoarding,

would be more common in subjects with OCD, whereas other OCPD criteria, specifically rigidity, miserliness, and excessive devotion to work, would not differ between the two groups. We further hypothesized that such associations would be specific to OCD (i.e., would not be present for other anxiety disorders, or for major depressive disorder). We did not have specific predictions regarding the other OCPD criteria (preoccupation with details, reluctance to delegate tasks, inflexible about morality) and OCD.

METHOD

PARTICIPANTS

A total of 733 individuals with at least one of four personality disorders (schizotypal, borderline, obsessive compulsive, and avoidant) or major depressive disorder without a comorbid personality disorder were recruited for the Collaborative Longitudinal Personality Disorders Study. The total includes the original CLPS sample of 668 (Gunderson et al., 2000) plus an additional 65 subjects subsequently recruited to increase the proportion of minorities in the sample. For the current analyses, only the 629 subjects with personality disorders were included. Of the participants, 435 (69%) were Caucasian, 89 (14%) were African American, and the rest (17%) were other minorities. The majority of subjects were women (n = 403, 64%). The mean age of the sample was 32.4 (SD = 8.1). The design of the CLPS was to prospectively follow subjects to assess the course of psychiatric disorders and psychosocial functioning in people with personality disorders. A description of the aims, study design, methods, and subject characteristics of the study has been reported in detail elsewhere (Gunderson et al., 2000). Briefly, individuals with one of the four *DSM-IV* personality disorders listed above or *DSM-IV* criteria for major depressive disorder without a comorbid personality disorder were recruited for the study from a number of treatment settings including outpatient hospital-based clinics and private practices. The measures described below were administered by experienced interviewers with master's or doctoral degrees in a mental health field, or the equivalent clinical experience. The interviewers received extensive training and had ongoing interrater reliability monitoring.

MEASURES

Personality disorders were diagnosed at baseline using the Diagnostic Interview for *DSM-IV* Personality Disorders (DIPD-IV; Zanarini, Frankenburg, Sickel, & Young, 1996). Axis I diagnoses were determined by administering the Structured Clinical Interview for *DSM-IV* (SCID; First, Spitzer, & Williams, 1996). As described in detail elsewhere (Zanarini et al., 2000), an interrater reliability study was conducted with CLPS interviewers through the use of videotaped interviews generated and rated by interviewers at all sites. A test-retest reliability study was also conducted, with interviews repeated within 1 to 2 weeks following the intake interview by a second interviewer blind to the initial interview. The interrater and test-retest kappas for the four personality disorders targeted in this study were .68 and .69 for borderline personality disorder, .68 and .64 for avoidant personality disorder, and .71 and .74 for obsessive compulsive personality disorder. For schizotypal personality disorder, the test-retest kappa was .64. An interrater reliability kappa was not calculated because of the small sample size for this disorder. The diagnostic agreement was 100% (Zanarini et al., 2000). Interrater reliability kappas for Axis I diagnoses for CLPS interviewers ranged from .57 to 1.00, with a median of . 76; test-retest kappas ranged from .35 to .78 with a median of .64. For OCD, the interrater and test-retest reliabilities were .57 and .60, respectively (Zanarini et al., 2000).

DIPD-IV diagnoses were required to have convergent support from at least one of two instruments: the Personality Assessment Form (PAF; Shea et al., 1990) or the Schedule for Nonadaptive and Adaptive Personality (SNAP; Clark, 1993). All subjects agreed to participate

in the study and signed written informed consent. Data for the current study are from the baseline assessments of the participants.

DATA ANALYSIS

Analyses were conducted using the eight criteria for *DSM-IV* OCPD: rigidity, miserliness, hoarding, preoccupation with details, perfectionism, reluctance to delegate tasks, inflexibility regarding morality, and excessive devotion to work. Chi-square analyses were conducted to examine whether the individual OCPD criteria were more frequent in subjects with OCD than subjects without OCD. A bonferroni-corrected alpha level of .006 (.05/8) was used. To determine if associations found were specific to OCD, a logistic regression was conducted for each OCPD criterion with the following Axis I diagnoses entered simultaneously as predictors: OCD, generalized anxiety disorder (GAD), social phobia (SP), panic with agoraphobia, panic without agoraphobia, and major depressive disorder (MDD).

