



Citation for published version:

Gordon, OM, Salkovskis, PM & Bream, V 2016, 'The impact of obsessive compulsive personality disorder on cognitive behaviour therapy for obsessive compulsive disorder', *Behavioural and Cognitive Psychotherapy*, vol. 44, no. 4, pp. 444-459. <https://doi.org/10.1017/S1352465815000582>

DOI:

[10.1017/S1352465815000582](https://doi.org/10.1017/S1352465815000582)

Publication date:

2016

Document Version

Early version, also known as pre-print

[Link to publication](#)

University of Bath

Alternative formats

If you require this document in an alternative format, please contact:
openaccess@bath.ac.uk

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

**BEHAVIOURAL AND
COGNITIVE PSYCHOTHERAPY**



**The Impact of Obsessive Compulsive Personality Disorder
on Cognitive Behaviour Therapy for Obsessive Compulsive
Disorder**

Journal:	<i>Behavioural and Cognitive Psychotherapy</i>
Manuscript ID	BCP-01114-15
Manuscript Type:	Main
Keywords:	Obsessive Compulsive Disorder, Obsessive Compulsive Personality Disorder, Axis II, cognitive behaviour therapy

1
2
3 **The Impact of Obsessive Compulsive Personality Disorder on Cognitive Behaviour**
4 **Therapy for Obsessive Compulsive Disorder**
5

6
7 Authors:

8
9 Olivia M. Gordon ^{a*}, Paul M. Salkovskis ^b & Victoria B. Oldfield ^{a,c}
10
11

12
13
14
15
16 ^aInstitute of Psychiatry, King's College London
17

18
19 ^bUniversity of Bath
20

21
22 ^cCentre for Anxiety Disorders and Trauma, South London and Maudsley NHS Trust
23
24
25
26
27

28
29 *Correspondence should be addressed to Dr Olivia Gordon, Centre for Anxiety Disorders and
30 Trauma, 99 Denmark Hill, London SE5 8AZ, UK (e-mail: Olivia.Gordon@kcl.ac.uk)
31
32

33
34 Word Count: 4071
35
36
37

38
39 Running head: Impact of OCPD on CBT for OCD
40
41

42
43 Keywords: Obsessive Compulsive Disorder, Obsessive Compulsive Personality Disorder, Axis
44
45 II, Cognitive Behaviour Therapy
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Abstract

Background: It is often suggested that in general, co-morbid personality disorders are likely to interfere with CBT based treatment of Axis I disorders, given that personality disorders are regarded as dispositional and are therefore considered less amenable to change than axis I psychiatric disorders.

Aims: The present study aimed to investigate the impact of co-occurring Obsessive-Compulsive Disorder (OCD) and Obsessive-Compulsive Personality Disorder (OCPD) on cognitive-behavioural treatment for OCD.

Method: 92 individuals with a diagnosis of OCD participated in this study. Data were drawn from measures taken at initial assessment and following cognitive-behavioural treatment at a specialist treatment centre for anxiety disorders.

Results: At assessment, participants with OCD and OCPD had greater overall OCD symptom severity, as well as doubting, ordering and hoarding symptoms relative to those without OCPD, however participants with co-morbid OCD and OCPD demonstrated greater treatment gains in terms of OCD severity, checking and ordering than those without OCPD. Individuals with OCD and OCPD had higher levels of checking, ordering and overall OCD severity at initial assessment; however at post-treatment they had similar scores to those without OCPD.

Conclusion: The implications of these findings are discussed in the light of research on axis I and II co-morbidity and the impact of axis II disorders on treatment for axis I disorders.

Introduction

Although there have been major advances in the treatment of obsessive-compulsive disorder (OCD), it remains a challenging problem to treat successfully, with a significant proportion of patients not resolving their difficulties (Abramowitz, 1998). Many reasons have been put forward to account for therapeutic failure in OCD, including the presence of “over-valued ideation” where the patient perceives their obsessional fear as likely to be true (“ego-syntonic”) (Foa, 1979; Rachman, 1983). Given the possible importance of such “ego-syntonic” beliefs in treatment refractoriness, it seems likely that comorbidity with obsessive compulsive personality disorder (OCPD) would have the same effect because OCPD is by definition characterised by “ego-syntonic” beliefs, i.e. excessively conscientiousness, scrupulous and inflexible about matters of morality, ethics or values. There is now some evidence that some of these factors in the context of OCPD are associated with the severity of OCD itself (Gordon, Salkovskis, Oldfield and Carter, 2013).

It is often suggested that in general, co-morbid personality disorders are likely to interfere with CBT based treatment of Axis I disorders, given that personality disorders are regarded as dispositional and are therefore considered less amenable to change than axis I psychiatric disorders. In pharmacological treatment of anxiety disorders, clients with personality disorders show worse treatment outcomes for axis I disorders than those without (Reich, 2003). In a study conducted by Baer et al. (1992) with participants with OCD, the effect of concomitant personality disorder on the results of ten weeks of pharmacotherapy was evaluated. Schizotypal, avoidant and borderline personality disorders were associated with poorer treatment outcome. Reich (2003) attributes poorer outcome to the greater likelihood that patients with personality disorders dropping out of treatment and having poorer treatment compliance and interpersonal

1
2
3 difficulties with mental health professionals. By contrast, however, in CBT research on the
4
5 impact of personality disorders on CBT for anxiety disorders has found no, or limited influence,
6
7 of comorbid personality disorders (Dreessen, Arntz, Luttels & Sallaerts, 1994; Dreessen,
8
9 Hoekstra & Arntz, 1997; Steketee, Chambless, & Tran, 2001). Dreessen et al. (1994) reported
10
11 on the effect of SCID-II personality pathology on treatment outcome to standardised individual
12
13 CBT, in a group of thirty-one patients with Panic Disorder. It was found that patients with one or
14
15 more personality disorders improved parallel to patients without a personality disorder. In a
16
17 further investigation, Dreessen, et al. (1997) studied forty-three patients who completed
18
19 standardised CBT for their obsessive-compulsive axis I complaints. They reported that the
20
21 presence of one or more personality disorders had no impact upon change from pre-test to later
22
23 tests, and that the presence of an avoidant, dependent, obsessive-compulsive, paranoid or
24
25 schizotypal personality disorder was unrelated to immediate or long-term treatment outcome.
26
27 Furthermore, the effect of personality pathology was studied by evaluating dimensional
28
29 personality variables (the total number of personality disorder diagnoses, total number of
30
31 personality traits, and the avoidant, obsessive-compulsive, paranoid, schizotypal, passive-
32
33 aggressive, and self-defeating traitscores), and it was reported that none of these variables
34
35 significantly predicted treatment outcome. In this study, personality disorder variables did not
36
37 affect treatment outcome of patients with OCD even after including data of the drop-outs. The
38
39 authors concluded, therefore, that the presence of any personality disorder, irrespective of type,
40
41 is unrelated to treatment outcome.
42
43
44
45
46
47
48
49

50
51 Dreessen and Arntz (1998) argue that apparent differences found in some studies in end
52
53 of treatment outcome, i.e. higher post-treatment scores in individuals with co-morbid axis II
54
55 disorders compared to those without axis II disorders may be accounted for by the fact that
56
57

