

## Supplementary Online Content

Gordon BR, McDowell CP, Hallgren M, Meyer JD, Lyons M, Herring MP.

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**eFigure 1.** Flowchart of Study Selection

**eFigure 2.** Funnel Plot of Hedges  $d$  Effect Sizes vs Study Standard Error

**eTable 1.** Individual Scores on Amended Detsky Quality Assessment

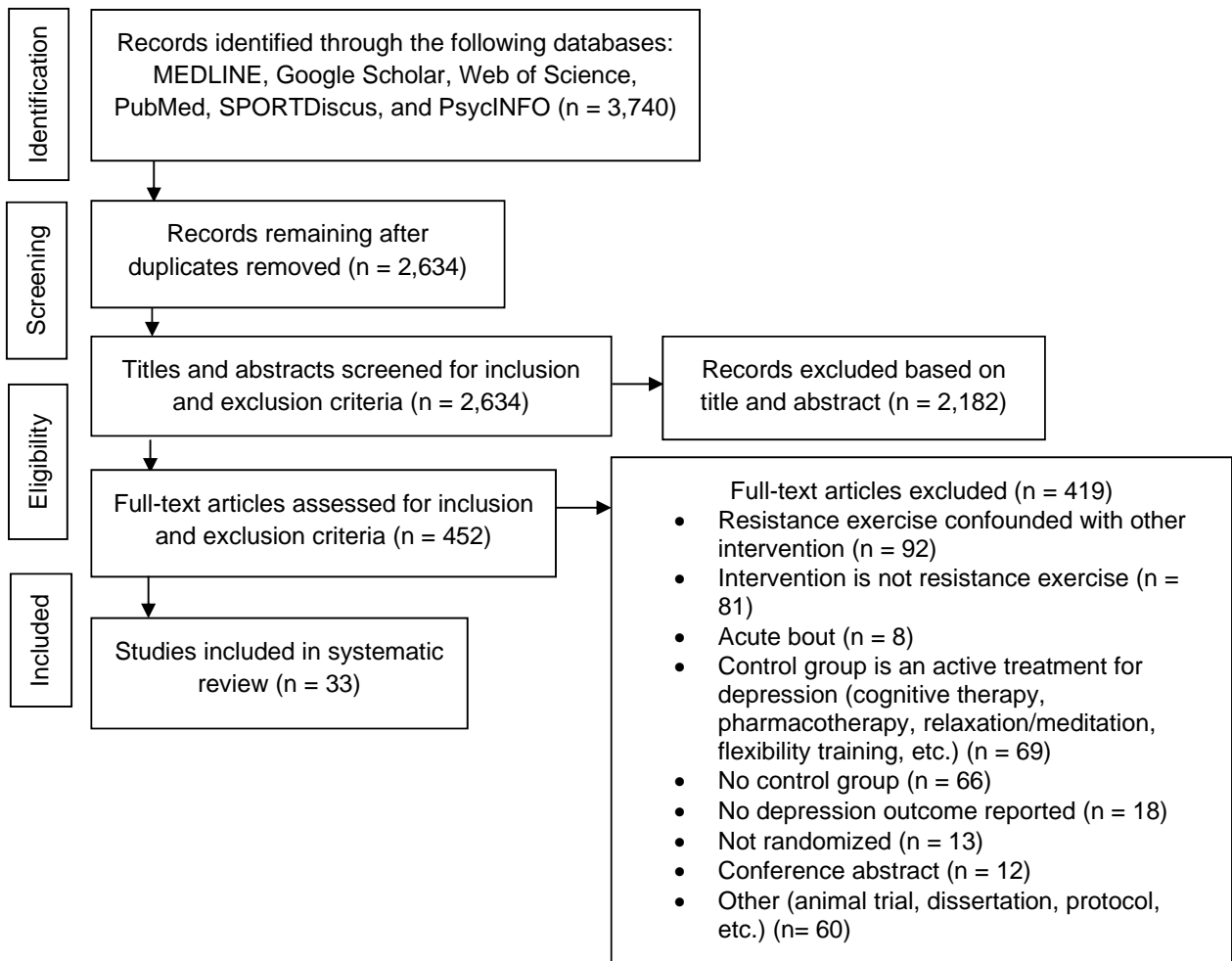
**eTable 2.** Values Used to Calculate Hedges  $d$  Effect Size and Primary Moderator Values