RESULTS

Of the sample, 262 (42%) subjects met *DSM-IV* criteria for OCPD and 89 (14%) met *DSM-IV* criteria for OCD. The frequencies of the other Axis I anxiety disorders in the sample are as follows: generalized anxiety disorder, 21%; social phobia, 22%; panic disorder with agoraphobia, 12.4%; and panic disorder without agoraphobia, 8.9%.

Fifty-three (8%) subjects met criteria for both OCPD and OCD. Of those subjects with OCPD, 20% had OCD. OCD was significantly more frequent in subjects with OCPD compared to subjects with other personality disorders ($\chi_2 = 16.0$, $p < .0001$).

Three of the eight OCPD criteria were significantly ($p < .006$) more common in subjects with OCD than in subjects without OCD: hoarding, perfectionism, and preoccupation with details (Table 1). Examination of effect size estimates ($r_{\text{effect sizes}}$) for the between groups comparisons also revealed that these three criteria were associated with the largest effect sizes. It is worth noting, hower, that although these were the largest effect sizes observed, they are considered small effect sizes (cf. Rosenthal & Rosnow, 1991). Frequencies of the remaining OCPD criteria (rigidity, miserliness, reluctance to delegate, inflexible morality, and excessive devotion to work) were not found to differ significantly between subjects with and without OCD and the magnitude of the between groups differences on these criteria was small.

Results of the logistic regression analyses (see Tables 2 and 3) revealed that four of the eight OCPD criteria were significantly predicted from the Axis I disorders (using $\alpha \leq .006$): hoarding, perfectionism, preoccupation with details, and reluctance to delegate tasks, $\chi^2(6) = 20.61$, 29.81, 30.51, and 24.66, respectively. Examining the unique contributions of diagnoses to the prediction of these criteria, OCD was found to be associated with significantly increased odds of meeting the hoarding, perfectionism, and preoccupation with details criteria. GAD was associated with significantly increased odds of meeting the preoccupation with details and reluctance to delegate tasks criteria. Panic disorder without agoraphobia was associated with significantly *decreased* odds of meeting the perfectionism criteria. And finally, social phobia, panic disorder with agoraphobia, and MDD were not associated with significantly increased or decreased odds of meeting criteria for any of the OCPD criteria.

DISCUSSION

The current study provides important information on the association between OCPD criteria and OCD using *DSM-IV* criteria. Most broadly, the results demonstrate a meaningful link between OCD and OCPD, when individual criteria are considered. Specifically, the current results reveal that not all OCPD characteristics are equally related to OCD. The data show that

the relationship between OCPD and OCD is primarily due to criteria of hoarding, perfectionism, and preoccupation with details, and is not driven by criteria of inflexible morality, excessive devotion to work, rigidity, or miserliness. This suggests that OCPD, as currently defined in the *DSM-IV*, is not a developmental precondition for OCD, as was proposed by Janet. Instead, the findings suggest that the relationship between OCD and OCPD is comprised of symptoms from both Janet's and Freud's conceptualizations (perfectionism and hoarding/preoccupation with details, respectively), but that there are also some symptoms from each theory that are not involved in linking these two disorders (e.g., reluctance to delegate tasks from Freud's conceptualization).

Given the finding that particular symptoms link OCPD and OCD, it is important to examine the specificity of this relationship. Perhaps hoarding, perfectionism, and preoccupation with details are associated with psychopathology in general and are not specific to OCD. Indeed, perfectionism has been shown to play a role in many forms of psychopathology (Flett & Hewitt, 2002); however, results of the current study showed that of five anxiety disorders studied, the unique contributions from OCD were the most predictive of the likelihood of having OCPD criteria. Specifically, the presence of OCD predicted elevated odds of having three OCPD criteria. In contrast, the unique contributions of social phobia, panic disorder with agoraphobia, panic disorder without agoraphobia, and major depression did not predict elevated odds of having *any* of the OCPD criteria. Interestingly, GAD was associated with significantly increased odds of having preoccupation with details and reluctance to delegate tasks. These findings that GAD also predicted elevated odds of some OCPD characteristics are not surprising given frequent difficulties in distinguishing these two disorders and their shared cognitive components (Coles, Mennin, & Heimberg, 2001; Comer, Kendall, Franklin, Hudson, & Pimentel, 2004). Although speculative, the OCPD traits found to also be elevated in GAD in the current study, namely preoccupation with details and a reluctance to delegate tasks, may be associated with the construct of intolerance of uncertainty, a characteristic shown to be associated with both GAD and OCD (Holaway, Heimberg, & Coles, 2006). Future studies examining the relative overlaps between OCPD and GAD, compared to OCPD and OCD, may be useful in clarifying the relationship between GAD and OCD.

