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Review

Group cognitive behavioural therapy for obsessive–compulsive disorder: a systematic review and meta-analysis

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Jónsson H, Hougaard E. Group cognitive behavioural therapy for obsessive–compulsive disorder: a systematic review and meta-analysis.

Objective: Behaviour therapy with exposure and response prevention (ERP) or cognitive behavioural therapy (CBT) including ERP are considered the psychological treatments of choice for obsessive–compulsive disorder (OCD), but group CBT/ERP has received relatively little research attention in the treatment of OCD. The aim of this study was to provide a meta-analysis of the effectiveness of group CBT/ERP for OCD.
Method: A systematic literature search was conducted and studies were meta-analysed by means of the Cochrane Review Manager Program with measures of i) pre- to post-effect sizes (ES) and ii) between-group ES in comparison with different control conditions. Outcome was primarily measured on the Y-BOCS and ES was calculated in the form of Cohens *d*.
Results: Thirteen trials were included in the meta-analysis. The overall pre–post-ES of these trials of 1.18 and a between-group ES of 1.12 compared with waiting list control in three randomized controlled studies indicate that group CBT/ERP is an effective treatment for OCD. Group CBT achieved better results than pharmacological treatment in two studies. One study found no significant differences between individual and group CBT.
Conclusion: Group CBT is an effective treatment for OCD, but more studies are needed to compare the effectiveness of group and individual treatment formats.

Key words: obsessive–compulsive disorder; meta-analysis; cognitive behavioural therapy; group therapy

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Summations

- Group cognitive behavioural therapy including exposure and response prevention is an effective treatment for obsessive–compulsive disorder.
- There are insufficient data on the relative effectiveness of individual and group cognitive behavioural therapy including exposure and response prevention for obsessive–compulsive disorder.

Considerations

- There are few studies of the effectiveness of group cognitive behavioural therapy including exposure and response prevention for obsessive–compulsive disorder and only four randomized control trials.

Introduction

Obsessive–compulsive disorder (OCD) is characterized by persistent, intrusive thoughts (obsessions) and/or stereotyped repetitive behaviours carried out in a ritualistic fashion (compulsions) (1). It is a debilitating disorder with a chronic course if untreated. Epidemiological studies have found lifetime prevalence estimates of OCD to be about 1–2% (2, 3).

Over the last two decades, researchers have made progress in identifying effective treatments including psychotherapy, pharmacotherapy and their

combination. The psychological treatment for OCD with the highest degree of empirical support is individual exposure and response prevention (ERP) (4, 5). Most clinicians today, however, supplement the behavioural methods with cognitive methods, although there is at present no empirical evidence showing that cognitive behavioural therapy (CBT) with ERP achieves better outcomes than ERP alone (4). Meta-analyses suggest that ERP and CBT with ERP achieve large effects in pre–post-conditions or compared with waitlist or placebo conditions. For example, Eddy et al. (6) found an uncontrolled, pre–post-effect size (ES) of 1.52 (Cohen's *d*) in a meta-analysis of 13 randomized controlled trials (RCTs) and a controlled, between-group ES of 1.12 based on three of these studies. In the same review, a meta-analysis of 32 RCTs of pharmacological treatment for OCD reported an uncontrolled pre–post-ES of 1.18 and a controlled, between-group ES of 0.83. A comparison of pre–post-ES for ERP treatment of 110 patients in a naturalistic treatment setting found outcomes similar to those achieved in four RCTs (7) thus indicating that the method is effective or useful in general clinical practice.

Group CBT/ERP for OCD has been proposed as a cost-effective treatment format. In a qualitative review of 12 studies of group CBT or ERP for adults Himle, Van Etten and Fischer (8) concluded that there was some evidence of the effectiveness of group CBT or ERP, although limitations in quantity and quality of the research made conclusions rather tentative. The meta-analysis by Eddy et al. (6) found somewhat larger uncontrolled, pre–post-ESs for individual therapy (1.48) than for group therapy (1.17). However, only two studies on group treatment were included in their analysis and the authors did not report whether the difference reached statistical significance.

Aims of the study

The aim of this study was to provide a meta-analysis of group cognitive behavioural therapy (CBT) and exposure and response prevention (ERP) for OCD, which has not, as far as we know, been done before. The review primarily analyses the overall pre–post-effect size (ES) of group CBT and ERP therapy for OCD and, secondarily, between-group ESs for different control conditions.