**eTable 3.** Definitions for Each Moderator and Associated Levels

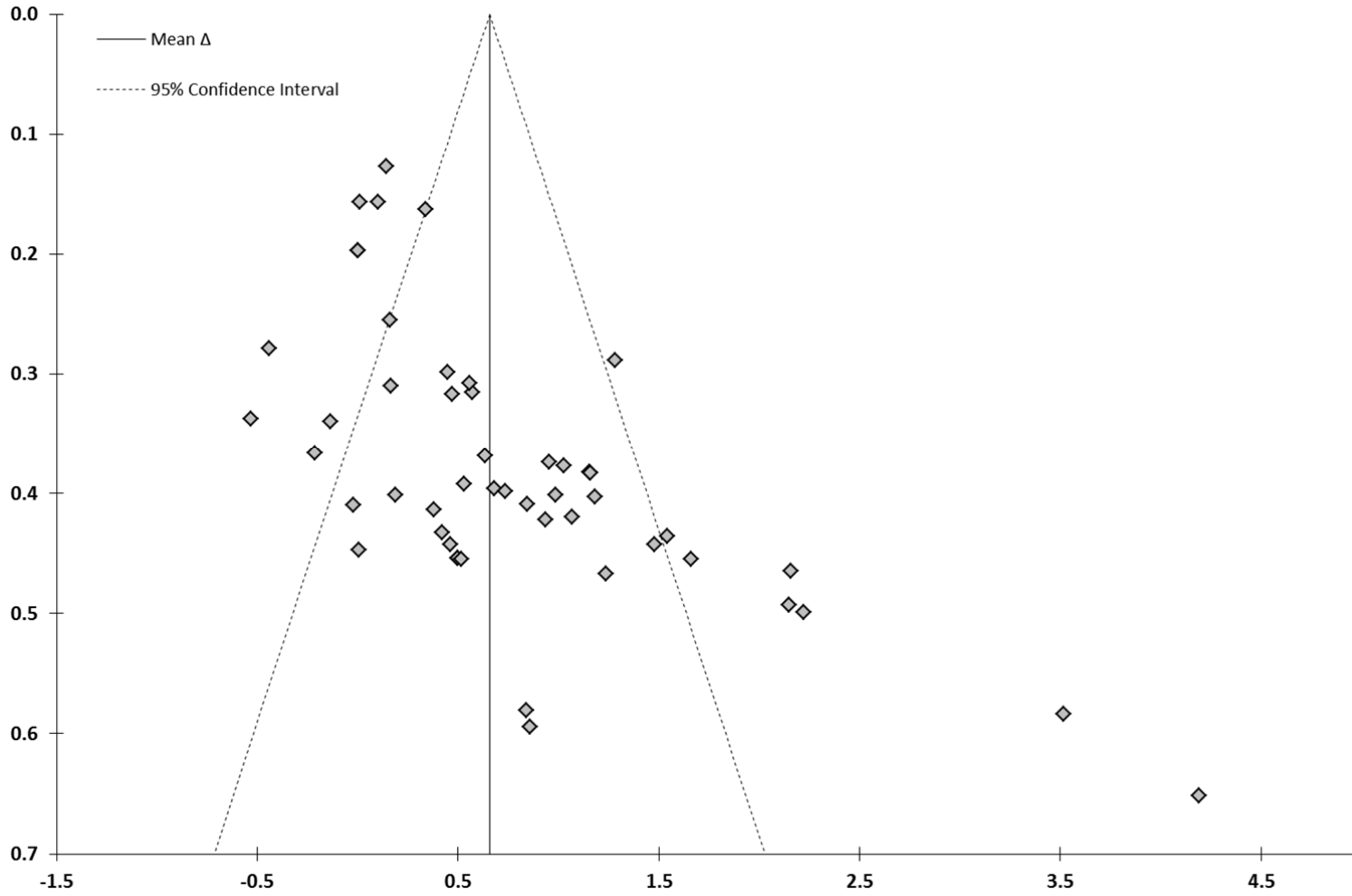
**eReferences**

This supplementary material has been provided by the authors to give readers additional information about their work.

