

The Relationship between Obsessive Compulsive Personality and Obsessive Compulsive Disorder Treatment Outcomes: Predictive Utility and Clinically Significant Change

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Background: The evidence regarding whether co-morbid obsessive compulsive personality disorder (OCPD) is associated with treatment outcomes in obsessive compulsive disorder (OCD) is mixed, with some research indicating that OCPD is associated with poorer response, and some showing that it is associated with improved response. **Aims:** We sought to explore the role of OCPD diagnosis and the personality domain of conscientiousness on treatment outcomes for exposure and response prevention for OCD. **Method:** The impact of co-morbid OCPD and conscientiousness on treatment outcomes was examined in a clinical sample of 46 participants with OCD. **Results:** OCPD diagnosis and scores on conscientiousness were not associated with poorer post-treatment OCD severity, as indexed by Yale-Brown Obsessive Compulsive Scale (YBOCS) scores, although the relative sample size of OCPD was small and thus generalizability is limited. **Conclusion:** This study found no evidence that OCPD or conscientiousness were associated with treatment outcomes for OCD. Further research with larger clinical samples is required.

Keywords: Obsessive compulsive disorder, obsessive compulsive personality disorder, conscientiousness.

Introduction

Obsessive compulsive personality disorder (OCPD) is the most common personality disorder in obsessive compulsive disorder (OCD), with a co-morbidity rate of up to 47.3% (see Supplementary material for details). Individuals with OCD and co-morbid OCPD may be at risk of poorer outcomes as a result of ambivalence or resistance to treatment if their obsessions align with their personal values, impacting on motivation to change. Whilst several studies have found that OCPD traits are predictive of worse treatment outcomes (see Wetterneck et al., 2011), Gordon et al. (2016) found that those with a co-morbid OCPD diagnosis demonstrated greater treatment gains in relation to OCD severity than those without OCPD.

Studies that have found OCPD to be associated with poorer outcomes raise the question as to whether dimensional aspects of OCPD also play a role in treatment response. Conscientiousness has been of interest in OCD research given its alignment with OCPD

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pathology, such as order, achievement-oriented behaviours, and perfectionism. Studies that have examined conscientiousness in OCD have utilized the Revised NEO Personality Inventory (NEO PI-R; Costa and McCrae, 1992) that measures conscientiousness with six subscales: competence, order, dutifulness, achievement-striving, self-discipline, and deliberation. Studies that have examined conscientiousness among OCD samples have yielded mixed findings. Rector et al. (2005) found no difference in conscientiousness scores between a depressed sample and an OCD sample when controlling for level of depression. However, Rees et al. (2005) compared OCD patients with anxious and depressed non-OCD patients and whilst they found no overall differences in conscientiousness, they did find that the OCD patients had lower scores on the competence and self-discipline facets (see Supplementary material for details). Other studies employing the NEO PI-R or Big Five Inventory measures have found that conscientiousness shows no statistically significant relationship with OCD, suggesting that this personality domain may not be critical to OCD (see Wetterneck et al., 2011).

There is a relative dearth of research that has examined OCPD and personality (e.g. conscientiousness) in relation to OCD outcomes, and further, the evidence regarding these relationships is mixed. Although studies have identified low scores on conscientiousness in OCD (Rector et al., 2005; Rees et al., 2005), facets of conscientiousness have been found to be predictive of post-treatment severity, and thus further research is required to clarify the impact of these associations on treatment outcome. Studies that have examined conscientiousness in OCD have only made comparisons with anxious or depressed populations, as opposed to OCPD. Examining OCD treatment outcomes based on OCPD and conscientiousness is important given the co-morbidity between OCPD and OCD, the association between conscientiousness and OCPD, and the conflicting evidence regarding the role of OCPD in OCD outcomes.

The aim of the current study was to determine whether OCPD diagnosis and the personality domain of conscientiousness were predictive of post-treatment OCD severity. Based on previous findings it was predicted that co-morbid OCPD and the conscientiousness facets of competence, self-discipline and deliberation would be negatively associated with poorer treatment outcomes.