1
2
3 patients with personality disorders display higher symptom severity on axis I disorders prior to
4 treatment. There is certainly ample other evidence that co-morbid axis II disorders are commonly
5 associated with more severe symptomatology in terms of Axis I disorders (Gordon et al., 2013;
6 van den Hout, Brouwers & Oomen, 2006). It may be that these observations account for the
7 clinical impression that patients respond less well to treatment. van den Hout et al. (2006)
8 investigated the short-term outcome of CBT for individuals with co-morbid personality disorders
9 and axis I disorders such as OCD, Panic disorder with agoraphobia and major depression.
10 Results indicated that patients with axis II problems had higher axis I problems both before and
11 after treatment, but the decrease was parallel.
12
13
14
15
16
17
18
19
20
21
22
23

24 The very elevated rates of OCPD in OCD samples (ranging from 23% (Albert, Maina,
25 Forner & Bogetto, 2004) to 45% (Gordon et al., 2013) suggests that some of the same
26 mechanisms are involved in these two otherwise distinct problems. Gordon et al (2013) point out
27 that the shared phenomenology of OCD and OCPD may explain the significant and specific
28 association between them. They found that, across the entire OCD group, those who met the
29 OCPD criteria for attention to detail, perfectionism, hoarding, and stubbornness had significantly
30 higher self-reported obsession symptoms (OCI total scores), with no differences for excessive
31 work, high standards, reluctance to delegate, and reluctance to spend money. It may be that
32 responsibility as a cognitive factor could explain these associations (Salkovskis and Forrester,
33 2002).
34
35
36
37
38
39
40
41
42
43
44
45
46
47

48 Given that this is clearly such a common comorbidity, it is vitally important to explore
49 whether the presence of OCPD specifically has a significant impact on cognitive behavioural
50 treatment for OCD. It has been suggested that the occurrence of OCPD in the context of ego-
51 syntonic but counter-productive traits, such as perfectionism, scrupulosity, or preoccupation with
52
53
54
55
56
57
58
59
60

1
2
3 detail, can pose difficulties in the treatment of OCD (Salkovskis, Forrester, Richard, & Morrison,
4 1998). This may be due to the fact that the patient may wish to be rid of troublesome thoughts
5 but also continue to behave in a way that may be regarded as obsessional. Salkovskis et al.
6
7
8
9
10 (1998) suggest that the therapist and client, therefore, may need to experiment with more flexible
11 ways of thinking and responding to their life as a whole; this process is usually incorporated into
12 CBT for OCD which emphasises both Cognitive interventions and ERP in the form of
13 behavioural experiments.
14
15
16
17
18
19

20 At present, there is little research evidence regarding the impact of OCPD on treatment
21 outcome specifically in OCD. One study found a negative impact on pharmacological treatment
22 (Cavedini, Erzegovesi, Ronchi, & Bellodi, 1997), while another did not find a significant
23 difference in outcome in response to serotonin reuptake inhibitor between those with and without
24 co-morbid OCPD (Baer et al., 1992). In terms of psychological therapy, Dressen et al. (1997)
25 reported that the presence of a range of personality disorders, including OCPD, did not
26 negatively impact on CBT for OCD. Recently, Pinto, Liebowitz, Foa and Simpson, (2011)
27 analysed a subset of medication refractory patients taken from a randomised trial. These patients
28 were selected because they had failed to respond to 12 weeks and therefore received ERP as an
29 addition to an SRI or SSRI. Results in this highly selected group indicated that OCPD severity
30 predicted worse outcome when patients were given exposure and ritual prevention (ERP);
31 however the effect size is unclear, as is the extent to which the failure to respond to medication
32 may have influenced the results.
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49

50 The aims of the current study, therefore, were to explore in larger samples seen in routine
51 clinical practice whether or not the presence of OCPD impacted on cognitive-behavioural
52
53
54
55
56
57
58
59
60

1
2
3 treatment for OCD by studying treatment outcome for patients with OCD with co-morbid OCPD
4
5 relative to those without OCPD.
6
7
8
9

10 **Method**

11 *Participants*

12
13
14
15 The sample consisted of 92 individuals, all of whom had completed treated in a specialist
16
17 anxiety disorders treatment and research centre for anxiety disorders, the Centre for Anxiety
18
19 Disorders and Trauma (CADAT) run jointly by the Specialist Directorate of the South London
20
21 and Maudsley Trust and the Institute of Psychiatry, King's College London. Of this total, 45
22
23 participants met diagnostic criteria for OCD, but not for OCPD, while 47 individuals had a
24
25 diagnosis of OCD with co-morbid OCPD. Of all of the participants, 48 (52.2%) were female and
26
27 44 (47.8%) were male. Participants were aged 17 years or over, and the mean age of the sample
28
29 was 36.03 years (SD= 11.57; range = 17-64 years). Table 1 sets out sociodemographic
30
31 information of the total sample and that of participants with OCD according to whether they met
32
33 diagnostic criteria for OCPD or not.
34
35
36
37
38
39

40
41

Table 1 around here

42 43 44 45 *Treatment Setting and Content of Therapy*

46
47 CADAT is both a specialist CBT service (accepting national referrals) and part of local services.
48
49 Clinicians at CADAT have a high level of training in CBT; most are either clinical psychologists
50
51 or nurse therapists with diplomas in CBT or equivalent. The emphasis of the clinic on research-
52
53 practice links, innovation in clinical methods and rigorous supervision promotes high quality
54
55
56
57
58
59
60

1
2
3 CBT with a focus on idiosyncratic formulation and intricately designed behavioural experiments.
4
5 Treatment starts with an emphasis on normalising intrusive thoughts, and quickly progresses to
6
7 an idiosyncratic formulation based on the vicious flower (Salkovskis et al., 1998) and a 'theory a,
8
9 theory b' (Challacombe, Oldfield & Salkovskis, 2011)). Goals and costs/benefits are discussed at
10
11 an early stage. Several sessions can be devoted to exploration of the role of safety-seeking
12
13 behaviours (Salkovskis, 1991) progressing to collaboratively derived behavioural experiments
14
15 (see Challacombe et al (2011) for examples). Whilst this stage of treatment involves
16
17 encountering previously avoided situations and tolerating anxiety, this tends not to be classic
18
19 'exposure' (that is, not a hierarchical progression through increasingly anxiety-provoking
20
21 situations whilst allowing the habituation of anxiety), instead, the aim is belief change - finding
22
23 evidence to support a less-threatening belief about 'how the world really works' and to counter
24
25 obsessional beliefs. As treatment continues, the emphasis shifts to greater use of homework tasks
26
27 and being 'OCD-free'. The final sessions and follow-up period focus on relapse prevention and
28
29 how to overcome setbacks. A strong message in treatment is that nothing should be avoided, and
30
31 that OCD is to be overcome, rather than 'managed' or minimised.
32
33
34
35
36
37
38
39
40

41 *Procedure*

42
43 The data for this study were extracted from existing case-notes and databases previously
44
45 set up for audit purposes within the specialist centre for anxiety disorders. Data were entered
46
47 into an existing database for individuals with OCD. NHS referrals for OCD are accepted
48
49 nationally and locally. As part of routine assessment procedure in the service, participants were
50
51 assessed through a structured clinical diagnostic interview (the Structured Clinical Interview for
52
53 DSM IV, SCID IV) by an appropriately trained clinical psychologist or a cognitive-behavioural
54
55
56
57
58
59
60