**eFigure 1. Flowchart of Study Selection**



**eFigure 2.** Funnel Plot of Hedges  $d$  Effect Sizes vs Study Standard Error



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**eTable 1.** Individual Scores on Amended Detsky Quality Assessment\*

| Study                           | Blinded Allocation | Blinded assessment | Described outcomes | Objective outcomes | Defined inclusion | Report n excluded | RET clearly described | Control clearly described | Statistical analysis provided | P value provided | Analysis appropriate | Justify Sample Size | Adherence Compliance Reported | Total |
|---------------------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|-----------------------|---------------------------|-------------------------------|------------------|----------------------|---------------------|-------------------------------|-------|
| Aidar et al. <sup>e7</sup>      | 1                  | 0                  | 1                  | 1                  | 1                 | 0                 | 1                     | 1                         | 1                             | 1                | 1                    | 0                   | 0                             | 9     |
| Abrahao et al. <sup>e6</sup>    | 0                  | 1                  | 1                  | 1                  | 1                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 1                   | 0                             | 11    |
| Alves et al. <sup>e8</sup>      | 1                  | 1                  | 1                  | 1                  | 1                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 1                   | 1                             | 13    |
| Ansai et al. <sup>e9</sup>      | 1                  | 0                  | 1                  | 1                  | 1                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 1                   | 1                             | 12    |
| Courneya et al. <sup>e10</sup>  | 1                  | 0                  | 1                  | 1                  | 1                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 1                   | 1                             | 12    |
| Dalgas et al. <sup>e11</sup>    | 1                  | 1                  | 1                  | 1                  | 1                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 0                   | 1                             | 12    |
| Damush et al. <sup>e12</sup>    | 0                  | 0                  | 1                  | 1                  | 0                 | 0                 | 1                     | 1                         | 1                             | 1                | 1                    | 0                   | 0                             | 7     |
| Doyne et al. <sup>e15</sup>     | 0                  | 1                  | 1                  | 1                  | 1                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 0                   | 0                             | 10    |
| Geliebter et al. <sup>e16</sup> | 0                  | 1                  | 1                  | 1                  | 1                 | 0                 | 1                     | 1                         | 1                             | 1                | 1                    | 0                   | 0                             | 9     |
| Goldfield et al. <sup>e17</sup> | 0                  | 1                  | 1                  | 1                  | 1                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 1                   | 1                             | 12    |
| Häkkinen et al. <sup>e22</sup>  | 0                  | 0                  | 1                  | 1                  | 1                 | 0                 | 1                     | 1                         | 1                             | 1                | 1                    | 0                   | 0                             | 8     |
| Herring et al. <sup>e18</sup>   | 1                  | 1                  | 1                  | 1                  | 1                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 1                   | 1                             | 13    |
| Herring et al. <sup>e4</sup>    | 1                  | 0                  | 1                  | 1                  | 0                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 1                   | 0                             | 10    |
| Karahan et al. <sup>e23</sup>   | 1                  | 1                  | 1                  | 1                  | 1                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 1                   | 0                             | 12    |
| Lau et al. <sup>e5</sup>        | 0                  | 0                  | 1                  | 1                  | 0                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 0                   | 0                             | 8     |
| Levinger et al. <sup>e3</sup>   | 1                  | 0                  | 1                  | 1                  | 1                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 0                   | 1                             | 11    |
| Lincoln et al. <sup>e24</sup>   | 0                  | 1                  | 1                  | 1                  | 1                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 0                   | 0                             | 10    |
| Martins et al. <sup>e19</sup>   | 0                  | 0                  | 1                  | 1                  | 1                 | 0                 | 1                     | 1                         | 1                             | 1                | 1                    | 0                   | 0                             | 8     |
| Norvell et al. <sup>e25</sup>   | 0                  | 0                  | 1                  | 1                  | 1                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 0                   | 0                             | 9     |
| Nyberg et al. <sup>e26</sup>    | 1                  | 1                  | 1                  | 1                  | 1                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 1                   | 0                             | 12    |
| O'Reilly et al. <sup>e27</sup>  | 1                  | 0                  | 1                  | 1                  | 1                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 1                   | 0                             | 11    |
| Penninx et al. <sup>e20</sup>   | 1                  | 1                  | 1                  | 1                  | 1                 | 1                 | 1                     | 1                         | 1                             | 1                | 1                    | 1                   | 0                             | 12    |
| Pilu et al. <sup>e28</sup>      | 0                  | 0                  | 1                  | 1                  | 1                 | 0                 | 0                     | 1                         | 1                             | 1                | 1                    | 0                   | 0                             | 7     |
| Putiri et al. <sup>e29</sup>    | 0                  | 0                  | 1                  | 1                  | 1                 | 1                 | 0                     | 1                         | 1                             | 1                | 1                    | 0                   | 0                             | 8     |