Method

Participants

Data for this study came from a published trial of Exposure and Response Prevention (ERP) therapy for OCD (Anderson and Rees, 2007; see Supplementary Material for details).

In the current study, all participants ($N = 46$) met criteria for a primary diagnosis of OCD and a total of 11 participants (23.9%) met criteria for a co-morbid diagnosis of OCPD. Treatment outcomes were compared for participants with and without OCPD, with analyses based on this co-morbidity herein referred to as the 'OCD only' ($n = 35$) and 'OCD/OCPD' groups ($n = 11$).

Materials

Participants were diagnosed via the Structured Clinical Interview for DSM-IV. The clinician-administered Yale-Brown Obsessive Compulsive Scale (YBOCS) was used as the primary

outcome measure of OCD severity at pre- and post-treatment. The NEO PI-R (self-report) was used to measure dimensional conscientiousness (see Supplementary Material for details).

Procedure

Participants in the current study were randomized to 10-week individual or group ERP therapy for OCD. All treatment and assessment procedures were conducted at the Curtin University Psychology Clinic. Diagnostic interviews were recorded and 25% reviewed for reliability. All measures were completed prior to the first treatment session, and the YBOCS was re-administered at the final treatment session (see Anderson and Rees, 2007).

Results

Descriptive clinical and demographic data

No significant differences were found on sociodemographic variables between the OCD only and OCD/OCPD groups (see Supplementary Material for further details).

Pre-treatment means

Assumption testing and analyses were conducted using the Statistical Package for the Social Sciences (SPSS) version 22.0 (see Supplementary Material for details). YBOCS scores for the OCD/OCPD group were as follows: obsessions (mean = 11.82, $SD = 4.90$), compulsions (mean = 13.09, $SD = 3.51$); and for OCD only: obsessions (mean = 12.11, $SD = 3.88$), compulsions (mean = 12.26, $SD = 3.55$). The mean pre-treatment total YBOCS score for the OCD/OCPD group indicated 'severe' symptoms (mean = 24.91, $SD = 7.76$), which was comparable to 'severe' symptoms in the OCD only group (mean = 24.40, $SD = 6.54$). An independent samples t -test indicated that the difference was not statistically significant and the effect size was small; $t(44) = -.22$; $p = .83$; 95% confidence interval of the mean difference (CI) -5.28 to 4.26 ; $d = -.07$. The OCD/OCPD group reported higher total NEO PI-R conscientiousness scores (mean = 42.90, $SD = 11.27$) compared with OCD only (mean = 38.32, $SD = 11.91$). An independent samples t -test indicated that this difference was not statistically significant and the effect size was small to medium; $t(39) = -1.12$, $p = .27$; 95% CI -12.82 to 3.67 ; $d = -.39$.

Bivariate correlations

Pearson's bivariate correlation coefficients were calculated to assess covariation between categorical OCPD diagnosis (minimum of four out of eight DSM-IV OCPD symptoms coded as present and clinically significant at baseline) and dimensional NEO PI-R conscientiousness scores at pre-treatment, with OCD severity (YBOCS scores) at post-treatment. Partial correlation analyses were used to explore the association between post-treatment OCD severity with OCPD diagnosis and the facets of conscientiousness, after controlling for pre-treatment YBOCS scores.

Bivariate correlations revealed that only total pre-test YBOCS symptoms were significantly correlated with total post-test YBOCS severity, which demonstrated a moderate, positive

relationship; $r(46) = .61, p < .001$. The association between post-test YBOCS severity and the remaining variables were weak: OCPD diagnosis [$r(46) = .08, p = .62$]; competence [$r(41) = -.41, p = .80$]; self-discipline [$r(41) = .06, p = .70$]; deliberation [$r(41) = -.20, p = .22$]. The associations between OCPD diagnosis and YBOCS obsessions pre [$r(46) = -.03, p = .84$], YBOCS compulsions pre [$r(46) = .10, p = .50$], YBOCS obsessions post [$r(46) = .06, p = .70$], YBOCS compulsions post [$r(46) = .09, p = .55$], were small and non-significant.