Material and methods

Identification of studies

Studies were located by searching the following databases: PsychInfo, EBSCO host, PubMed, Web of Science and The National Research Register, from the first available year to 01.02.07, using the keywords [(obsess* or compul* or ocd) AND (group next therap*) OR (group next treatment*)]. In addition, the reference lists of other reviews and selected articles were inspected for further relevant studies.

Inclusion criteria

The following criteria were used for inclusion of studies: i) participants aged 18 years or above, ii) a primary diagnosis of OCD according to a standardized diagnostic classification system (e.g. DSM-III or later editions), iii) interventions in the form of group ERP or group CBT, iv) outcomes reported with means and standard deviations on the Yale-Brown Obsessive–Compulsive Scale (Y-BOCS) [clinical rating form or self-report version (only one study (9) used self-report version)], v) number of participants in each treatment condition ≥10, vi) studies available in English or German language and vii) published in peer-reviewed journals.

Exclusion criteria: i) studies limited to patients with only hoarding symptoms or patients with obsessions only, ii) studies where patients received combined individual and group therapy, and iii) studies where the duration of treatment was more than 20 weeks.

All decisions on inclusion/exclusion criteria were made a priori. Two authors were contacted because of missing statistical information; Fals-Stewart (10), and Sousa (11), and the needed information from the second-mentioned author was retrieved.

Methodological quality of studies

Studies were ranked into three categories:

i) Randomized controlled studies; i.e. studies comparing group ERP or group CBT to placebo control, waitlist control or to other active treatments.
ii) Controlled studies; i.e. studies with control conditions but without randomized group allocation.
iii) Open clinical trials with outcome measures before and after therapy but no control conditions.

Quality of individual studies was independently assessed, by the two authors of the paper, on the Cochrane Collaboration Depression, Anxiety and Neurosis Group (CCDAN) quality rating scale a 23-item scale with total scores from 0 to 46 (12).

The consistency between the two raters was acceptable with a Cronbach's α value of 0.93. In case of a substantial disagreement (>3 points on the scale), the differences were discussed and new consensual ratings were applied.

Statistical analysis

Data from the Y-BOCS were considered as primary outcome measures. Data were entered into the computer software REVIEW MANAGER 4.2 (RevMan), provided by The Cochrane Collaboration (13). For continuous outcomes, the software calculates standardized weighted mean difference based on Cohen's (14) *d* and 95% confidence intervals. The random-effects model was used, which yields superior results in terms of clinical interpretability and external generalizibility to other clinical contexts compared with analyses based on the fixed effects model (15). The RevMan software calculates two additional statistics for estimating heterogeneity of studies, the *I-squared* (I^2) and *Q-statistics*. The I^2 statistics indicates the percentage of variance in a pooled ES that can be attributed to heterogeneity in the sample of studies (16). Values of 25% are considered low, 50% as moderate and 75% as high. The Q-statistics calculates *P*-values for heterogeneity of studies (i.e. *P*-values ≤0.05 indicates significant heterogeneity).

As a supplement to these analyses, *Fail-Safe N* was calculated as a measure of how vulnerable meta-analysis ES findings are to the possibility of undiscovered studies (17). *Fail-Safe N* estimates the number of undiscovered, approximately equally sized studies with an ES of zero needed to reduce the overall ES to a certain criterion level, e.g. to 0.5 or 0.2, ESs classified as medium and small by Cohen (14).

By using the RevMan software, pooled mean pre–post-ES, weighted according to numbers of participants in the studies, were computed for each of the three methodological categories as well as for total number of studies. Between-group ES were calculated for comparisons of group CBT/ ERP to i) waitlist control group, ii) placebo control, iii) individual CBT and iv) pharmacological treatment.

In case of evidence of marked heterogeneity (I^2 > 50%) studies with markedly higher/lower ES were tentatively considered as outliers and excluded from the analysis. A sensitivity analysis was then conducted comparing meta-analyses with and without the outliers checking for significant differences.

In addition, overall pooled mean pre–post-ESs were computed for other outcome measures of symptoms of depression and anxiety.