1
2
3 therapist to determine relevant diagnoses and clinical characteristics. Furthermore, participants
4
5 completed self-rated questionnaires for demographic information and further clinical
6
7 characteristics. When participants completed treatment, which typically consisted of twelve
8
9 sessions of individual CBT, therapist-completed measures and participant-completed measures
10
11 were re-administered.
12
13

14 15 16 17 *Measures*

18
19 Participants completed the Beck Depression Inventory (BDI; Beck, Steer & Brown, 2005) and
20
21 the Beck Anxiety Inventory (BAI; Beck & Steer, 1993) and took part in the Structured Clinical
22
23 Interview for DSM –IV Axis I disorders (First, Spitzer, Gibbon & Williams, 1996) and
24
25 Structured Clinical Interview of DSM-IV Axis II disorders (First, Spitzer, Gibbon, Williams &
26
27 Benjamin, 1997). Participants also completed the Obsessive Compulsive Inventory (OCI; Foa,
28
29 Kozak, Salkovskis, Coles, & Amir, 1998), the Responsibility Attitudes Scale (RAS; Salkovskis
30
31 et al., 2000) and the ‘Client Ratings Scale’ (based on Watson & Marks, 1971).
32
33
34
35
36
37
38

39 *Beck Depression Inventory (Beck et al. 2005)*

40
41 The BDI is a widely used 21-item self-report scale used to measure symptoms and severity of
42
43 depression over the previous week, including cognitive, affective, motivational, and
44
45 physiological symptoms. Each item has four alternative answers scored 0 to 3 and total scores
46
47 range from 0 to 63.
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 *Beck Anxiety Inventory (Beck & Steer, 1993).*

4
5 The BAI is a 21-item self-report questionnaire designed to assess distress associated with
6
7 symptoms of anxiety over the previous week. Each item enquires about how much the
8
9 respondent has been bothered by each symptom on a 0-3 scale of severity from ‘not at all’ to
10
11 ‘severely’. Scores are added to give a single score ranging from 0 – 63.
12
13
14

15
16
17 *Structured Clinical Interview for DSM-IV Axis I Disorders (First et al. 1996)*

18
19 The Structured Clinical Interview for DSM-IV Axis I Disorders (SCID; First et al., 1997) is a
20
21 semi-structured interview used to screen for DSM-IV axis I disorders. All participants were
22
23 administered the screening module of the SCID to identify possible co-morbid axis I disorders.
24
25 Where particular axis I disorders were indicated on the screener, a full SCID was conducted for
26
27 the relevant disorder(s) to ascertain whether or not the participant reached full diagnostic criteria
28
29 for the disorder(s). The SCID for Axis I disorders Version 2.0 for OCD (First et al., 1996) was
30
31 administered to all participants referred for OCD to confirm they met DSM-IV diagnostic criteria
32
33 for OCD (APA, 1994).
34
35
36
37
38
39
40

41 *Structured Clinical Interview of DSM-IV Axis II disorders (First et al., 1997).*

42
43 The Structured Clinical Interview for DSM-IV Axis II Personality Disorders (SCID-II; First et
44
45 al., 1997) for OCPD was administered to participants with a self-report screener to determine
46
47 further axis II diagnoses. If a participant indicated a personality disorder on the self-report
48
49 screener, he or she was interviewed by the assessor with the relevant personality disorder module
50
51 to ascertain whether he or she met full SCID-II criteria for the relevant diagnosis. However, all
52
53 participants referred for OCD were interviewed using the OCPD module of the Axis II SCID.
54
55
56
57
58
59
60

1
2
3 *Obsessive Compulsive Inventory (OCI; Foa et al., 1998)*
4

5 The OCI is 42-item self-report measure of the frequency and distress associated with a range of
6 obsessions and compulsions. Each item is scored for frequency on a scale of 0 – 4 (0=Never, and
7 4=Almost Always), and distress on a scale of 0-4 (0=Not at all, and 4=Extremely). A total score
8 for frequency and distress can be calculated as well as sub-scale scores for seven subscales
9 relevant to various manifestations of obsessional behaviour: washing, checking, doubting,
10 ordering, obsessions, hoarding and mental neutralising. The maximum total score across the
11 subscales is 168.
12
13
14
15
16
17
18
19
20
21
22
23

24 *Responsibility Attitudes Scale (RAS; Salkovskis et al., 2000)*
25

26 The RAS is a 26-item self-report questionnaire designed to assess general beliefs about
27 responsibility. Each item is measured on a 7-point Likert scale, with responses ranging from 1
28 =‘totally agree’ to 7=‘totally disagree’. The scale has high test-retest reliability and internal
29 consistency ($r = 0.94$; $\alpha = 0.92$; Salkovskis et al., 2000). The RAS correlates significantly with
30 measures of obsessionality, therefore demonstrating concurrent validity (Salkovskis et al 2000).
31
32
33
34
35
36
37
38
39
40

41 *‘Client Ratings Scale’ (internal clinic scale, based on Watson and Marks, 1971)*
42

43 This scale furnishes information about the most troublesome thought and ritual of the client,
44 along with specific ratings of the discomfort and interference associated with the thought and
45 ritual over the previous week. These items are measured on a scale of zero to eight, where zero
46 indicates ‘not at all’ or ‘absent’ and eight indicates extreme discomfort or interference. The
47 amount of time that the patient is troubled by the obsessional problems as a whole is also
48 requested. Furthermore, clients rate their general anxiety on how distressing their anxiety
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 difficulties are as a whole at present, as well as how much the anxiety problems as a whole
4
5 interfere with life at present. These ratings are on a similar nine-point scale. Finally, clients are
6
7 requested to rate how OCD has impaired areas of their lives, such as work, home-management,
8
9 social and leisure activities, private leisure activities, general relationship with partner, and
10
11 sexual relationship. These impairment ratings are on a nine-point scale, where zero indicates not
12
13 at all impaired and eight indicates very severely impaired.
14
15
16
17
18
19

20 *Demographic information*

21
22 Data were collected from clinical records of participants' age, gender, ethnicity, number of years
23
24 spent in education, employment status and relationship status. Information regarding age at
25
26 which OCD began to significantly interfere with the service user's life, as well as alcohol
27
28 consumption was collected.
29
30
31
32
33

34 *Data analysis*

35
36 Means, standard deviations, percentages and frequencies were calculated for
37
38 demographic information and co-morbidity rates. Between-group differences for the OCD with
39
40 OCPD versus the OCD without OCPD cases were calculated using Chi-square analyses for
41
42 categorical variables and ANOVAs and t-tests for continuous variables. Treatment responses
43
44 were assessed using mixed model repeated measures ANOVAs (pre-post treatment as the within
45
46 subjects variable, with diagnostic grouping as fixed factor between subject variables; i.e.
47
48 OCPD/No OCPD). The analytic strategy was determined by the authors prior to detailed
49
50 inspection of the data. Where multiple variables could be examined (e.g. OCD outcomes), the
51
52
53
54
55
56
57
58
59
60

