Detached mindfulness reduced both depression and anxiety in elderly women with major depressive disorders

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1. Introduction

Major depressive disorders (MDD) are unsurprisingly among the most common of psychiatric disorders. Moreover, Murray and Lopez (1997) have calculated that MDDs are responsible for the second highest number of years lost due to premature death or disability, with chronic lifelong risk for recurrent lapse, and high morbidity, comorbidity and mortality (Culpepper et al., 2015; Gonda et al., 2015; Lockwood et al., 2015; Kennedy and Paykel, 2004; Fava and Ruini, 2002). Accordingly, adequate treatment and care of patients suffering from MDD is highly desirable for both clinical and economic reasons. However, several studies indicate that the efficacy of antidepressants is limited; a therapeutic effect is achieved at most in 60–70% of patients suffering from major depressive disorders (Castrén, 2005), with maximum adherence of 50% four weeks after starting treatment (Cassano and Fava, 2002), probably due to an antidepressant effect time lag of two or more weeks (Castrén, 2005), and to various adverse side-effects such as weight gain, dry mouth, and sexual dysfunction (Reichenpfader et al., 2014).

The first-line options in the treatment of severe MDD are antidepressants. In treating mild to moderate MDD, psychotherapeutic interventions (e.g. Cuijpers et al., 2011a, 2011b) and physical activity (Kvam et al., 2016; Josefsson et al., 2014) are valuable options both by themselves and in combination with antidepressants or ECT (Salehi et al., 2016). Schuch et al. (2016) concluded from their meta-analysis that physical activity is a valid treatment option and should also be considered as a routine component of the management of depression in older adults.

In the present study, we focused on a psychotherapeutic intervention, and specifically on detached mindfulness (DM). Briefly, DM is a standardized, time-limited psychotherapeutic intervention based on metacognitive psychotherapy (see below and Table 2). Metacognitive interventions or detached mindfulness (Solem et al., 2017, 2015) focus on thinking about one’s own thinking; more specifically, metacognitive
interventions ask to what extent one’s own thoughts are helpful in becoming aware (‘mindful’) of mental processes such as thoughts and feelings, and to increase the capacity to disrupt (or ‘detach’) the relation between thoughts and reactions to thoughts (Wells, 2006). Specifically, detached mindfulness aims to strengthen the belief that thoughts are nothing more than inner events separate from the control of action. Or to put it another way, detached mindfulness helps to achieve awareness of negative thoughts, to identify and isolate them as mere mental processes, and to avoid turning these (negative) thoughts into action. Detached mindfulness (DM) has been used successfully with patients with obsessive-compulsive disorders, generalized anxiety disorders, and major depressive disorders (Wells et al., 2012; Spada et al., 2010; Wells, 2006; Matthews and Wells, 2000), and also with patients suffering from hypertension (Ahmadpanah et al., 2016a).

Given these encouraging results, and given the standardized, economic and time-limited character of DM as an intervention, in the present study we sought to investigate the influence of DM concomitantly on both depression and anxiety among elderly patients with MDD. Such a procedure is justified given numerous observations of the high comorbidity of MDD and anxiety disorders among adolescents, young adults (Melton et al., 2016; Coplan et al., 2015; Leventhal and Zvolensky, 2015; Quante, 2015), and the elderly (Beattie et al., 2010; Flood and Buckwalter, 2009; Devanand, 2002; Lenze et al., 2002). Furthermore, Cuijpers et al. (2011a), (2011b) have shown in a systematic review and meta-analyses that psychological interventions to treat patients with major depressive disorders are superior to control conditions, though concomitant effects on anxiety have not been investigated (Hollon and Ponniah, 2010), nor has the focus of previous studies been on older populations.

Specifically, Laidlaw (2013) also pointed out that findings regarding the psychotherapeutic treatment of depression and anxiety have often been based on studies of younger adults or older adults with symptoms of depression and anxiety, though without diagnosed MDD (see also Klainin-Yobas et al., 2015). To counter this, the first aim of the present study was to compare the influence of DM and a control condition on elderly female patients diagnosed with MDD. To our knowledge, there has been no research into the longer-term effects of DM on this category of patients following completion of treatment (Karyotaki et al., 2016). The second aim of the present study, therefore, was to investigate whether DM has an effect four weeks after study completion and if so the scale of such an effect. Third, given the substantial overlap between the two conditions, and 17 to the control condition. During the study, two participants dropped out of the intervention condition. While 36 participants completed the study, the statistical analysis was performed following the intent-to-treat algorithm with the last-observation-carried-forward (LOCF) procedure.