Results

Trial flow

The electronic search strategy yielded 1749 publications. After abstract screening, 37 studies were retrieved for more detailed evaluation with two additional studies found from references. Based on inspection of papers, 13 primary studies were judged to fulfil the inclusion criteria; four RCTs (11, 18–20), four controlled studies (21–24) and five open studies (9, 25–28). A list of excluded studies and reasons for exclusion are available on request from the corresponding author.

Study characteristics

Table 1 summarizes selected characteristics of the 13 studies. Number of participants in the studies varied from 20 to 155 with a total of 828 participants. Of these, a total of 549 received group therapy (395 group CBT and 154 group ERP), 79 functioned as waitlist controls, 83 received pharmacological treatment, 25 received individual CBT, 17 received group relaxation training and 75 received other sorts of active treatments (50 received a mixture of group therapy and pharmacotherapy and 20 received multifamily group ERP).

Mean age of the group treatment sample was 36.4 years, about 63% was females, and approximately 54% was in pharmacological treatment at treatment onset. The overall mean on the Y-BOCS scale at inclusion was 23.4 (SD = 1.62, range 21.2–26.7). There were no significant differences in Y-BOCS scores at treatment start between the three categories of studies [$F(2, 12) = 0.519$ $P = 0.608$]. Treatment duration ranged from seven to 16 weekly sessions with an average of 11 sessions with each session lasting 1½–2½ h (mean 120 min). Group sizes varied from four to 10 participants (mean 6.8) with one or two therapist(s) in each group. Follow-up ratings were obtained in nine of the included studies, and the follow-up period ranged from 1 month to 4 years, with an average of 12.3 months (median 3 months) (follow-up data are not analysed in this study). Drop-out rate was 13.5% in group treatment, compared with 8.5% in other treatments and 11.4% in the waiting list control conditions.

Quantitative data synthesis

Thirteen studies were included in the meta-analysis with 15 comparisons. Separate analyses were performed on CBT and ERP group therapy in McLean et al. (20) and on participants receiving

Table 1. Characteristics of include studies

Study	Intervention	Exclusion criteria	*n*/drop-outs	Mean age (SD)	Percent women	Mean age of onset (SD)	Mean duration (SD) of disorder	On medication	Treatment duration	Follow-up	Group size (number of therapists)	Mean Y-BOCS change	CCDAN*
Category 1: RCTs													
Anderson and Rees (18)	i) Group CBT ii) Individual CBT iii) Waitlist	Schizophrenia, intellectual disability, organic mental disorder	i) 21/4 ii) 25/5 iii) 17/3	i) 33.7 (NR)	i) 67.9	i) 19.9 (NR)	i) 13.6 (NR)	i) 63% stable 3 months prior to treatment	10 weekly 2 h sessions	1 month	i) 5–7 (2)	i) 7.3 ii) 7.3 iii) 0.6	29
Sousa et al. (11)	i) Group CBT ii) Sertraline	Tourettés syndrome, moderate or severe depression (BDI > 16), bipolar disorder, psychotic disorder, substance abuse, severe personality disorder	i) 28/3 ii) 28/3	i) 38.5 (11.79)	i) 80	i) 15 (7.58)	i) 23.5 (11.57)	i) 0% ii) stable 1 month prior to treatment	12 weekly 2 h sessions	–	i) 5–8 (1)	i) 10.8 ii) 7.4	29
Cordioli et al. (19)	i) Group CBT ii) Waitlist	Depression with suicidal risk; brain injury, severe social phobia, mental retardation, severe anorexia nervosa, severe personality disorders	i) 23/1 ii) 24/1	i) 36.5 (12.8)	i) 51	i) 14.7 (6.64)	i) 21.8 (11.2)	i) 44,7% stable 3 months prior to treatment	12 weekly 2 h sessions	3 months	i) 7–8 (2)	i) 11.6 ii) 1.5	32.5
McLean et al. (20)	i) Group CBT ii) Group ERP iii) Waitlist – delayed	Active thought disorder, mental retardation, organic mental disorder, severe physical disorders	i) 19/1 ii) 19/3 iii) 38/5	i) 35 (NR)	i) 48	NR	NR	i) 48% stable 3 months prior to treatment	12 weekly 2 h sessions	3 months	i) 6–8 (2)	i) 5.0 ii) 9.7 iii) 0.8	28
Category 2: Non-randomized controlled studies													
Fineberg et al. (21)	i) Group CBT ii) Group-based RT	Tourette's, psychosis and severe depression MADRS > 24	i) 24/1 ii) 17/6	i) 39.5 (NR)	i) 83	NR	i) 18.5 (NR)	i) 34% not allowed to increase doses during treatment	12 weekly 2 h sessions	12 months	i) 7–9 (1) ii) 4–7 (1)	i) 6.4 ii) 5.4	26
Aigner et al. (22)	i) Group CBT ii) Group CBT + medication iii) Medication	Severe physical disorders, schizophrenia, epilepsy, other comorbid axis I diagnosis,	i) 45/10 ii) 55/2 iii) 55/0	i) 34.1 (NR)	NR	i) 19.6 (7.2)	i) 17.4 (10.3)	i) 0%	10 weekly 2 h sessions	–	i) 5–8 ii) 5–8	i) 8.3 ii) 8.9 iii) 2.9	19.5
Himle et al. (23)	i) Group ERP – 12 weeks ii) Group ERP – 7 weeks	NR	i) 24/NR ii) 89/NR	i) 37 (10.86)	i) 62	NR	NR	i) 60% Not kept stable	12 or 7 weekly 2 h sessions	3 months + long term (mean 49.9 months)	NR	i) 7.2 ii) 6.7	18.5
Van Noppen et al. (24)	i) Group ERP ii) Multifamily group ERP	NR	i) 22/5 ii) 20/1	i) 33.0 (NR)	i) 67	NR	NR	NR Kept stable-but not reported for how long	10–12 weekly 2 h sessions	12 months	i) 7–8 ii) 5	i) 7.3 ii) 8.6	20
Category 3: Open studies													
Meier et al. (25)	i) Group CBT	Psychotic symptoms; alcohol abuse	i) 53/8	i) 34.8 (8.85)	78	i) 10.7 (9.02)	NR	i) 36%	10 weekly 2.5 h sessions	–	NR	i) 5.7	20
Cordioli et al. (26)	i) Group CBT	Major depression with suicidal risk, bipolar disorder, severe personality disorder (borderline or schizotypical), mental retardation	i) 32/2	i) 39.5 (12.8)	i) 69	i) 15 (6.64)	i) 23.6 (11.2)	i) 56.2%	12 weekly 2 h session	3 months	5–8	i) 12.6	24