The current findings of specificity of which criteria link OCPD and OCD are in keeping with an earlier study that examined the symptom overlap between these two disorders. Eisen and Rasmussen assessed the individual criteria comprising OCPD (using *DSM-III* criteria) in 114 individuals with OCD (Eisen & Rasmussen, 1991). In their study, the frequency of specific OCPD criteria in subjects with OCD varied considerably. The majority of OCD patients had difficulty with perfectionism and indecisiveness (82% and 70%, respectively), suggesting the possibility that these symptoms may be developmental markers for OCD or characteristics that are part of the syndrome of OCD. In contrast, rigidity, inability to express warmth, and excessive devotion to work were seen less frequently in OCD subjects (20%, 32%, and 18%, respectively). Our findings are also in keeping with a study by Baer who conducted principal components factor analysis of OCPD criteria using *DSM-III-R* criteria (Baer, 1994). He found two factors, one of which included the three criteria found to be associated with OCD in this study. This factor was found to be significantly correlated with a cluster of OCD symptoms, including hoarding, symmetry, ordering, repeating, and counting.

Together, Bear's findings, familial studies, and results of the current study, support the notion that certain features of OCPD are associated with OCD. There are several possible interpretations of these data. First, they suggest a possible subtype of OCD characterized by perfectionism and overattention to detail along with obsessions and compulsions such as counting, repeating, and the need for symmetry and ordering. Our clinical experience suggests that individuals with these symptoms and types of obsessions and compulsions may not respond as well to treatment; however, this question has not been investigated systematically. There is

considerable evidence from both pharmacologic and behavioral treatment outcome studies that hoarding is a particularly difficult OCD symptom to treat (Black et al., 1998). The presence of hoarding may represent a subtype of OCD that includes other comorbid OCPD symptoms as well and has a more refractory course and treatment response. Another possible interpretation of these data is that the overlap between these OCPD criteria and OCD may be temporal in nature, whereby the OCPD characteristics onset first and represent a vulnerability to developing OCD. If future studies support this concept, then early intervention in individuals with OCPD features of perfectionism and overattention to detail may prevent the onset of frank OCD. Finally, a third possible interpretation is related to overlap in symptom definitions between OCPD and OCD. For example, excessive list making can be viewed as a compulsion if it is time consuming and distressing. It is also mentioned as an example of preoccupation with details in *DSM-IV*s description of OCPD. Similarly, perfectionism is both an OCPD criterion and a symptom of OCD if it involves need for order, symmetry, and arranging. Hoarding is also considered both a compulsion (found in OCD) and as an OCPD criterion in *DSM-IV*. Although OCPD and OCD are conceptualized as separate disorders, there is clearly redundancy between the two disorders regarding several symptoms. Cross-sectional and prospective studies that assess specific OCPD criteria and specific OCD symptoms are needed to address this issue of overlap between definitions of the two disorders.

There are a number of limitations in this study. Our study does not allow us to ascertain whether the OCPD characteristics associated with OCD preceded the onset of OCD. More information is needed about the etiological courses of OCPD and OCD to determine whether the OCPD criteria linked to OCD are developmental antecedents or characteristics of the syndrome of OCD. Another limitation of our study is that types of obsessions and compulsions were not assessed, therefore prohibiting us from examining the relationship between specific obsessions and compulsions and specific OCPD criteria. For example, it is reasonable to propose that symmetry/ordering symptoms would be likely to show a particularly strong relationship with OCPD, whereas contamination symptoms would be expected to show a more modest relationship to OCPD. This is consistent with recent proposals that OCD symptoms motivated by feelings of incompleteness (with a desire to get things “just right”) may be more strongly related to OCPD than OCD symptoms motivated by harm avoidance (Summerfeldt, 2004; Summerfeldt, Antony, & Swinson, 2000). Finally, although there are clear advantages to using a sample of individuals with personality disorders, this also limits the generalizability of the conclusions. Future research should examine whether the current findings are replicated in community samples.