1
2
3 within-subjects variable was pre-post treatment, with OCPD/No OCPD as fixed factor between
4
5 subjects variable.
6
7
8
9

10 **Results**

11 *Effects of treatment for OCD-specific measures*

12
13 There were a number of outcome variables which could be analysed, therefore a restricted range
14
15 of variables were chosen *a priori* to reduce the impact of multiple testing. See Table 2 for pre- to
16
17 post-treatment scores on variables for the sample.
18
19
20
21

22
23
24

Insert Table 2 around here

25 26 27 28 *Distress related to obsessional thoughts (0-8 Client-Ratings Scale)*

29
30 There was a significant effect of treatment phase for distress associated with thoughts;
31
32 $F_{[1,80]}=39.55$, $p<0.0001$. An OCPD x treatment interaction effect, however, was not significant,
33
34 although the effect did suggest a trend, $F_{[1,80]}=3.06$, $p=0.083$.
35
36
37
38
39
40
41

42 *Distress related to Rituals out of 8 (Client-Ratings Scale)*

43
44 In terms of distress associated with rituals, there was a significant main effect of
45
46 treatment, $F_{[1,80]}=34.9$, $p<0.0001$. The interaction between OCPD and treatment phase
47
48 reached significance, $F_{[1,80]}=3.82$, $p=0.05$. For this variable, participants with OCPD displayed
49
50 significantly greater improvement relative to patients without OCPD. An independent t-test
51
52
53
54
55
56
57
58
59
60

1
2
3 indicates that at the end of treatment the groups were significantly different; $t_{(85.9)}=2.03$, $p<0.05$.

4
5 See figure 1.

6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Figure 1 around here

Distress Rating for All Obsessional Problems (Client-Ratings Scale)

In terms of overall distress associated with obsessional difficulties, there was a significant main effect of treatment, $F_{[1, 77]} = 46.9$, $p<0.0001$. There was also a significant interaction between treatment phase and OCPD, $F_{[1, 77]} = 4.33$, $p<0.05$. A planned comparison indicated a significant difference between groups at post-treatment ($t_{(82.9)}=2.03$, $p<0.05$). See figure 2.

Figure 2 around here

RAS

On this measure, there was a significant main effect of treatment, $F_{[1, 90]} = 49.67$, $p<0.0001$.

However, the interaction between treatment phase and OCPD was not significant, $F_{[1, 90]} = 1.83$, $p=0.18$.

Obsessive compulsive inventory (OCI)

See Table 3 for pre- to post-treatment scores on the OCI.

Insert Table 3 here

OCI Total

For the total OCI scores, there was a significant main effect of treatment, $F_{[1, 90]} = 103.12$, $p<0.0001$. There was also a significant interaction between treatment phase and OCPD, $F_{[1, 90]} = 5.9$, $p<0.05$. As can be seen from figure 3, the pattern here is different; the pre-treatment scores differ ($p<0.05$) but converge at post-treatment.

Figure 3 around here

OCI Washing

On the ‘washing’ subscale of the OCI, there was a significant main effect of treatment, $F_{[1, 90]} = 53.55, p < 0.0001$. There was no significant interaction between treatment phase and OCPD, $F_{[1, 90]} = 1.66, p = 0.20$.

OCI Checking

There was a significant main effect of treatment on the ‘checking’ subscale of the OCI, $F_{[1, 90]} = 150.06, p < 0.0001$. There was also a significant interaction between treatment phase and personality disorder, $F_{[1, 90]} = 4.28, p < 0.01$. This interaction is illustrated in Figure 4.

Figure 4 around here

OCI Doubting

There was a significant main effect for treatment phase, $F_{[1, 90]} = 24.29, p < 0.0001$. The interaction between treatment phase and OCPD was not significant, $F_{[1, 90]} = 2.69, p = 0.11$.

OCI Ordering

For the OCI ‘ordering’ subscale, there was a significant main effect of treatment, $F_{[1, 90]} = 39.73, p < 0.0001$. As depicted in Figure 5, there was also a significant interaction between treatment and OCPD, $F_{[1, 90]} = 8.02, p < 0.05$.

Figure 5 around here

OCI Obsessions

There was a significant effect of treatment phase $F_{[1, 90]} = 68.39, p < 0.0001$. However, the interaction between treatment and personality disorder was not significant, $F_{[1, 90]} = 2.64, p = 0.107$.

OCI Hoarding

For the 'hoarding' subscale of the OCI, a significant effect of treatment phase was found, $F_{[1, 90]} = 25.35, p < 0.0001$. The interaction of treatment phase with OCPD, however, was not significant, $F_{[1, 90]} = 2.27, p = 0.135$.

OCI Neutralising

There was a significant effect of treatment phase, $F_{[1, 90]} = 63.96, p < 0.0001$. There was no significant interaction between treatment and OCPD, $F_{[1, 90]} = 1.17, p = 0.28$.

Effects of Treatment on Mood

Depression (BDI)

A significant main effect of treatment was found, $F_{[1, 90]} = 44.91, p < 0.0001$. However, there was no significant interaction between treatment phase and personality disorder, $F < 1$.

Anxiety (BAI)

There was a significant effect of treatment phase for anxiety, $F_{[1, 92]} = 26.88, p < 0.0001$. There was no significant interaction between treatment phase and OCPD, $F < 1$.

Discussion

The aim of the present study was to evaluate the impact of OCPD on CBT for OCD by comparing patients with OCD who met diagnostic criteria for OCPD with those with OCD who did not meet criteria for OCPD. The presence of OCPD did not impact on outcomes in terms of depression and anxiety measures. However, there were significant differences between the OCD with OCPD and OCD without OCPD groups in terms of treatment outcome on other measures. For level of self-rated disability there was evidence of similar initial levels but with the OCPD group making greater gains. For OCD symptoms rated on the OCI, Checking, Ordering and Total OCI scores, initial levels were higher for OCPD patients but converged at post-treatment. In no instance was there evidence of the presence of OCPD impairing treatment response.

These findings unexpectedly suggest that individuals with OCD and OCPD appear to benefit more from CBT treatment for OCD than those without OCPD. Previously, (Dreessen et al., 1997) studied the treatment outcome for 43 patients with OCD who completed standardised CBT for their obsessive compulsive axis I difficulties. They found that the presence of one or more personality disorders, including OCPD, had no impact on treatment, such that all participants benefited equally from treatment. Furthermore, previous studies have found that treatment of anxiety disorders for individuals with one or more concomitant personality disorders, is somewhat less successful than for patients without one or more personality disorders (Mennin & Heimberg, 2000). However, findings from the present study indicate that individuals specifically with OCPD had greater treatment gains in terms of OCD symptoms than those without OCPD.