Table 1 gives the descriptive and inferential statistics for the socio-demographic and illness-related variables, separately for patients in the DM group and in the control group. No significant differences were observed between the two study conditions. Accordingly, socio-demographic and illness-related variables were not introduced as covariates.

2.2. Sample

A total of 34 elderly women (mean age: M = 69.23 years, SD = 4.35) diagnosed with MDD took part in the study. Inclusion criteria were as follows: 1. Age between 65 and 85 years. 2. Currently suffering from MDD, as diagnosed by a psychiatrist or clinical psychologist not otherwise involved in the study, and based on a clinical psychiatric interview with the Structured Clinical Interview for DSM Disorders (SCID; First et al., 1997; Farsi version: Sharifi et al., 2009). 3. Self-reported symptoms of depression, as rated by the Geriatric Depression Scale (five or more points; see description below). 4. Symptoms of depression, as rated by experts (Montgomery-Asberg Depression Rating Scale Ahmadpanah et al., 2016b; between 7 and 34 points: mild to moderate depression). 5. Suffering from symptoms of anxiety, as self-reported on the Beck Anxiety Inventory (BAI; Beck et al., 1986; 16 or more points; see description below). 6. Monotherapy with a standard SSRI (citalopram) at therapeutic levels. 7. Written informed consent. 8. Able and willing to complete self-rating questionnaires. 9. Mini Mental State Examination (MMSE, Folstein et al., 1975; 26 points or higher). 10. Life time depressive episodes: three or less. 11. Undergoing other treatments such as physical activity, training, relaxation techniques, psychotherapy, or similar. 12. Undergoing treatments such as rTMS, or ECT.

As shown in Fig. 1, 85 eligible participants were approached; of those, 36 (42.4.9%) were recruited, 19 being allocated to intervention condition, and 17 and to the control condition. During the study, two participants dropped out of the intervention condition. While 36 participants completed the study, the statistical analysis was performed following the intent-to-treat algorithm with the last-observation-carried-forward (LOCF) procedure.

2.3. Randomisation

As described elsewhere (Ghaleiha et al., 2016; Haghghi et al., 2014), a psychologist not otherwise involved in the study prepared an opaque ballot box containing 2 × 20 chips in two different colors. Each color represented a study condition. The chips were mixed, the patient drew a chip and was assigned to the corresponding study condition.

2.4. Tools

2.4.1. Depression (self-report)

The Geriatric Depression Scale (GDS; Sheikh et al., 1991) was employed. This self-rating questionnaire consists of 15 items focusing on
typical symptoms of depression such as feeling hopeless, lonely, and sad, social withdrawal, weight loss, or loss of interest in usual pursuits. Answers are yes (= 1) or no (= 0), with higher scores reflecting a higher level of depression (Cronbach's alpha = 0.87). Categorization was made as follows (Sheikh et al., 1991): 0–4 points: no depression; 5–9 points: mild to moderate depression; 10–15 points: severe depression.

2.4.2. Depression (experts’ ratings); Montgomery-Asberg Depression Rating Scale
Experts rated patients’ symptoms of depression with the Montgomery-Asberg Depression Rating Scale (MADRS; original: Montgomery and Asberg, 1979; Farsi validation: Ahmadpanah et al., 2016). The 10 items forming the scale assess the following symptoms: 1. apparent sadness; 2. reported sadness; 3. inner tension; 4. reduced sleep; 5. reduced appetite; 6. concentration difficulties; 7. lassitude; 8. inability to feel; 9. pessimistic thoughts; 10. suicidal thoughts. Answers are given on a 6-point Likert scale ranging from 0 (= not at all) to 6 (= definitely), with higher scores reflecting more severe symptoms (Cronbach’s alpha = 0.89). Categorization was made as follows (Ahmadpanah et al., 2016b; Montgomery and Asberg, 1979): 0–6 points: no depression; 7–19 points: mild depression; 20–34 points: moderate depression; > 34 points: severe depression.