In summary, this study supports a cross-sectional association between OCPD and OCD, when individual criteria of OCPD are examined. This association appears for the criteria of perfectionism, hoarding, and preoccupation with details, in contrast to other OCPD criteria (rigidity, miserliness, inflexibility about morality, and excessive devotion to work). More research is needed to determine whether these OCPD criteria are linked to specific types of obsessions and compulsions (e.g., ordering and arranging), and whether there is a familial association between these OCPD criteria and OCD. Additionally, research is needed to determine whether individuals with both OCD and OCPD criteria of perfectionism, preoccupation with details, and hoarding represent specific phenotypes of OCD with a characteristic comorbidity pattern, course pattern, and familial vulnerability. Further, now that particular criteria linking OCPD and OCD have been suggested, it will be worthwhile for future studies with large samples to examine whether changes in these symptoms predict changes in OCD symptoms over time. Contrary to prediction, Shea and colleagues (2004) found that improvement in OCPD generally did not significantly predict remission from OCD. It will be interesting to examine whether criterion level analyses produce different results. Finally, there are significant treatment implications from these findings. Individuals with both OCPD symptoms and OCD may have a different response to both medication and behavioral therapy

compared to individuals without OCPD symptoms. Further OCD course and treatment response studies that assess the presence of OCPD symptoms will shed light on this important clinical question.

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TABLE 1

Frequency and Percentage of Obsessive-Compulsive Personality Disorder Criteria in Subjects With and Without OCD

Criterion	With OCD(n = 89) n (%)	Without OCD(n = 540) n (%)	chi-square	p	$r_{effect\ size}$
Rigidity	56 (62.92)	261 (48.33)	6.50	.011	.10
Miserliness	20 (22.47)	76 (14.07)	4.17	.04	.08
Hoarding	58 (65.17)	218 (40.37)	19.08	<.0001	.17
Perfectionism	60 (67.42)	230 (42.59)	18.95	<.0001	.17
Preoccupation with details	48 (53.93)	150 (27.78)	24.23	<.0001	.20
Reluctance to delegate	59 (66.29)	275 (50.93)	7.24	.007	.11
Inflexible about morality	37 (41.57)	171 (31.67)	3.39	.066	.07
Excessive devotion to work	30 (33.71)	157 (29.13)	.76	.38	.03

Note. $r_{effect\ size}$:.1 = *small*,.3 = *medium*,.5 = *large*

TABLE 2

Odds Ratio Estimates of OCPD Traits for the Axis I Anxiety Disorders and Major Depressive Disorder

	OCD(*n* = 89) odds ratio(95% CI)	GAD(*n* = 130) odds ratio(95% CI)	SP(*n* = 138) odds ratio(95% CI)	Panic w/A(*n* = 78) odds ratio(95% CI)	Panic(*n* = 56) odds ratio(95% CI)	MDD(*n* = 248) odds ratio(95% CI)
Rigidity	1.73(1.08–2.78)	1.75(1.16–2.62)	0.78(0.54–1.16)	0.89(0.54–1.45)	1.11(0.63–1.95)	0.81(0.58–1.13)
Miserliness Hoarding	**2.71**(1.69–4.37)	1.30(0.87–1.95)	0.89(0.60–1.32)	1.00(0.61–1.64)	0.76(0.43–1.37)	1.03(0.74–1.44)
Perfectionism	**2.91**(1.79–4.75)	1.29(0.86–1.94)	1.14(0.77–1.69)	0.57(0.34–0.95)	**0.42**(0.23–0.79)	0.83(0.59–1.16)
Preoccupation with details	**2.99**(1.87–4.78)	**1.78**(1.18–2.70)	0.88(0.55–1.31)	0.78(0.44–1.31)	0.83(0.44–1.54)	1.03(0.72–1.48)
Reluctance to delegate	1.70(1.05–2.75)	**2.03**(1.34–3.08)	0.79(0.53–1.16)	1.40(0.85–2.34)	0.89(0.51–1.58)	0.70(0.50–0.98)
Inflexible about morality Excessive devotion to work						

Note. Odds ratios are not shown for miserliness, inflexible morality, and excessive devotion to work because the overall regression models were not found to be significant (p's > .006). Odds ratios shown in **bold** are significant at $p \leq .006$. OCD = obsessive-compulsive disorder; GAD = generalized anxiety disorder; SP = social phobia; Panic w/A = panic disorder with agoraphobia; Panic = panic disorder without agoraphobia; and MDD = major depressive disorder.