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| <b>Study</b>                       | <b>Blinded Allocation</b> | <b>Blinded assessment</b> | <b>Described outcomes</b> | <b>Objective outcomes</b> | <b>Defined inclusion</b> | <b>Report n excluded</b> | <b>RET clearly described</b> | <b>Control clearly described</b> | <b>Statistical analysis provided</b> | <b>P value provided</b> | <b>Analysis appropriate</b> | <b>Justify Sample Size</b> | <b>Adherence Compliance Reported</b> | <b>Total</b> |
|------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------------------|--------------------------|------------------------------|----------------------------------|--------------------------------------|-------------------------|-----------------------------|----------------------------|--------------------------------------|--------------|
| Sims et al. <sup>e30</sup>         | 1                         | 0                         | 1                         | 1                         | 1                        | 1                        | 1                            | 1                                | 1                                    | 1                       | 1                           | 1                          | 1                                    | 12           |
| Singh et al. <sup>e1</sup>         | 1                         | 1                         | 1                         | 1                         | 1                        | 1                        | 1                            | 1                                | 1                                    | 1                       | 1                           | 1                          | 1                                    | 13           |
| Singh et al. <sup>e31</sup>        | 1                         | 1                         | 1                         | 1                         | 1                        | 1                        | 1                            | 1                                | 1                                    | 1                       | 1                           | 1                          | 1                                    | 13           |
| Sparrow et al. <sup>e2</sup>       | 1                         | 1                         | 1                         | 1                         | 1                        | 1                        | 1                            | 1                                | 1                                    | 1                       | 1                           | 1                          | 1                                    | 13           |
| Tapps et al. <sup>e14</sup>        | 0                         | 0                         | 1                         | 1                         | 1                        | 0                        | 1                            | 1                                | 1                                    | 1                       | 1                           | 0                          | 0                                    | 8            |
| Van der Kooi et al. <sup>e32</sup> | 1                         | 1                         | 1                         | 1                         | 1                        | 1                        | 1                            | 1                                | 1                                    | 1                       | 1                           | 1                          | 0                                    | 12           |
| Vizza et al. <sup>e33</sup>        | 1                         | 0                         | 1                         | 1                         | 1                        | 1                        | 1                            | 1                                | 1                                    | 1                       | 1                           | 0                          | 1                                    | 11           |
| Zanuso et al. <sup>e13</sup>       | 0                         | 0                         | 1                         | 1                         | 1                        | 1                        | 1                            | 1                                | 1                                    | 1                       | 1                           | 0                          | 0                                    | 9            |

\*Amended to include randomization and blinding methods, description of RET and control, and reporting of adherence and/or compliance