Reasons for this finding are of great interest. Guidano and Liotti (1983) propose that underlying both OCPD and ritualistic elements of OCD are maladaptive components such as

1
2
3 perfectionism, a need for certainty and a belief in an absolutely correct solution to problems.
4
5 Furthermore, Beck et al. (2004) suggest that individuals with OCPD have a view of themselves
6
7 as responsible for themselves and others, and are accountable to their own (unrealistically high)
8
9 perfectionistic standards. Furthermore, it has been suggested that dichotomous thinking is an
10
11 important characteristic distortion of individuals with OCPD (Beck et al., 2004). It may be that
12
13 CBT for OCD as conducted here with a cognitive emphasis might be particularly helpful for
14
15 those with OCPD. Although treatment includes a major component of ERP, it is embedded
16
17 within a cognitive rationale which seeks to change aspects of perfectionism as well as specific
18
19 appraisals of responsibility and the way these motivate compulsive behaviour. Having loosened
20
21 these beliefs, it then becomes easier for patients to engage in behavioural experiments including
22
23 high levels of exposure with full response prevention. Cognitive elements in the treatment thus
24
25 focus on increasing cognitive flexibility by offering the formulation as an “alternative
26
27 explanation (Salkovskis 1996), with an emphasis on “theory A vs theory B” (Challacombe, et al.,
28
29 2012). Other components, again formulation driven, target “just right” phenomena, dichotomous
30
31 thinking, intolerance of uncertainty, and responsibility beliefs. These strategies may work by
32
33 targeting the elevated levels of overall OCD symptoms in individuals with OCD and OCPD. It
34
35 is also possible that individuals with OCD accompanied by OCPD respond especially well to
36
37 certain aspects of the cognitive emphasis in terms of thought processes (Beck et al., 2004).
38
39 Anecdotally, it also seems that, once a cognitive shift to an alternative, less threatening
40
41 explanation of their obsessional fears is achieved, a level of efforts towards perfectionism in
42
43 therapy itself may come into play. Thus, patients with perfectionistic tendencies listen to their
44
45 recordings of therapy and carry out other homework assignments more assiduously than those
46
47 without such tendencies. Clinical Perfectionism and helpful Persistence appear to be correlated
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 (Kobori and Salkovskis, in preparation); in therapy with patients who have both OCD and OCPD
4
5 it may be that what starts as a problem (perfectionism) can become an asset in treatment itself.
6
7

8 Since completing the present study, Pinto et al. (2011) reported an interesting study
9
10 which found that the presence of OCPD predicted worse outcome in therapy for OCD in a
11 medication refractory sample. The presence of perfectionism in that study was associated with
12 poorer treatment outcome. Indeed, Pinto et al. point out that the presence of this single OCPD
13 trait was as predictive of outcome as the total number of OCPD criteria endorsed. Perfectionism
14 has been found to be one of the most prevalent and stable OCPD features (McGlashan et al.,
15 2005). Although at first sight this finding would appear to be at odds those reported here, there
16 are a number of key differences, notably the sample (medication refractory patients) and the
17 behavioural framework used to present ERP rather than the cognitively based CBT in the present
18 study. It may be that the outcomes are indeed different CBT relative to ERP for OCD. Clearly it
19 would be helpful to conduct a study comparing these different approaches to therapy in patients
20 suffering from OCD and OCPD.
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37

38 ***Clinical Implications***

39
40 Clinically, the contrast between the present study and that of Pinto et al (2011) leaves a number
41 of important questions unanswered. The fact that, in a routine clinical setting, participants with
42 OCD and co-morbid OCPD displayed either similar or greater treatment gains than those without
43 OCPD (with no evidence of poorer outcomes) is encouraging. We suggest that it would be
44 inappropriate to anticipate poorer outcome (as often is the case) in order to avoid self-fulfilling
45 expectancy effects. Furthermore, it seems that attributing therapeutic failure to concomitant
46 OCPD would be erroneous; it may be simply that such patients require a treatment which
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 increases their cognitive flexibility, as in the CBT delivered in the present study. Given the high
4
5 rate of OCPD in samples with OCD, incorporating cognitive techniques aimed at addressing
6
7 OCPD traits, such as clinical perfectionism as part of routine treatment may be useful.
8
9

10 11 12 **References**

13
14
15 Abramowitz, J.S. (1998). Does cognitive-behavioral therapy cure obsessive-
16
17 compulsive disorder? A meta-analytic evaluation of clinical significance. *Behavior*
18
19 *Therapy, 29*, 339-355.
20
21

22
23
24 Albert, U., Maina, G., Forner, F., Bogetto, F. (2004). DSM-IV obsessive-compulsive
25
26 personality disorder: prevalence in patients with anxiety disorders and in healthy
27
28 comparison subjects. *Comprehensive Psychiatry, 45* (5), 325-32.
29
30

31
32
33 Baer, L., Jenike, M.A., Ricciardi, J.N., Holland, A.D., Seymour, R.J. & Minichiello,
34
35 W.E. (1992). Standardised assessment of personality disorders in obsessive-
36
37 compulsive disorders. *Archives of General Psychiatry, 47*, 826-830.
38
39

40
41
42 Beck, A.T., Freeman, A., Davis, D. and Associates (2004). *Cognitive Therapy of*
43
44 *Personality Disorders*. New York: Guilford Press.
45
46
47

48
49
50 Beck, A. T., & Steer, R. A. (1993). Manual for the Beck anxiety inventory. San
51
52 Antonio, TX: Psychological Corporation.
53
54

1
2
3 Beck, A. T., Steer, R. A., & Brown, G. K. (2005). Manual for the Beck depression
4 inventory II. San Antonio, TX: Psychological Corporation.
5
6

7
8
9
10 Cavedini, P., Erzegovesi, S., Ronchi, P. & Bellodi, L. (1997). Predictive value of
11 obsessive-compulsive personality disorder in antiobsessional pharmacological
12 treatment. *European Neuropsychopharmacology*, 7, 45-49.
13
14
15

16
17
18
19
20 Challacombe, F., Oldfield, V.B. & Salkovskis, P.M. (2012). *Break Free From OCD:*
21 *Overcoming Obsessive Compulsive Disorder with CBT*. UK: Vermilion.
22
23
24

25
26
27 Dreessen, L. & Arntz, A. (1998). The impact of personality disorders on treatment
28 outcome of anxiety disorders: Best evidence synthesis. *Behaviour Research and*
29 *Therapy*, 36, 483-504.
30
31
32

33
34
35
36 Dreessen, L., Arntz, A., Luttels, C. & Sallaerts, S. (1994). Personality disorders do
37 not influence the results of cognitive behaviour therapies for anxiety disorders.
38 *Comprehensive Psychiatry*, 35, 265-274.
39
40
41
42

43
44
45
46 Dreessen, L., Hoekstra, R. & Arntz, A. (1997). Personality disorders do not influence
47 the results of cognitive and behavioural therapy for obsessive compulsive disorder.
48 *Journal of Anxiety Disorders*, 11, 5, 503-521.
49
50
51
52

1
2
3 Foa, E. (1979). Failures in treating obsessive compulsives. *Behaviour Research and*
4
5
6 *Therapy*, 17, 169-176.
7
8

9
10 First, M.B., Spitzer, R.L., Gibbon, M., Williams, J.B.W. & Benjamin, L. (1997).
11
12 *Structured clinical interview for DSM-IV personality disorders (SCID II)*.
13
14 Washington, DC: American Psychiatric Press.
15
16
17