2.4.3. Anxiety (self-report)
Symptoms of anxiety were assessed with the Beck Anxiety Inventory (BAI; Beck et al., 1988). Hossein Kaviani and Mousavi (2008) have reported robust and reliable psychometric properties for the Farsi version of this inventory. The BAI consists of 21 items addressing typical cognitive, emotional and bodily signs of anxiety such a fear of the worst happening, numbness and tingling, or sweating not due to heat. Answers are given on 4-point rating scales with the anchor points 0 (= not at all) and 3 (= severely/it bothered me a lot), and with higher sum scores reflecting greater symptoms of anxiety (Cronbach’s alpha = 0.88). Categorization was made as follows (Hossein Kaviani and Mousavi, 2008; Beck et al., 1988): 0–9: minimal anxiety; 10–16: mild anxiety; 17–29: moderate anxiety; 30–63: severe anxiety.

2.5. Interventions
2.5.1. Detached mindfulness (DM) therapy
As described in an earlier intervention study involving patients with...
hypertension (Ahmadpanah et al., 2016a), detached mindfulness practice is a form of cognitive psychotherapeutic intervention aimed at learning how and where to guide one’s attention, and to focus on thinking about thinking. More specifically, DM aims at becoming aware of one’s negative thoughts, but recognizing them as mere mental processes without the need to follow their impulses (see Introduction).

Trained clinical psychologists performed the psychotherapeutic sessions, which lasted about 60–90 min. Sessions took place twice a week as group therapy with 7–9 participants per group, and lasted for four consecutive weeks. Table 2 describes the individual sessions. Additionally, patients were asked to exercise individually at least three times per week.

2.5.2. Control condition

Participants in the control condition met twice a week in small groups to engage in leisure activities together. These guided and supervised activities included walking through the park and the woods, painting lessons, museum visits, handcrafts, and similar. The duration, frequency and intensity of the ‘special program’ for the control condition were identical to the intervention condition: four consecutive weeks, twice a week for 60–90 min per session. Follow-up (FU) took place four weeks after study completion (SC).

2.5.3. Pharmacologic intervention

All patients were treated with citalopram (an SSRI) at therapeutic dosages. At least four weeks before being enrolled in the study, patients started pharmacological treatment with citalopram (40 mg/d), which was maintained at this level until the follow-up (2*4 weeks). With respect to the initial pharmacological intervention, patients-reported side effects included dry mouth, sweating, nausea and vertigo.

2.6. Response

Response was defined as symptom improvement of 50% or more. Symptoms of depression: self-rating, Geriatric Depression Scale; experts’ ratings: Montgomery-Asberg Depression Rating Scale; anxiety scores: Beck Anxiety Inventory.

2.7. Statistical analysis

2.7.1. Preliminary calculations

At baseline, there were no statistically or descriptively significant group differences for age, symptom severity (depression: self- and experts’ ratings; self rated anxiety; see also Table 2), mental status (Mini Mental Status Examination), number of previous depressive episodes (see Table 1), or other inclusion and exclusion criteria. Accordingly, no covariates were entered in the equations.

Data were analyzed as intention-to-treat, with LOCF. Three ANOVAs for repeated measures were performed with Group (intervention vs. control condition), Time (baseline, study completion, follow-up), and the Group-by-Time interaction as independent factors and the depression and anxiety scores as dependent variables. Post-hoc tests were performed with Bonferroni-Holm corrections for p-values. To allow for deviations from sphericity, statistical tests were performed using Greenhouse-Geisser corrected degrees of freedom. Throughout the paper the original degrees of freedom are reported with the relevant Greenhouse-Geisser epsilon value (ε). To calculate whether the distribution of responders and remitters at SC and FU differed between the intervention and the control condition, a series of odds-ratio calculations were performed. The nominal level of significance was set at alpha < 0.05. All statistics were performed with SPSS® 22.0 (IBM Corporation, Armonk NY, USA) for Apple Mac®.

3. Results

3.1. Symptoms of depression, self- and experts’ ratings

Tables 3, 4 give a descriptive and inferential statistical overview for symptoms of depression as self- (GDS) and expert (MADRS) rated. Statistical indices are only reported in the Tables. Fig. 2 displays symptoms of depression over time and separately for the two groups, as rated by experts. Symptoms of depression decreased over time, but more so in the treatment than in the control condition (significant time by group interaction). Compared to the control condition, symptoms of depression were significantly lower in the treatment condition. Post-hoc analyses after Bonferroni-Holm corrections for p-values showed that at SC, depression scores were significantly lower in the treatment than the control condition. Post-hoc analyses after Bonferroni-Holm corrections for p-values showed that at FU depression scores were still significantly lower in the treatment than the control condition (see also Fig. 2).