**eTable 2.** Values Used to Calculate Hedges *d* Effect Size and Primary Moderator Values

| Study                           | RET<br>Pre<br>Mean | RET<br>Pre<br>SD | RET<br>Post<br>Mean | Control<br>Pre<br>Mean | Control<br>Baseline<br>SD | Control<br>Post<br>Mean | Hedges' <i>d</i> | Lower<br>95%CI | Upper<br>95%CI | Blind | Total<br>Volume<br>RET | Health<br>Status | Strength<br>Improved |
|---------------------------------|--------------------|------------------|---------------------|------------------------|---------------------------|-------------------------|------------------|----------------|----------------|-------|------------------------|------------------|----------------------|
| Abrahao et al. <sup>e6</sup>    | 19.40              | 5.00             | 17.30               | 19.10                  | 5.60                      | 20.10                   | 0.57             | -0.04          | 1.19           | Yes   | 1800                   | Ill              | No                   |
| Aidar et al. <sup>e7</sup>      | 17.70              | 8.20             | 13.90               | 16.90                  | 8.60                      | 16.40                   | 0.38             | -0.43          | 1.19           | No    | 2160                   | Ill              | Yes                  |
| Alves et al. <sup>e8</sup>      | 3.92               | 2.39             | 3.00                | 3.46                   | 2.37                      | 3.00                    | 0.19             | -0.60          | 0.97           | Yes   | 960                    | healthy          | No                   |
| Alves et al. <sup>e8</sup>      | 3.92               | 2.39             | 2.22                | 3.46                   | 2.37                      | 4.06                    | 0.93             | 0.11           | 1.76           | Yes   | 1920                   | healthy          | No                   |
| Alves et al. <sup>e8</sup>      | 2.50               | 1.74             | 1.64                | 2.00                   | 1.83                      | 1.92                    | 0.42             | -0.43          | 1.27           | Yes   | 960                    | healthy          | No                   |
| Alves et al. <sup>e8</sup>      | 2.50               | 1.74             | 0.30                | 2.00                   | 1.83                      | 2.10                    | 0.124            | 0.32           | 2.15           | Yes   | 1920                   | healthy          | No                   |
| Ansai et al. <sup>e9</sup>      | 3.90               | 2.60             | 3.20                | 3.30                   | 2.20                      | 3.70                    | 0.45             | -0.14          | 1.03           | Yes   | 2880                   | healthy          | No                   |
| Courneya et al. <sup>e10</sup>  | 13.80              | 10.10            | 10.60               | 13.90                  | 9.70                      | 10.80                   | 0.01             | -0.30          | 0.32           | Yes   | NR                     | Ill              | Yes                  |
| Courneya et al. <sup>e10</sup>  | 13.80              | 10.10            | 12.60               | 13.90                  | 9.70                      | 13.70                   | 0.10             | -0.21          | 0.41           | Yes   | NR                     | Ill              | Yes                  |
| Dalgas et al. <sup>e11</sup>    | 10.30              | 6.10             | 7.90                | 8.80                   | 4.42                      | 9.90                    | 0.64             | -0.09          | 1.36           | Yes   | NR                     | Ill              | Yes                  |
| Damush et al. <sup>e12</sup>    | 79.50              | 20.20            | 81.60               | 84.30                  | 18.50                     | 83.20                   | 0.16             | -0.34          | 0.66           | No    | 720                    | healthy          | Yes                  |
| Doyne et al. <sup>e15</sup>     | 19.50              | 9.18             | 10.96               | 16.06                  | 5.12                      | 15.72                   | 1.07             | 0.25           | 1.89           | Yes   | NR                     | Ill              | No                   |
| Doyne et al. <sup>e15</sup>     | 16.51              | 4.32             | 9.13                | 15.81                  | 2.88                      | 16.57                   | 2.15             | 1.18           | 3.11           | Yes   | NR                     | Ill              | No                   |
| Doyne et al. <sup>e15</sup>     | 13.80              | 3.82             | 7.78                | 12.58                  | 4.58                      | 10.23                   | 0.84             | 0.04           | 1.65           | Yes   | NR                     | Ill              | No                   |
| Doyne et al. <sup>e15</sup>     | 19.50              | 9.18             | 5.93                | 16.06                  | 5.12                      | 15.25                   | 1.66             | 0.77           | 2.55           | Yes   | NR                     | Ill              | No                   |