18
19
20 First, M.B., Spitzer, R.L., Gibbon, M. & Williams, J.B.W. (1996). *Structured clinical*
21
22 *interview for DSM-IV axis I disorders, clinical version (SCID – CV)*. Washington,
23
24 DC: American Psychiatric Press.
25
26

27
28
29 Foa, E.B., Kozak, M.J., Salkovskis, P.M., Coles, M.E. & Amir, N. (1998). The
30
31 validation of a new obsessive-compulsive disorder scale: the Obsessive-Compulsive
32
33 Inventory. *Psychological Assessment*, 10, 206-214.
34
35
36

37
38
39 Gordon, O., Salkovskis, P., Oldfield, V.B. & Carter, N. (2013, in press). The
40
41 Association between obsessive compulsive disorder and obsessive compulsive
42
43 personality disorder. *British Journal of Clinical Psychology*. DOI:10.1111/bjc.12016
44
45
46

47
48 Guidano, V.F. & Liotti, G. (1983). *Cognitive processes and emotional disorders*.
49
50 New York: Guilford Press.
51
52

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

McGlashan, T., Grilo, C. M., Sanislow, C. A., Ralevski, E., Morey, L. C., Gunderson, J. G., Skodol, A.E., Shea, M.T., Zanarini, M.C., Bender, D., Stout, R.L., Yen, S & Pagano, M. (2005). Two- year prevalence and stability of individual DSM-IV criteria for schizotypal, borderline, avoidant and obsessive-compulsive personality disorders: toward a hybrid model of axis II disorders. *American Journal of Psychiatry*, 162(5), 883–889.

Mennin, D.S. & Heimberg, R.G. (2000). The impact of comorbid mood and personality disorders in the cognitive-behavioural treatment of panic disorder. *Clinical Psychology Review*, 20, 339-357.

Pinto, A., Liebowitz, M.R., Foa, E.B., & Simpson, H.B (2011). Obsessive compulsive personality disorder as a predictor of exposure and ritual prevention outcome for obsessive compulsive disorder. *Behaviour Research and Therapy*, 49, 8, 453-458.

Rachman, S. (1983). Obstacles to the successful treatment of obsessions. In E. Foa & P.M.G. Emmelkamp (eds.) *Failures in Behaviour Therapy*. USA: John Wiley & Sons.

Reich, J. (2003). The effect of axis II disorder on the outcome of treatment of anxiety and unipolar depressive disorders: A review. *Journal of Personality Disorders*, 17, 387-405.

1
2
3 Salkovskis, P. M. (1991). The importance of behaviour in the maintenance of anxiety
4 and panic: A cognitive account. *Behavioural Psychotherapy*, 19, 6–19.
5
6
7

8
9
10 Salkovskis, P. M. (1996). Cognitive-behavioural approaches to the understanding of
11 obsessional problems. In R. Rapee, *Current Controversies in the Anxiety Disorders*.
12 New York: Guilford.
13
14
15

16
17
18 Salkovskis, P.M. and Forrester, E (2002) Responsibility, In R.O. Frost and G.
19 Steketee, *Cognitive approaches to obsessions and compulsions: theory assessment*
20 *and treatment* (p45-61).
21
22
23
24
25
26

27
28
29 Salkovskis, P.M., Forrester, E. Richard, H.C. & Morrison, N. (1998). The devil is in
30 the detail: conceptualising and treating obsessional problems. In N. Tarrrier, A. Wells
31 & G. Haddock, (Eds.), *Treating Complex Cases: The Cognitive Behavioural*
32 *Approach*. Chichester: John Wiley.
33
34
35
36
37
38

39
40
41 Salkovskis, P.M., Wroe, A., Gledhill, A., Morrison, N., Forrester,E., Richards, H.C.,
42 Reynolds, M. & Thorpe, S. (2000). Responsibility attitudes and interpretations are
43 characteristic of obsessive-compulsive disorder. *Behaviour Research and Therapy*,
44 38, 347-372.
45
46
47
48
49
50
51

1
2
3 Steketee, G., Chambless, D.L. & Tran, G.Q. (2001). Effects of Axis I and II
4 comorbidity on behaviour therapy outcome for obsessive-compulsive and
5
6 agoraphobia. *Comprehensive Psychiatry*, 42, 76-86.
7
8
9

10
11
12 van den Hout, M., Brouwers, C. & Oomen, J. (2006). Clinically diagnosed axis II co-
13 morbidity and the short term outcome of CBT for axis I disorders. *Clinical*
14
15 *Psychology and Psychotherapy*, 13, 56-63.
16
17
18
19

20
21
22 Watson, J.P. & Marks, I.M. (1971). Relevant and irrelevant fear in flooding: a cross-
23
24 over study of phobic patients. *Behaviour Therapy*, 2, 275-295.
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Figure 1

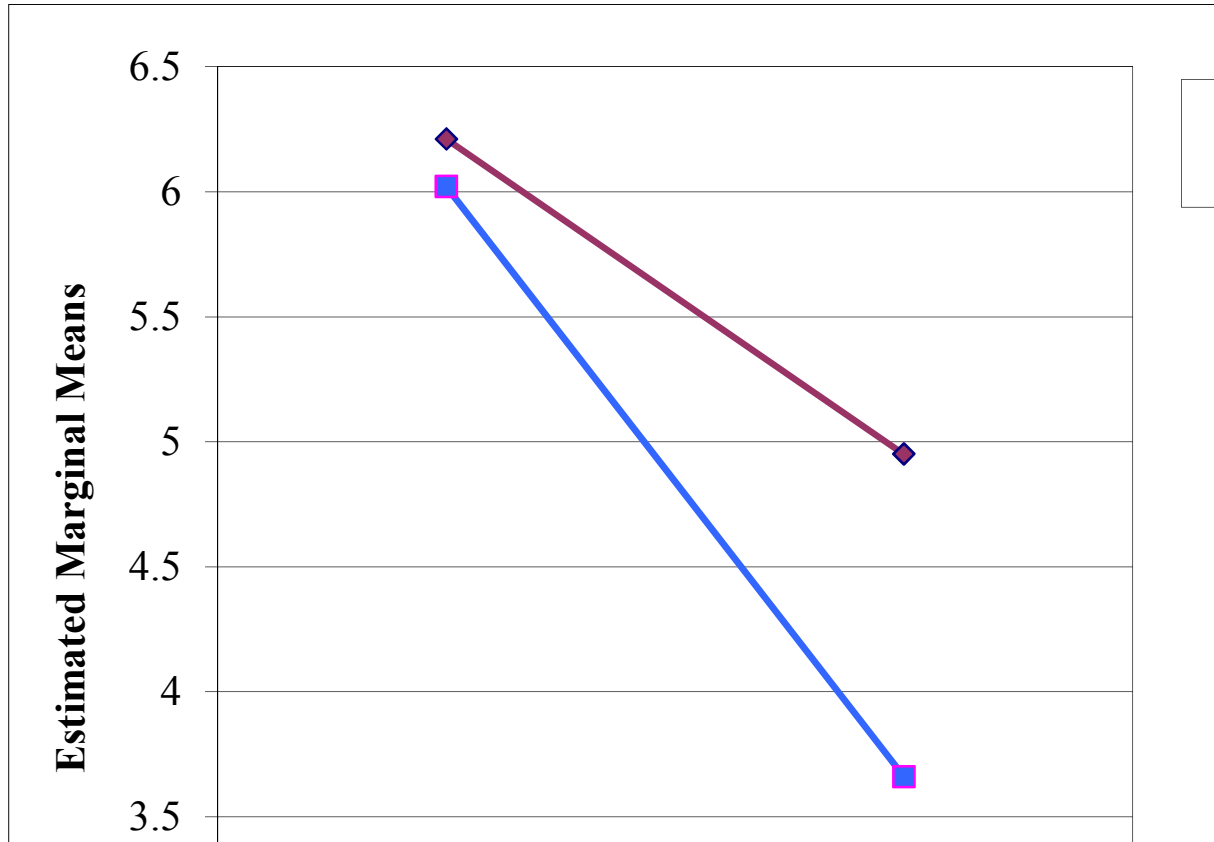
Mean scores of distress associated with rituals at pre-treatment and post-treatment in participants with OCD and OCPD, compared with those with OCD without OCPD.