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TABLE 3

Logistic Regressions of OCPD Traits for the Axis I Anxiety Disorders and Major Depressive Disorder

	OCPD miserly				OCPD rigid and stubborn			
Axis I Disorder	**Beta**	**Std Err**	**Chi-square**	***p* value**	**Beta**	**Std Err**	**Chi-square**	***p* value**
OCD	0.55	0.24	5.18	0.0229	0.54	0.29	3.51	0.0612
GAD	0.56	0.21	7.24	0.0071	0.71	0.26	7.45	0.0063
Social Phobia	−0.24	0.19	1.43	0.2325	0.20	0.27	0.57	0.4483
MDD	−0.21	0.17	1.57	0.2102	−0.31	0.24	1.67	0.1968
Panic w/A	−0.12	0.25	0.23	0.6292	−0.77	0.40	3.62	0.0572
Panic	0.10	0.29	0.12	0.7290	−0.59	0.46	1.67	0.1962
	OCPD pack rat				**OCPD perfectionism**			
Axis I Disorder	**Beta**	**Std Err**	**Chi-square**	***p* value**	**Beta**	**Std Err**	**Chi-square**	***p* value**
OCD	0.99	0.24	16.89	<0.0001	1.07	0.25	18.34	<0.0001
GAD	0.26	0.21	1.68	0.20	0.26	0.21	1.51	0.22
Social Phobia	−0.12	0.20	0.35	0.56	0.13	0.20	0.43	0.51
MDD	0.03	0.17	0.03	0.87	−0.19	0.17	1.26	0.26
Panic w/A	−0.00	0.25	0.0001	0.99	−0.57	0.26	4.69	0.03
Panic	−0.27	0.30	0.82	0.36	−0.86	0.32	7.38	<0.01
	OCPD details				**OCPD reluctant to delegate**			
Axis I Disorder	**Beta**	**Std Err**	**Chi-square**	***p* value**	**Beta**	**Std Err**	**Chi-square**	***p* value**
OCD	1.09	0.24	20.94	<0.0001	0.53	0.25	4.64	0.03
GAD	0.58	0.21	7.47	<0.01	0.71	0.21	11.02	<0.001
Social Phobia	−0.16	0.22	0.56	0.45	−0.24	0.20	1.48	0.22
MDD	0.03	0.18	0.03	0.86	−0.35	0.17	4.28	0.04
Panic w/A	−0.28	0.28	0.99	0.32	0.34	0.26	1.71	0.19
Panic	−0.19	0.32	0.36	0.55	−0.11	0.29	0.15	0.70
	OCPD inflexible morality				**OCPD workaholic**			
Axis I Disorder	**Beta**	**Std Err**	**Chi-square**	***p* value**	**Beta**	**Std Err**	**Chi-square**	***p* value**
OCD	0.36	0.24	2.29	0.13	0.23	0.25	0.83	0.36
GAD	0.36	0.21	2.89	0.09	0.11	0.22	0.25	0.62
Social Phobia	−0.34	0.21	0.42	0.52	−0.04	0.21	0.04	0.85
MDD	−0.15	0.18	0.66	0.42	0.17	0.18	0.89	0.35
Panic w/A	0.34	0.25	1.74	0.19	−0.06	0.27	0.05	0.82
Panic	−0.51	0.34	2.34	0.13	−0.78	0.37	4.55	0.03

Note. OCD = obsessive-compulsive disorder; GAD = generalized anxiety disorder; SP = social phobia; Panicf w/A = panic disorder with agoraphobia; Panic = panic disorder without agoraphobia; MDD = major depressive disorder.