| Doyne et al. <sup>e15</sup>     | 16.51              | 4.32             | 8.01                | 15.81                  | 2.88                      | 12.92                   | 1.48             | 0.61           | 2.35           | Yes   | NR                     | Ill              | No                   |
| Doyne et al. <sup>e15</sup>     | 13.80              | 3.82             | 5.13                | 12.58                  | 4.58                      | 13.58                   | 2.22             | 1.24           | 3.20           | Yes   | NR                     | Ill              | No                   |
| Geliebter et al. <sup>e16</sup> | 8.30               | 6.20             | 4.70                | 9.70                   | 6.80                      | 7.20                    | 0.17             | -0.44          | 0.77           | Yes   | NR                     | Ill              | No                   |
| Goldfield et al. <sup>e17</sup> | 2.70               | 2.65             | 1.70                | 2.80                   | 2.62                      | 2.70                    | 0.34             | 0.02           | 0.66           | Yes   | 3872                   | Ill              | No                   |
| Häkkinen et al. <sup>e22</sup>  | 6.40               | 5.00             | 3.60                | 6.60                   | 4.90                      | 7.50                    | 0.72             | -0.17          | 1.60           | No    | NR                     | Ill              | Yes                  |
| Herring et al. <sup>e18</sup>   | 17.50              | 8.15             | 10.00               | 20.40                  | 13.14                     | 18.60                   | 0.50             | -0.39          | 1.39           | Yes   | 184                    | Ill              | Yes                  |
| Herring et al. <sup>e18</sup>   | 17.50              | 8.15             | 10.40               | 20.40                  | 13.14                     | 19.00                   | 0.50             | -0.39          | 1.39           | Yes   | 368                    | Ill              | Yes                  |
| Herring et al. <sup>e18</sup>   | 17.50              | 8.15             | 8.10                | 20.40                  | 13.14                     | 16.90                   | 0.52             | -0.37          | 1.40           | Yes   | 552                    | Ill              | Yes                  |
| Herring et al. <sup>e4</sup>    | 9.50               | 3.70             | 5.50                | 7.90                   | 2.30                      | 5.40                    | 0.46             | -0.41          | 1.33           | Yes   | 2160                   | Ill              | No                   |
| Karahan et al. <sup>e23</sup>   | 11.00              | 5.70             | 6.90                | 11.20                  | 5.60                      | 9.80                    | 0.47             | -0.15          | 1.09           | Yes   | 720                    | Ill              | Yes                  |
| Lau et al. <sup>e5</sup>        | 4.73               | 3.70             | 6.27                | 5.56                   | 2.30                      | 5.38                    | -0.53            | -1.19          | 0.13           | No    | 1080                   | Ill              | No                   |
| Levinger et al. <sup>e3</sup>   | 82.60              | 21.27            | 67.80               | 62.90                  | 17.82                     | 67.90                   | 0.99             | 0.20           | 1.77           | Yes   | 1800                   | Ill              | No                   |
| Levinger et al. <sup>e3</sup>   | 65.50              | 23.88            | 65.00               | 67.90                  | 22.35                     | 66.90                   | -0.02            | -0.82          | 0.78           | Yes   | 1800                   | healthy          | No                   |
| Lincoln et al. <sup>e24</sup>   | 11.50              | 7.50             | 3.10                | 11.10                  | 7.40                      | 12.40                   | 1.28             | 0.72           | 1.85           | Yes   | 2160                   | Ill              | No                   |
| Martins et al. <sup>e19</sup>   | 0.80               | 1.00             | 1.10                | 1.10                   | 0.80                      | 1.00                    | -0.44            | -0.99          | 0.10           | No    | 2160                   | healthy          | No                   |
| Norvell et al. <sup>e25</sup>   | 53.86              | 8.32             | 45.21               | 52.40                  | 6.02                      | 52.53                   | 1.18             | 0.39           | 1.97           | No    | 960                    | healthy          | No                   |
| Nyberg et al. <sup>e26</sup>    | 3.50               | 2.37             | 2.80                | 3.20                   | 0.79                      | 3.50                    | 0.56             | -0.05          | 1.16           | Yes   | 1440                   | Ill              | Yes                  |
| O'Reilly et al. <sup>e27</sup>  | 4.58               | 2.91             | 4.01                | 4.79                   | 2.91                      | 4.90                    | 0.23             | -0.07          | 0.53           | Yes   | NR                     | Ill              | No                   |