Table 1. *Continued*

Study	Intervention	Exclusion criteria	*n*/drop-outs	Mean age (SD)	Percent women	Mean age of onset (SD)	Mean duration (SD) of disorder	On medication	Treatment duration	Follow-up	Group size (number of therapists)	Mean Y-BOCS change	CCDAN*
Stengler-Wenzke & Angermeyer (27)	i) Group CBT (with family members in last three sessions)	Primary depression diagnosis, psychotic episode	i) 20/0	NR	i) 50	NR	i) 14.2 (range 7–35)	60% – stable during treatment	12–16 weekly 2 h sessions	–	6–8 (2)	i) 5.1	14.5
Van Noppen et al. (9)	i) Group CBT	Cognitive deficits, psychosis, active substance abuse, comorbid axis I and II were only excluded if the severity of symptoms was at risk of interfering with participation in group	i) 90/17	NR	i) 70	i) 22.2 (9.2)	NR	i) 80%	10 weekly, 1.5 h sessions	On average of 24 months (n = 46)	8–10 (2)	i) 5.2	16.5
Krone et al. (28)	i) Group CBT	Organic mental disorder, schizophrenia, active substance abuse in last 6 months	i) 40/4	i) 38	NR	NR	i) 19	i) 55%	7 weekly 2 h sessions	3 months	–	i) 5.1	18.5
Mean			Total 828	36.4	63.9	15.9	18.2	54.4%	11 weeks/ 120 min	7 months	6.8	7.5 in group therapy	22.8

*Mean of the two ratings.
G-CBT, group cognitive behaviour therapy; G-ERP, group exposure and response prevention; RT, relaxation training; BDI, Beck depression inventory; MADRS, Montgomery Åsberg Depression Rating Scale.

12 and 7 weeks of therapy in Himle et al. (23). All comparisons were based on completer analyses, except from the studies by Cordioli et al. (19, 26), which only reports intention to treat analyses.

