Supplementary Figure legends

Supplementary Figure 1. Pooled standardized mean difference between home-based psychological intervention and usual care according to severities of depression

Supplementary Figure 2. Pooled standardized mean difference between home-based exercise, combined psychological intervention with exercise and usual care

Supplementary Figure 3. Pooled risk ratio of disease remission between home-based psychological intervention and usual care

Supplementary Figure 4. Pooled risk ratio of disease remission between home-based exercise, combined psychological intervention with exercise and usual care

Supplementary Figure 5. Network plot of all available home-based interventions

Supplementary Figure 6. Funnel plots of home-based psychological intervention and home-based exercise

Supplementary Figure 7. Funnel and contour enhanced funnel plot of combined psychological intervention with exercise
**Supplementary Figure 1**

<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>SMD (95% CI)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MDD</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Klug (2010)</td>
<td>-1.18 (-1.74, -0.62)</td>
<td>10.25</td>
</tr>
<tr>
<td>Kiosses (2015)</td>
<td>-0.77 (-1.25, -0.30)</td>
<td>11.80</td>
</tr>
<tr>
<td>Subtotal (I-squared = 63.5%, p = 0.005)</td>
<td>-0.95 (-1.35, -0.55)</td>
<td>22.05</td>
</tr>
<tr>
<td><strong>Mixed severity of depression</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gary (2010)</td>
<td>-0.19 (-0.89, 0.50)</td>
<td>8.19</td>
</tr>
<tr>
<td>Naylor (2010)</td>
<td>-0.09 (-0.78, 0.59)</td>
<td>8.33</td>
</tr>
<tr>
<td>Gitlin (2013)</td>
<td>-0.41 (-0.68, -0.13)</td>
<td>15.74</td>
</tr>
<tr>
<td>Choi (2014)</td>
<td>-0.87 (-1.17, -0.17)</td>
<td>11.35</td>
</tr>
<tr>
<td>Subtotal (I-squared = 0.0%, p = 0.523)</td>
<td>-0.41 (-0.82, -0.19)</td>
<td>43.60</td>
</tr>
<tr>
<td><strong>Minor depression</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gellis (2007)</td>
<td>-1.10 (-1.54, -0.67)</td>
<td>10.66</td>
</tr>
<tr>
<td>Gellis (2010)</td>
<td>-0.72 (-1.38, -0.04)</td>
<td>8.47</td>
</tr>
<tr>
<td>Joling (2011)</td>
<td>-0.10 (-0.40, 0.20)</td>
<td>15.22</td>
</tr>
<tr>
<td>Subtotal (I-squared = 82.1%, p = 0.004)</td>
<td>-0.61 (-1.28, 0.06)</td>
<td>34.35</td>
</tr>
<tr>
<td><strong>Overall (I-squared = 63.5%, p = 0.005)</strong></td>
<td>-0.57 (-0.84, -0.31)</td>
<td>100.00</td>
</tr>
</tbody>
</table>

NOTE: Weights are from random effects analysis.
### A. Home-based exercise

<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>SMD (95% CI)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blumenthal (2007)</td>
<td>-0.15 (-0.54, 0.24)</td>
<td>33.69</td>
</tr>
<tr>
<td>Kerse (2010)</td>
<td>-2.75 (-3.15, -2.35)</td>
<td>33.65</td>
</tr>
<tr>
<td>Gary (2010)</td>
<td>-0.17 (-0.86, 0.52)</td>
<td>32.66</td>
</tr>
<tr>
<td>Overall (I² = 97.9%, p &lt; 0.001)</td>
<td>-1.03 (-2.89, 0.82)</td>
<td>100.00</td>
</tr>
</tbody>
</table>

### B. Combined home-based psychological intervention with exercise

<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>SMD (95% CI)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ciechanowski (2004)</td>
<td>-0.81 (-1.16, -0.46)</td>
<td>81.26</td>
</tr>
<tr>
<td>Gary (2010)</td>
<td>-0.65 (-1.37, 0.06)</td>
<td>18.74</td>
</tr>
<tr>
<td>Overall (I² = 0.0%, p = 0.692)</td>
<td>-0.78 (-1.09, -0.47)</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Supplementary Figure 3

<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>RR (95% CI)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naylor (2010)</td>
<td>1.47 (0.84, 2.55)</td>
<td>13.00</td>
</tr>
<tr>
<td>Joling (2011)</td>
<td>1.21 (0.79, 1.87)</td>
<td>40.20</td>
</tr>
<tr>
<td>Gitlin (2013)</td>
<td>1.63 (1.08, 2.46)</td>
<td>38.86</td>
</tr>
<tr>
<td>Kiosses (2015)</td>
<td>2.80 (1.12, 6.98)</td>
<td>7.95</td>
</tr>
<tr>
<td>Overall (I^2 = 0.0%, p = 0.404)</td>
<td>1.53 (1.19, 1.98)</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Supplementary Figure 4

A. Home-based exercise

<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>RR (95% CI)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blumenthal (2007)</td>
<td>0.84 (0.54, 1.24)</td>
<td>35.87</td>
</tr>
<tr>
<td>Pfaff (2014)</td>
<td>1.07 (0.82, 1.39)</td>
<td>64.13</td>
</tr>
<tr>
<td>Overall (I-squared = 0.0%, p = 0.366)</td>
<td>0.99 (0.79, 1.24)</td>
<td>100.00</td>
</tr>
</tbody>
</table>

B. Combined home-based psychological intervention with exercise

<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>RR (95% CI)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banerjee (1996)</td>
<td>2.33 (1.28, 4.30)</td>
<td>55.86</td>
</tr>
<tr>
<td>Ciechanowski (2004)</td>
<td>4.58 (2.04, 10.31)</td>
<td>40.87</td>
</tr>
<tr>
<td>Chaytor (2011)</td>
<td>9.00 (0.50, 161.86)</td>
<td>3.26</td>
</tr>
<tr>
<td>Overall (I2 = 19.7%, p = 0.288)</td>
<td>3.47 (2.11, 5.70)</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Supplementary Figure 5

Usual care
Home-based psychological intervention
Home-based exercise
Combined home-based psychological intervention with exercise
Supplementary Figure 6

A. Home-based psychological intervention

B. Home-based exercise
Supplementary Figure 7

A. Funnel plot

B. Contour enhanced funnel plot