Partial correlations

The trends in the partial correlations, controlling for pre-treatment YBOCS scores, were consistent with bivariate correlations, weak and statistically non-significant; OCPD diagnosis [$r(38) = .10, p = .54$]; competence [$r(38) = .10, p = .55$]; self-discipline [$r(38) = .24, p = .15$]; deliberation [$r(38) = -.08, p = .62$]. Furthermore, the associations between OCPD diagnosis and post-treatment discrete YBOCS scores, controlling for YBOCS pre-treatment scores, were weak and statistically not significant; YBOCS obsessions post [$r(38) = .09, p = .60$]; YBOCS compulsions post [$r(38) = .11, p = .52$]. A power analysis conducted using G*Power 3.1.9.2 indicated that the study was underpowered to detect a statistically significant, medium-sized (.30) association between OCPD and conscientiousness with OCD outcome; a sample size of 82 ($\alpha = .05$, two-tailed, 80% power) would have been required to detect these effects.

Discussion

It was predicted that co-morbid OCPD and the conscientiousness facets of competence, self-discipline and deliberation would be associated with poorer treatment outcomes, but our results indicated that treatment outcome was not impacted by the presence of OCPD or conscientiousness. Neither OCPD diagnosis nor pre-treatment conscientiousness facets of competence, self-discipline and deliberation, were predictive of post-treatment OCD symptom severity. Further, rates of recovery between the OCD/OCPD and OCD-only group were comparable based on relative proportions in each group (see Supplementary material).

Our findings are in contrast to previous studies that have found OCPD traits, such as perfectionism, to be associated with poorer outcomes in OCD (see Wetterneck et al., 2011). Our results align with a recent investigation indicating that co-morbid OCPD diagnosis is not associated with poorer OCD outcomes (Gordon et al., 2016). However, in contrast to the findings by Gordon and colleagues (2016), our results did not indicate that OCPD was associated with greater improvement. Whilst earlier studies (Rector et al., 2005; Rees et al., 2005) found conscientiousness to differ between OCD and non-OCD clinical samples, in the current study, conscientiousness scores *per se* were not found to have an impact on treatment outcome.

It is acknowledged that there were methodological constraints within the current study. Whilst the co-morbidity rate of OCPD in our sample (23.9%) was consistent with previous OCD studies (see Supplementary Material for details), the number of participants with co-morbid OCPD was relatively small, which limited the degree to which we were able to detect OCPD and conscientiousness as predictors of outcome; thus caution is warranted in generalizing these results. Further examination with larger samples with adequate statistical power to detect

smaller effects is required. The original trial from which the current data were derived was designed to examine differences between individual *versus* group ERP for OCD and not OCPD, and the SCID-IV skip-criteria were used in diagnosis, which meant that subsequent questions were omitted when insufficient criteria were endorsed to warrant further questioning (Anderson and Rees, 2007). As such, comprehensive dimensional data for OCPD were not collected and thus our analyses were limited to categorical examination. Given the evidence that particular traits of OCPD, such as perfectionism, are predictive of OCD outcomes, our research would have been strengthened by a broader examination of the predictive utility of individual OCPD traits.

Overall, the body of empirical findings regarding the role of OCPD and conscientiousness has been mixed, but our study failed to find any evidence that co-morbid OCPD or conscientiousness impacted on treatment outcomes for OCD. It is essential that future studies with larger clinical samples seek to augment this developing body of research to inform clinicians as to best practice treatment decisions for patients with OCD and concomitant OCPD traits.

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Ethics statement: This study has been approved by the Curtin University Human Research Ethics Committee (approval no. HR38/2014). The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, and its most recent revision.

Supplementary material

To view supplementary material for this article, please visit <https://doi.org/10.1017/S1352465817000194>

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