### Table 2
Detached etached mindfulness therapy; sessions and description.

<table>
<thead>
<tr>
<th>Sessions</th>
<th>Session description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Orientation, motivation, goal of sessions; BDI</td>
</tr>
<tr>
<td>2.</td>
<td>Explanation of treatment plan, metacognitive detached mindfulness therapy, Attention Training Techniques (ATT)</td>
</tr>
<tr>
<td>3.</td>
<td>Discussion of home assessment, training and exercise of metacognitive leading, assessment against prevented inhibition</td>
</tr>
<tr>
<td>4.</td>
<td>Discussion of home assessment, training and exercise of association techniques</td>
</tr>
<tr>
<td>5.</td>
<td>Discussion of home assessment, training and exercise of wandering mind and task orientation</td>
</tr>
<tr>
<td>6.</td>
<td>Discussion of home assessment, training and exercise of circle words and unruly child management</td>
</tr>
<tr>
<td>7.</td>
<td>Discussion of home assessment, training and exercise of imagery clouds and train station tasks</td>
</tr>
<tr>
<td>8.</td>
<td>Review of techniques and completion of BDI</td>
</tr>
</tbody>
</table>

Notes: BDI = Beck Depression Inventory.

### Table 3
Descriptive overview of symptoms of depression (self- and experts’ ratings) and anxiety (self-rating), separately for Time (baseline, on study completion, and 4 weeks later at follow-up), and separately for the two groups (detached mindfulness DM; controls CG).

<table>
<thead>
<tr>
<th>N</th>
<th>Detached Mindfulness</th>
<th>Groups</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baseline (BL) 19</td>
<td>Study completion (SC)</td>
<td>Follow-up (FU)</td>
</tr>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Geriatric Depression Scale (GDS; self-rating)</td>
<td>8.12 (2.67)</td>
<td>4.00 (2.69)</td>
<td>4.30 (2.46)</td>
</tr>
<tr>
<td>Beck Anxiety Inventory (BAI; self-rating)</td>
<td>34.29 (7.10)</td>
<td>21.24 (9.25)</td>
<td>20.88 (7.22)</td>
</tr>
<tr>
<td>Depression (MADRS; experts’ ratings)</td>
<td>30.06 (2.52)</td>
<td>12.19 (6.78)</td>
<td>13.60 (6.00)</td>
</tr>
</tbody>
</table>

Notes: MADRS = Montgomery-Asberg Depression Rating Scale.
Table 4
Inferential statistical overview of symptoms of depression (self- and experts’ ratings) and anxiety (self-rating), separately for Time (pre-test, on completion of the study (post-test), and 4 weeks later at follow-up), Group (metacognitive detached mindfulness MDM; controls CG), and the Time by Group interaction.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Time</th>
<th>Group</th>
<th>Time × Group interaction</th>
<th>Post-hoc tests</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F(2, 62)</td>
<td>2 partial eta²</td>
<td>F(1, 31)</td>
<td>partial eta²</td>
</tr>
<tr>
<td>Geriatric Depression Scale (GDS; self-rating)</td>
<td>9.34</td>
<td>0.33</td>
<td>28.26</td>
<td>0.73</td>
</tr>
<tr>
<td>Beck Anxiety Inventory (BAI; self-rating)</td>
<td>0.12</td>
<td>0.004</td>
<td>75.70</td>
<td>0.71</td>
</tr>
<tr>
<td>Depression (experts’ ratings; MADRS)</td>
<td>5.45</td>
<td>0.20</td>
<td>54.99</td>
<td>0.64</td>
</tr>
</tbody>
</table>

Notes: MADRS = Montgomery-Asberg Depression Rating Scale; MDM = metacognitive detached mindfulness; CG = control group. Degrees of freedom for Group: (1, 31); degrees of freedom for Time: (2, 62); degrees of freedom for Time by Group interaction: (2, 62).