Within group analyses

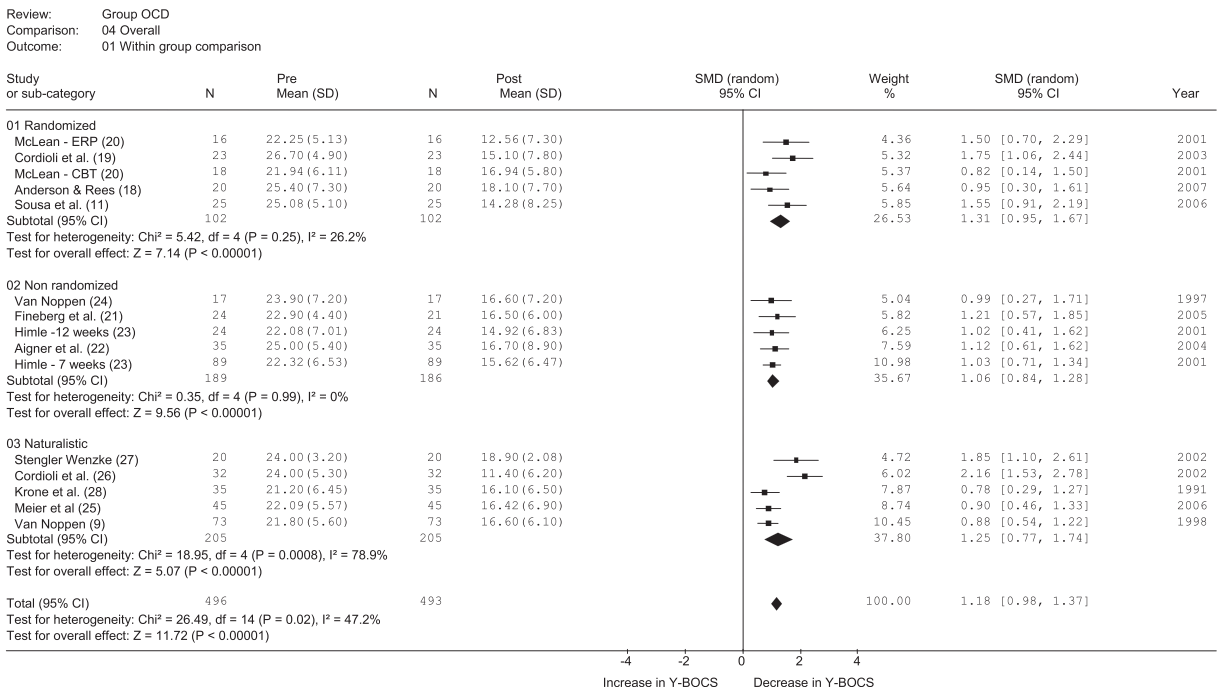
Effect sizes. Table 2 reports ESs on Y-BOCS changes for all the included studies. Overall, pre–post-ESs ranged from 0.78 to 1.89 with an overall weighted mean of 1.18 (95% CI 0.98–1.37). The weighted mean ES for the three different methodological conditions were: 1.31 (95% CI 0.95–1.67) for randomized controlled studies; 1.06 (95% CI 0.84–1.28) for non-randomized controlled studies and 1.25 (95% CI 0.77–1.74) for the open studies without a control group. The *Fail-Safe N* analysis indicated that 18 studies with null ESs should be necessary to reduce the present overall ES value to the 0.50 level (medium effect) and 64 studies should be necessary to reduce it to the 0.20 level (small effect).

Methodological quality. A one way analysis of variance found no statistical differences of ESs between the three categories of studies [F (2, 12) = 0.493, P = 0.623]. As can be seen in Table 1, the general quality of the 13 studies, as assessed by the CCDAN quality rating scale, was low to moderate (M = 22.8). As should be expected, the mean quality score of the RCTs was significantly higher than the mean scores of the uncontrolled and open trials [F(2, 10) = 14.38, P = 0.001]. The CCDAN quality rating scores did not correlate significantly with the ES of individual studies [r = 0.326, n = 13, P = 0.277].

Heterogeneity of studies. Heterogeneity between studies, in the three different methodological conditions, was examined using the I^2 method and the *Q-statistics*. There was no evidence of marked heterogeneity for the RCTs (I^2 = 26.2%; P = 0.25) nor for the non-randomized controlled studies (I^2 = 0.0%; P = 0.99), but there was considerable heterogeneity for the whole sample of studies (I^2 = 47.2%; P = 0.02), primarily because of a marked heterogeneity for the category of open naturalistic studies (I^2 = 78.9%; P = 0.0008).