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Figure 2

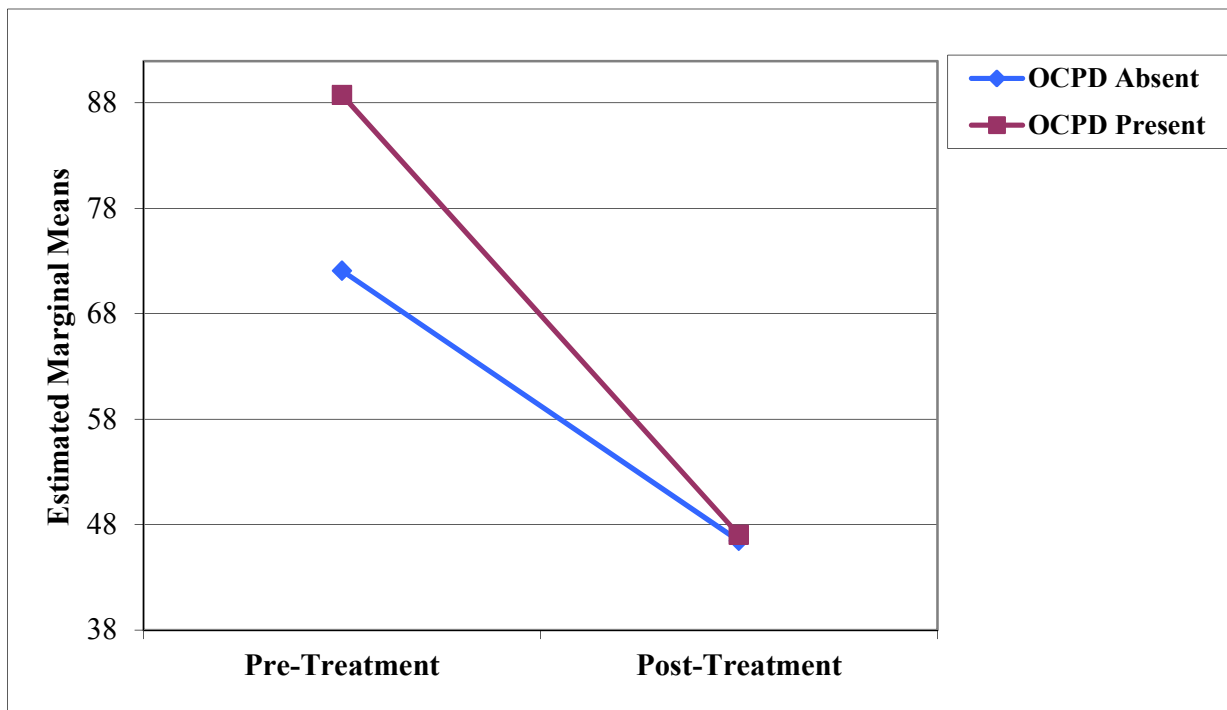
Mean scores of distress associated with all obsessional problems at pre-treatment and post-treatment for participants with OCD and OCPD and those with OCD without OCPD



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Figure 3

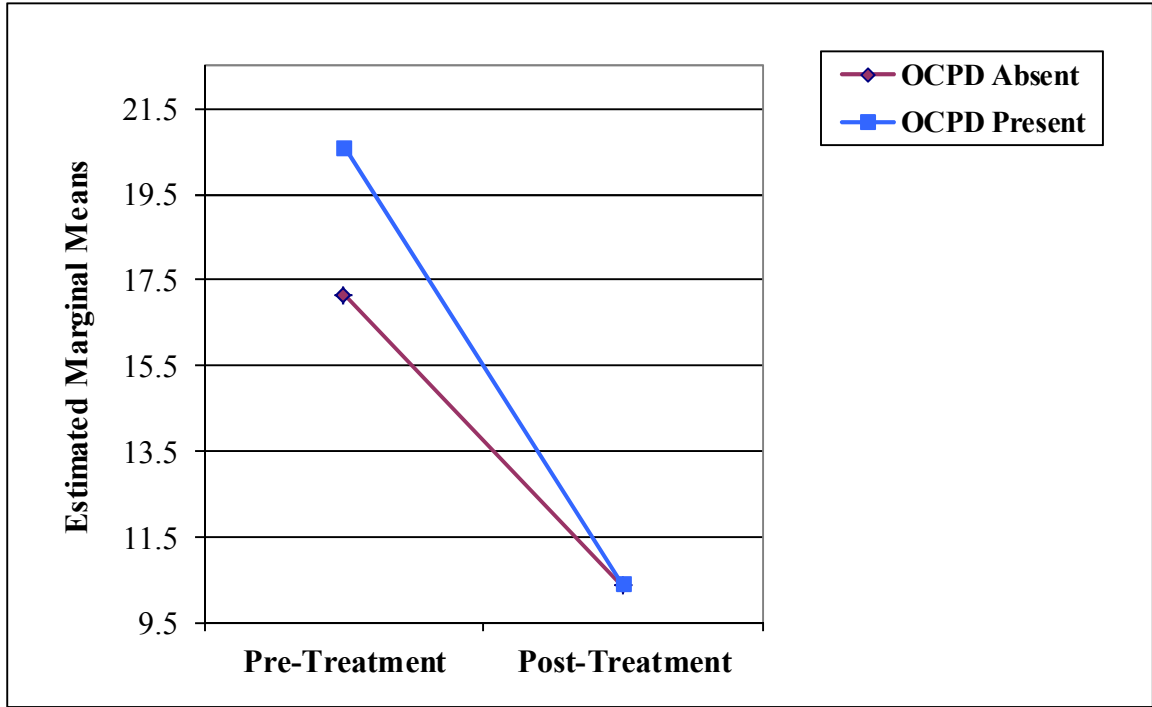
Mean Total OCI scores for participants with OCD with and without OCPD, before and after treatment