| Study                                     | RET Pre Mean | RET Pre SD | RET Post Mean | Control Pre Mean | Control Base SD | Control Post Mean | Hedges' <i>d</i> | Lower 95%CI | Upper 95%CI | Blind | Total Volume RET | Health Status | Strength Improved |
|---|--------------|------------|---------------|------------------|-----------------|-------------------|------------------|-------------|-------------|-------|------------------|---------------|-------------------|
| <b>Penninx et al.</b> <sup>e20</sup>      | *            | *          | *             | *                | *               | *                 | 0.14             | -0.11       | 0.39        | Yes   | 2160             | Ill           | No                |
| <b>Pilu et al.</b> <sup>e28</sup>         | 20.50        | 7.10       | 8.10          | 19.30            | 5.70            | 16.70             | 1.54             | -0.69       | 2.40        | No    | 3840             | Ill           | No                |
| <b>Putiri et al.</b> <sup>e29</sup>       | 5.20         | 2.60       | 2.60          | 5.00             | 3.10            | 5.10              | 0.86             | -0.31       | 2.02        | No    | 2160             | Ill           | No                |
| <b>Sarsan et al.</b> <sup>e21</sup>       | 13.95        | 7.27       | 10.80         | 14.85            | 9.25            | 15.85             | 0.49             | -0.14       | 1.12        | Yes   | NR               | Ill           | Yes               |
| <b>Sims et al.</b> <sup>e30</sup>         | 15.43        | 7.49       | 15.13         | 22.37            | 8.86            | 20.62             | -0.17            | -0.76       | 0.41        | Yes   | NR               | Ill           | No                |
| <b>Singh et al.</b> <sup>e28</sup>        | 21.30        | 7.42       | 9.80          | 18.40            | 6.58            | 13.80             | 0.95             | 0.22        | 1.69        | Yes   | 1500             | Ill           | Yes               |
| <b>Singh et al.</b> <sup>e28</sup>        | 5.20         | 1.65       | 2.00          | 4.60             | 1.55            | 3.30              | 1.16             | 0.41        | 1.91        | Yes   | 1500             | Ill           | Yes               |
| <b>Singh et al.</b> <sup>e28</sup>        | 16.90        | 6.60       | 8.60          | 13.90            | 5.42            | 12.00             | 1.03             | 0.29        | 1.77        | Yes   | 1500             | Ill           | Yes               |
| <b>Singh et al.</b> <sup>e28</sup>        | 12.30        | 3.71       | 5.30          | 11.40            | 3.87            | 8.90              | 1.16             | 0.41        | 1.91        | Yes   | 1500             | Ill           | Yes               |
| <b>Singh et al.</b> <sup>e31</sup>        | 19.90        | 6.73       | 11.20         | 18.00            | 7.21            | 14.20             | 0.68             | -0.09       | 1.46        | Yes   | 900              | Ill           | Yes               |
| <b>Singh et al.</b> <sup>e31</sup>        | 16.20        | 6.36       | 9.10          | 13.70            | 5.77            | 11.20             | 0.73             | -0.05       | 1.51        | Yes   | 900              | Ill           | Yes               |
| <b>Singh et al.</b> <sup>e31</sup>        | 11.60        | 3.74       | 7.20          | 11.20            | 4.33            | 9.00              | 0.53             | -0.24       | 1.30        | Yes   | 900              | Ill           | Yes               |
| <b>Sparrow et al.</b> <sup>e2</sup>       | 3.80         | 4.30       | 4.70          | 5.00             | 6.30            | 5.90              | 0.00             | -0.39       | 0.39        | Yes   | 2160             | healthy       | No                |
| <b>Sparrow et al.</b> <sup>e2</sup>       | 3.80         | 4.30       | 4.60          | 5.00             | 6.30            | 5.80              | 0.00             | -0.39       | 0.39        | Yes   | 4320             | healthy       | No                |
| <b>Tapps et al.</b> <sup>e14</sup>        | 8.27         | 2.33       | 6.73          | 1.55             | 1.37            | 3.91              | 2.16             | 1.28        | 3.07        | No    | 360              | healthy       | No                |
| <b>Tapps et al.</b> <sup>e14</sup>        | 8.27         | 2.33       | 2.73          | 1.55             | 1.37            | 2.36              | 3.52             | 2.33        | 4.66        | No    | 720              | healthy       | No                |
| <b>Tapps et al.</b> <sup>e14</sup>        | 8.27         | 2.33       | 1.73          | 1.55             | 1.37            | 2.58              | 4.19             | 2.91        | 5.47        | No    | 1080             | healthy       | No                |
| <b>van der Kooi et al.</b> <sup>e32</sup> | 2.40         | 2.80       | 1.90          | 2.20             | 2.71            | 1.10              | -0.21            | -0.93       | 0.51        | Yes   | 4680             | Ill           | No                |
| <b>van der Kooi et al.</b> <sup>e32</sup> | 0.70         | 2.91       | 0.70          | 1.90             | 2.87            | 1.50              | -0.14            | -0.80       | 0.53        | Yes   | 4680             | Ill           | No                |
| <b>Vizza et al.</b> <sup>e33</sup>        | 10.80        | 6.80       | 5.40          | 12.70            | 9.60            | 14.70             | 0.84             | -0.30       | 1.98        | Yes   | 2880             | Ill           | No                |
| <b>Zanuso et al.</b> <sup>e13</sup>       | 40.93        | 1.73       | 40.04         | 41.34            | 5.98            | 40.48             | 0.01             | -0.87       | 0.88        | No    | 5040             | healthy       | No                |