As marked heterogeneity was evident among the open trials, the two studies (26, 27) here with the highest ES were tentatively considered as outliers and excluded from the analysis. A sensitivity analysis was then conducted where the statistical test for heterogeneity for all studies was reduced

Table 2. Comparisons of premean scores vs. postmean scores on the Y-BOCS scale of all trials, including effect size statistics



from I^2 = 47.1 to 0% and the overall ES was reduced non-significantly [$t(26)$ = 0.836. P = 0.41] to 1.04 (95% CI 0.89–1.18), i.e. only slightly smaller than the ES (1.18) for the whole sample of studies. After the exclusion of outliers, there were still no statistical differences in ESs between the three methodological categories of studies [$F(2, 10)$ = 2.996, P = 0.096], although a tendency (P < 0.10) was found with higher ES in the RCTs.

Other outcome measures. Overall ESs were 0.52 (95% CI 0.35–0.69) on symptoms of depression (n = 11) and 0.77 (95% CI 0.49–1.06) on symptoms of anxiety (n = 4).

Between-group analyses

Treatment vs. waitlist control. A weighted mean controlled between-group ES was computed for the three randomized controlled studies comparing group CBT/ERP with a waitlist control group. Controlled ESs ranged from 0.73 to 1.59 in favour of the treatment condition, with a mean ES of 1.12 (95% CI 0.78–1.46). The test for heterogeneity showed no evidence of marked heterogeneity (I^2 = 8.1%; P = 0.35), and the *Fail-Safe N* statistics indicated that four studies with null ES would be necessary to bring the ES down to the 0.5 level, and 14 null studies to bring it down to the 0.2 level.

Group vs. placebo conditions. Only one, non-randomized controlled study compared group therapy to non-specific placebo condition (21), where group CBT (n = 24) was compared with group-based relaxation training (RT) (n = 17). Participants in the group RT condition were found to improve significantly over the course of treatment with no significant difference between the group RT and group CBT. However, approximately 29% of group RT participants withdrew from the study before therapy began, and further 25% withdrew while the RT groups were still running, while only one participant (4.2%) dropped-out of the CBT group condition during the study.

Group vs. individual therapy. Only one of the included studies compared group therapy directly to individual therapy (18). This RCT compared CBT group therapy (n = 21) with CBT individual therapy (n = 25) showing a non-significant ES of 0.19 (95% CI −0.84 to 0.46) in favour of individual therapy. Analyses in the study indicated that the

individual treatment was associated with a more rapid response and a larger percentage of participants (41% vs. 20%) meeting the two criteria (a cut-off point of 14 or below and a 10-point decrease on the Y-BOCS scale) for recovered after treatment. However, the percentage of participants in the individual CBT condition meeting the criterion for recovered dropped to 23% at a 1-month follow-up compared with 22% in the group CBT condition – leaving both conditions with equivalent rates of recovered participants at 1 month follow-up.

Group vs. pharmacological treatment. Two studies compared group therapy with pharmacological treatment (11, 22). In Aigner et al. (22), 155 participants were allowed to choose between CBT group therapy; standard SSRI pharmacological treatment (Sertraline, Fluoxetine or Fluvoxamine, doses not reported) or a combination of group and pharmacological treatment over a period of 12 weeks.

Sousa et al. (11) randomized 56 participants to either 12 weeks of group CBT or pharmacological treatment (Sertraline 100 mg/day). The pooled ES for these two studies was 0.80 (95% CI 0.45–1.15) in favour of group therapy. Test for heterogeneity was $I^2 = 0\%$ and the *Fail-Safe N* statistics indicates the need for one study with null ES to reduce the overall ES to the 0.5 level and six studies to reduce it to the 0.2 level.

CBT vs. ERP. In this study, treatment was defined as CBT if it was called CBT or if there was an explicit description of the use of cognitive methods for challenging negative beliefs in the study.

Two studies applied ERP (23, 24), 10 applied CBT, while one study (20) included groups with each of the two treatments. Pooled pre–post-ES for the three ERP comparisons was 1.07 (95% CI 0.82–1.31) compared with an ES of 1.22 (95% CI 0.95–1.50) for the 11 CBT comparisons. This difference was not significant [$t(26) = 0.379$, $P = 0.708$].