*** = p < 0.001. All variables are controlled for baseline. [S] = small effect size; [L] = large effect size.

3.2. Anxiety scores (self-rating)

Tables 3, 4 also give a descriptive and inferential statistical overview for symptoms of anxiety, as self-rated with the BAI. Statistical indices are reported only in the Tables. Fig. 3 shows the self-rated symptoms of anxiety over time and separately for the two groups.

Symptoms of anxiety decreased over time, but more so in the treatment than in the control condition (significant time by group interaction). Anxiety scores did not significantly differ between the two groups. Post-hoc analyses after Bonferroni-Holm corrections for p-values showed that at SC, anxiety scores were significantly lower and clinically relevant (cf. Beck et al., 1988) in the treatment condition than in the control condition. Post-hoc analyses after Bonferroni-Holm corrections for p-values showed that anxiety scores were still significantly and clinically lower in the treatment condition than in the control condition at FU (see also Fig. 3).

3.3. Response rate at study completion and at follow-up

With the first research question we explored whether and under which of the two conditions response to treatment would be observed at SC and FU. A decrease of 50% or more was defined as response to treatment. Response to treatment was observed at SC and FU in the DM condition but not in the control condition (symptoms of depression [self- and experts’ ratings] and anxiety).

3.4. Remission rates at study completion and at follow-up

With the second research question we explored whether and if so in which study condition remissions were observed at SC and FU. The following remission criteria were applied: Geriatric Depression scale (Sheikh et al., 1991; Sheikh, 1985): 0–4 points = no depression; Montgomery-Asberg Depression Scale (Ahmadpanah et al., 2016b; Montgomery and Asberg, 1979): 0–6 points: no depression; Beck Anxiety Inventory (Hossein Kaviani and Mousavi, 2008; Beck et al., 1988): 0–9: minimal anxiety.

As summarized in Table 6, the likelihood of a full remission from depression (self- and experts’ ratings) was 7.65–15.53-fold higher in the intervention than in control group. No such pattern of results was found for anxiety scores.

4. Discussion

The key finding of the present study was that, compared to a control condition, detached mindfulness (DM) psychotherapy led to significant reductions in symptoms of depression (self- and experts’ rated) and anxiety among elderly women diagnosed with major depressive disorders and treated with a standard antidepressant. Furthermore, the present study expanded upon the current literature in showing that the DM intervention led to significantly lower and clinically lower anxiety among elderly women diagnosed with major depressive disorder than in the control condition after completion of the intervention program, and this was confirmed (see Tables 3, 4, and Fig. 2). In this regard, the present findings are in line with previous results (Ahmadpanah et al., 2016a; Wells et al., 2012; Spada et al., 2010; Wells, 2006; Hollon and Ponniah, 2010). However,
the present findings also expand upon previous research in filling a gap in psychotherapeutic research that has largely focused on younger adults without a diagnosis of major depressive disorders (Laidlaw, 2013). Moreover, we confirmed that DM had the potential to reduce symptoms of depression and anxiety among older people (Klainin-Yobas et al., 2015; Cuijpers et al., 2011a, b). Given the substantial overlap between symptoms of depression and of anxiety that also exists among the elderly (Beattie et al., 2010; Flood and Buckwalter, 2009; Devanand, 2002; Lenze et al., 2002), this result was to be expected. It is also noteworthy that symptoms of depression were assessed both by participants and by experts blind to participants’ group allocation; we believe this further confirms the reliability and validity of the intervention effect and its clinical relevance.

Our second hypothesis was that, four weeks after the intervention, symptoms of depression and anxiety would remain stable, and this was confirmed. As shown in Tables 3, 4 and in Figs. 2 and 3, following completion of the DM intervention symptoms of depression and anxiety remained low, a finding in line with previous research (Karyotaki et al., 2016). On the other hand, symptoms of depression and anxiety also remained unchanged in the control condition; that is to say, there were no improvements, but also no deterioration from baseline to completion of the intervention to follow-up.

Our research questions concerned whether and if so in which group response and remission would be observed. As reported in the text and in Tables 5, 6, response and remission in depression (self- and experts’ ratings) were observed in the intervention but not in the control condition. Notably, the odds of remission with respect to depression were 8–15-fold higher in the treatment than in the control condition. We believe this outcome is an encouraging indication of the efficacy of employing psychotherapeutic interventions concomitantly with medication treatment with a standard SSRI (citalopram) at therapeutic levels.