Abbreviations: RET, Resistance exercise training; 95%CI, 95% confidence interval; NR, not reported. BDI, Beck Depression Inventory; BRUMS-D, Brunel Mood Scale Questionnaire-depression; CDS, Cardiac Depression Scale; CESD, Center for Epidemiologic Studies Depression Scale; DACL, Depression Adjective Checklist; DASS-21, Depression, Anxiety and Stress Scale; DSM, Diagnostic Statistics Manual-IV symptoms; GDS, Geriatric Depression Scale; HADS, Hospital Anxiety and Depression Scale; SCL-90-D, Hopkins Symptom Checklist-depression; HRSD, Hamilton Rating Scale for Depression; MDI, Major Depression Inventory; MHFI, Mental Health Functioning Index-depression; POMS-D, Profile of Mood States-depression, wk, weeks. \*Age presented as mean ± SD if reported, if not, age range is presented.

\*Effect sizes approximated from exact *p* values reported in manuscript, and confirmed with previous meta-analyses.

**eTable 3.** Definitions for Each Moderator and Associated Levels

| <b>Primary moderators</b>                  | <b>Definition</b>   |
|--|---|
| <b>Total Volume (continuous variable)</b>  | Intervention length x frequency x session duration  |
| <b>Significant improvement in Strength</b> |   |
| Yes  | The 95% confidence interval corresponding to the Hedges' <i>d</i> effect size for strength change did not encompass zero                          |
| No   | Strength was not reported, or the 95% confidence interval corresponding to the Hedges' <i>d</i> effect size for strength change encompassed zero. |
| <b>Blind</b>                               |   |
| Yes  | Authors reported allocation and/or administration and assessment of outcomes as blinded   |
| No   | Authors did not report allocation and/or administration and assessment of outcomes as blinded   |
| <b>Health</b>                              |   |
| Healthy                                    | Participants did not have a physical or mental illness  |
| Ill  | Participants had a physical or mental illness   |
| <b>Secondary moderators</b>                |   |
| <b>Sex</b>                                 |   |
| Female                                     | Participants were female only   |
| Mixed                                      | Participants were not female only   |
| <b>Age(years)</b>                          |   |
| <55  | Participant mean age was less than 55 years of age  |
| 55+  | Participants mean age was 55 years of age or older  |
| <b>Mental Health</b>                       |   |
| Mental Illness                             | Participants had a diagnosed mental illness [GAD, depression]   |
| No Mental Illness                          | Participants did not have a diagnosed mental illness  |
| <b>Physical Health</b>                     |   |
| Physical Illness                           | Participants had a physical illness [cancer, obesity, lupus, etc.]  |
| No Physical Illness                        | Participants did not have a physical illness  |
| <b>Control condition</b>                   |   |
| Attention placebo control                  | The comparison condition involved an attention placebo control  |
| No attention placebo control               | The comparison condition did not involve an attention placebo control   |
| <b>Comparison type</b>                     |   |
| Wait list                                  | The comparison condition involved waiting to participate in the intervention  |
| Patient education                          | The comparison condition involved an education program  |
| No treatment                               | The comparison condition involved no treatment  |
| Usual care                                 | The comparison condition involved usual medical care  |
| Placebo or second treatment                | The comparison condition involved a placebo or second treatment that was added to the intervention group as well.                                 |
| <b>Program</b>                             |   |
| <12 weeks                                  | The program lasted less than 12 weeks   |
| 12+ weeks                                  | The program lasted 12 weeks or more   |
| <b>Session</b>                             |   |
| <45 minutes                                | The exercise session lasted less than 45 minutes  |
| 45+ minutes                                | The exercise session lasted 45 minutes or more  |
| <b>Frequency</b>                           |   |
| 2 days/week                                | The exercise program was conducted 2 times per week   |
| 3 days/week                                | The exercise program was conducted 3 times per week   |
| <b>Secondary moderators</b>                |   |
| <b>Intensity</b>                           |   |



|  |  |
|--|--|
| Low to moderate                            | Relative intensity: <80% 1RM, 12-16 RPE or authors reported exercise was of a low/moderate intensity |
| Vigorous                                   | Vigorous intensity: ≥80% 1RM, >16 RPE, or authors reported exercise was of a vigorous intensity      |
| <b>Supervision</b>                         |  |
| Combination of supervised and unsupervised | The program was not fully supervised   |
| Yes  | The program was fully supervised   |
| <b>Primary Outcome Depression</b>          |  |
| Yes  | The primary outcome of the study was depression  |
| No   | The primary outcome of the study was not depression  |

**Abbreviations:** GAD, generalized anxiety disorder; RM, repetition maximum; RPE, rate of perceived exer

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