Discussion

The overall ES of this meta-analysis, i.e. a pre–post-ES of 1.18 in 13 studies (1.04 when excluding two outliers), and a between-group ES in three RCTs compared with waitlist controls of 1.12, clearly indicates that group treatment is an effective treatment format in ERP or CBT for OCD. The results are independent of methodological quality of studies, and the *Fail-Safe N* statistics indicates that the 'file drawer problem' is highly unlikely to explain this overall result. Specifically, the large pre–post-ES of group CBT/ERP does not depend on low quality studies, because the highest numerical ES was found for the RCTs. Group therapy also seems to be acceptable to most patients with OCD because only 13.5% dropped-out during treatment compared with 12.1% in a review of 15 studies of, mostly, individual CBT (two studies on group CBT) (6).

Overall changes on other outcome measures were also significant, even though ESs were considerably lower on symptoms of depression (0.52) and anxiety (0.77) compared with symptoms of OCD (1.18).

The only study in this sample (21) comparing group CBT with a placebo condition (group relaxation therapy) found no differences in outcome, but high drop-out rate in this study limits any conclusions to be drawn from it. An RCT with 90 participants by Fals-Stewart et al. (10) (not included in this meta-analysis; cf. above) found group ERP to be much more effective than individual relaxation training. The two studies (11, 22) comparing group CBT to pharmacological treatment, with a between-group ES of 0.80 favouring CBT, also contradicts the assumption that the results of group CBT for OCD can be explained solely by non-specific treatment factors. However, as none of the above studies (10, 11, 22) controlled for the effects of non-specific group effects, more comparisons need to be made with active attention placebo to allow conclusions about the specificity of the CBT ingredient in group therapy.

Even though this study clearly supports group CBT/ERP as effective treatments for OCD, it does not document that group treatment achieves change of the same magnitude as the individual formats of the respective treatments. The mean pre–post-ES (1.18) of group therapy in this meta-analysis is, thus, noticeably lower than previously reported pre–post-ES in two meta-analyses of individual treatment. Eddy et al. (6) reported a mean pre–post-ES for individual CBT studies of 1.48 (SD = 0.77) in 13 RCTs, and van Balkom et al. (29) reported an ES of 1.46 (SD = 0.75) based on 45 studies (including two studies on group therapy). It should be noted, however, that in our meta-analysis the mean ES from RCTs alone (1.31) is closer to what Eddy et al. (6) report in their review, where only RCTs were included.

The between-group ES of 1.12 in our meta-analysis, based on three RCTs comparing group therapy to waitlist control, was exactly the same as reported by Eddy et al. (6) when comparing individual treatment to control condition (not otherwise specified). Neither Anderson and Rees (18) nor Fals-Stewart et al. (10) (not included in

the meta-analysis), found any significant difference in efficacy between these treatment formats at post treatment, although a tendency of a faster rate of symptom reduction was noted in the individual conditions during treatment in both studies.

As mentioned before, the most obvious reason to prefer group to individual treatment is cost-effectiveness considerations. Savings of therapist time depends, of course, on the practical arrangements of the group treatment. In Fals-Stewart et al. (10) with one therapist treating groups with 10 participants 4 h/week, in 12 weeks, 4.8 h were needed to treat one patient; compared with a total of 24 h required to treat one patient individually 2 h/week in 12 weeks. In Anderson and Rees (18) two therapists with 5–7 participants per group, a total of 7 h were needed to treat one patient compared with 11 h per patient in individual treatment. Even with the probably more common group conditions in this last study, a considerable amount of time was saved by the group format, although it should be kept in mind, that group therapy is generally considered more demanding by therapists.

The data presented suffer from some limitations. Foremost, there are few studies of group ERP or CBT with only four RCTs. Almost all included studies only report completer data. Between group comparisons of group CBT/ERP to waitlist control, placebo, individual CBT/ERP and pharmacological treatment are based on very few studies.

In conclusion, the results from this review do confirm group ERP and CBT as effective treatments for OCD, although it does not document that it is as effective as individual versions of these treatments. Further comparative studies of group vs. individual therapy are necessary to clarify the relative effectiveness of the two treatment formats.

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Declaration of interest

None.

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