Remitter- and odds-ratio calculations (Table 6) also showed that remission was generally not achieved as regards anxiety. This result is at odds with the observed improvements in anxiety (see Tables 3, 4 and Fig. 3), though it is possible that the remission criterion of nine points or less on a scale from 0 to 63 is too exacting.

The question remains as to why detached mindfulness should have a positive and enduring impact on patients’ symptoms of depression and anxiety. The data available to us were insufficient to shed light on the underlying cognitive-emotional processes. However, as elaborated elsewhere (Ahmadpanah et al., 2016a), the following would appear to be possible explanations.

Detached mindfulness exercises increased awareness of current effects on the cognitive system and information processing by focusing on breathing and attention to the body and to the present (“here and now”). Furthermore, the impact of DM on anxiety in a group therapy setting can be explained as follows: patients are over-sensitized to concerns and anxieties and are more inclined to misinterpret psychological symptoms and bodily sensations as symptoms of anxiety. Accordingly, challenging their misinterpretations and reframing their cognitive-emotional concepts of what might be more or less fearful could have led to a decrease in their levels of anxiety.

On the other hand, techniques such as DM cause changes in the attitudes and cognitions of patients such that they accept their current physical and psychological state, engage with its mental consequences, and learn that emotions and negative thoughts are nothing more than transient inner processes carrying no requirement that these be translated into action.

Despite the positive findings of this study, several limitations warrant against overgeneralization. First, in Iran, wards and health care units are gender-segregated; consequently psychotherapeutic interventions are also gender-segregated, and in the present study only females were assessed. Thus, it remains unclear to what extent the present findings would generalize to male patients. Second, sleep was not assessed, though several studies have shown poor sleep to be causally related to poor mental health (Lovato and Gradisar, 2014), and that, compared to males, females complain more about insomnia (Zhang and Wing, 2006). Third, the present pattern of results might have emerged due to further latent but unassessed dimensions (such as motivation, attachment styles, expectations, subjectively perceived peer acceptance and rejection), which might have biased two or more variables in the same or opposite directions. Fourth, we applied statistical procedures, which by definition assumed linear associations. However, a more fine-grained day-by-day analysis would have allowed for the exploration of non-linear processes, with possible accelerated improvements at the beginning of the treatment and continuous deceleration. Such a microanalysis would allow for the fine-tuning of interventions in terms of frequency, duration and intensity. Further, it would also have permitted a clearer understanding as to why for patients in the control condition the impact of the social setting was apparently zero, or at least not aversive. However, this observation does not support the so-called social deprivation hypothesis, which explains the emergence and maintenance of symptoms of depression in terms of low social interaction rates (Levinsohn, 1974). Rather, as regards the control group, the pattern of results suggested that the cognitive-emotional content of social contacts rather than the mere fact of social contact seems to be of particular importance. Fifth, as regards the control condition, we observed that the psychopharmacologic treatment with SSRIs had no beneficial (and no detrimental) effects. We believe this pattern of results is consistent with that from a recent study among primiparae with postpartum depression (Ahmadpanah et al., In press): While both Detached Mindfulness and Stress Management Training reduced symptoms of depression after eight to sixteen weeks, no substantive changes were observed in the control group treated with a standard SSRI (citalopram). Sixth, a major limitation of the study is the absence of any direct evidence concerning patients’ cognitive-emotional processes: what cognitive-emotional concepts if any were modified, and why (Chambers et al., 2009; Kang and Grey, 2013; Norton et al., 2015)? Furthermore, while the DM intervention had effects that persisted for at least four weeks beyond completion of the program, we do not know what cognitive-emotional processes might have been responsible for this effect. Accordingly, we believe that future studies should focus more directly on the effect of psychotherapeutic interventions on patients’ cognitive-emotional concepts. This is especially important as Driessen et al. (2015) have shown that a publication bias might inflate the apparent efficacy of psychological treatments for MDDs (as is also the case for pharmacotherapy).
5. Conclusion

Compared to a control condition reproducing very similar social conditions, detached mindfulness (DM) reduced symptoms of depression and anxiety in elderly female patients with major depressive disorders (MDD), both over the course of a four week intervention and four weeks after completion of this program.

C. Onset of interests and financial disclosure

All authors declare no conflicts of interest. The entire study was performed without external funding.

Acknowledgements

We thank Nick Emler (University of Surrey, Surrey UK) for proofreading the manuscript.

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