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Figure 4

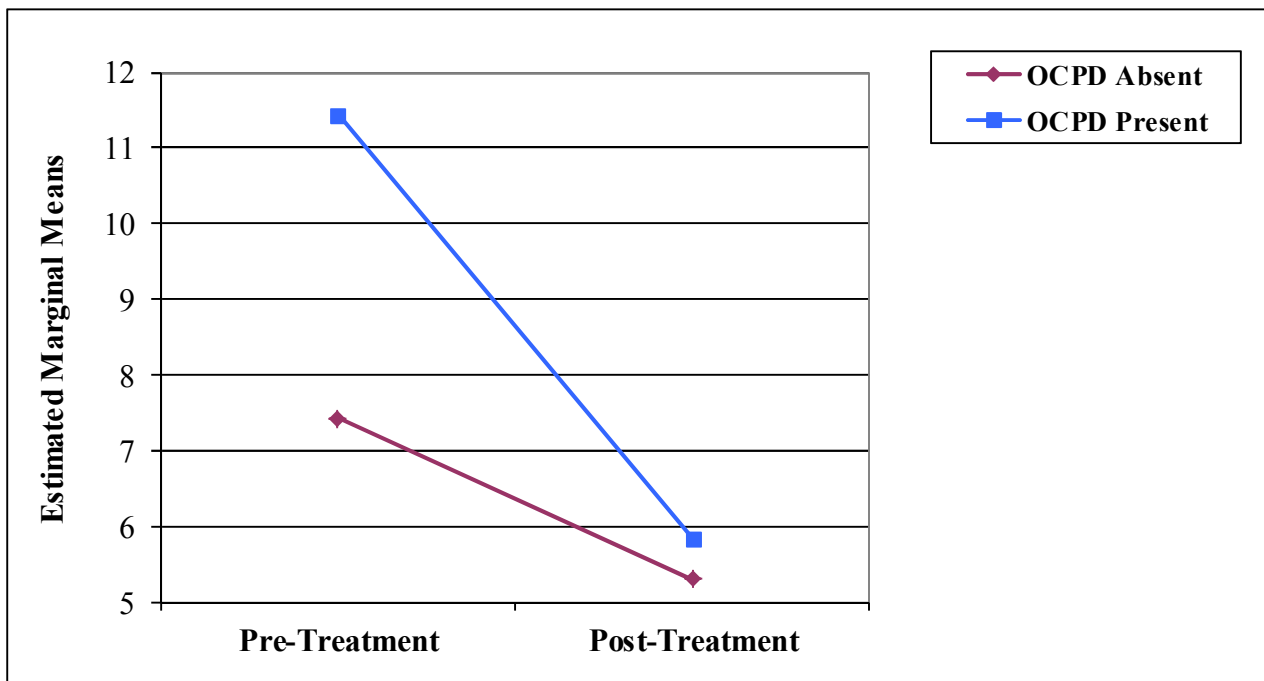
Mean scores on OCI 'Checking' subscale at pre-treatment and post-treatment for OCD patients, with and without OCPD



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Figure 5

Mean scores on the 'Ordering' subscale of the OCI for participants with OCD and OCPD, and those with OCD without OCPD



1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Table 1

Sociodemographic characteristics of the each group with OCD according to whether criteria for OCPD was not met (OCD/OCPD-) and whether diagnostic criteria for OCPD was met (OCD/OCPD+) and the total sample

	Group					
	OCD/OCPD- (n=45)		OCD/OCPD+ (n=47)		Total Sample (n=92)	
	Mean	(SD)	Mean	(SD)	Mean	(SD)
Age (years)	33.2	(11.5)	38.9	(11.4)	36.0	(11.6)
Years in Education	12.5	(2.7)	13.8	(2.6)	13.1	(2.7)
Number of sessions	11.9	(4.9)	10.32	(4.7)	11.2	(5.1)
	N	(%)	N	(%)	N	(%)
Male	21	(46.7)	23	(48.9)	44	(47.8%)
Caucasian	30	(66.7)	35	(74.5)	65	(70.7%)
Married/In Relationship	16	(35.6)	15	(31.9)	31	(33.7%)
Unemployed	10	(22.2)	7	(14.9)	17	(18.5)

Table 2

Pre- to post-treatment scores for distress associated with obsessions and rituals, depression, anxiety, responsibility beliefs for groups with OCD with co-occurring OCPD and OCD without OCPD

	Group			
	OCD/OCPD- (n=45)		OCD/OCPD+ (n=47)	
	Mean	(SD)	Mean	(SD)
Pre-Treatment:				
Distress – Thought	5.83	(1.95)	6.12	(1.77)
Distress- Ritual	5.9	(2.1)	5.9	(2.3)
Distress – All	6.2	(1.9)	6.0	(1.7)
BDI	22.0	(10.8)	22.2	(9.9)
BAI	21.8	(12.3)	18.4	(9.6)
RAS	123.2	(31.6)	129.0	(26.9)
Post-Treatment:				
Distress – Thought	4.4	(2.2)	3.5	(2.4)
Distress- Ritual	4.5	(2.1)	3.1	(2.4)
Distress – All	4.9	(1.8)	3.7	(2.4)
BDI	15.7	(10.4)	14.1	(11.0)
BAI	17.4	(11.1)	12.4	(10.9)
RAS	104.0	(31.1)	100.7	(37.0)
Change Scores:				
Distress – Thought	1.4	(3.0)	2.6	(2.7)
Distress- Ritual	1.4	(3.1)	2.8	(3.4)
Distress – All	1.3	(2.4)	2.4	(2.3)
BDI	6.3	(10.6)	8.1	(9.9)
BAI	4.5	(10.4)	6.0	(9.0)
RAS	19.2	(29.3)	28.4	(35.4)

Table 3

Pre- to post-treatment scores on the Obsessive Compulsive Inventory for groups of participants with OCD with and without co-occurring OCPD

	Group			
	OCD/OCPD- (n=45)		OCD/OCPD+ (n=47)	
	Mean	(SD)	Mean	(SD)
Pre-Treatment:				
Total OCI	72.1	(31.2)	88.8	(31.7)
Washing	13.6	(9.3)	15.8	(10.2)
Checking	17.2	(9.0)	20.6	(8.2)
Doubting	6.1	(3.7)	9.3	(10.1)
Ordering	7.4	(6.1)	11.4	(6.1)
Obsessions	16.2	(7.3)	15.9	(7.3)
Hoarding	3.0	(3.5)	5.0	(4.4)
Neutralising	9.1	(6.3)	11.6	(6.8)
Post-Treatment:				
Total OCI	46.5	(27.4)	47.0	(32.9)
Washing	8.9	(8.2)	9.1	(8.6)
Checking	10.4	(8.4)	10.4	(7.5)
Doubting	3.5	(3.1)	4.0	(3.7)
Ordering	5.3	(5.8)	5.8	(4.9)
Obsessions	11.3	(6.5)	8.6	(7.1)
Hoarding	1.9	(2.8)	3.0	(3.5)
Neutralising	5.0	(3.8)	6.2	(5.2)
Change Score:				
Total OCI	25.6	(34.2)	41.8	(29.1)
Washing	4.7	(7.1)	6.7	(7.9)
Checking	6.8	(8.0)	10.2	(7.9)
Doubting	2.7	(3.4)	5.3	(10.5)
Ordering	2.1	(6.4)	5.6	(5.3)
Obsessions	4.9	(7.3)	7.3	(6.8)
Hoarding	1.0	(2.7)	1.9	(2.9)
Neutralising	4.1	(6.4)	5.4	(5.0)