

S2 Table. COSMIN assessment tool and Post-Hoc power. The average score between reviewers was taken for the final inclusion. Power threshold was based at 0.8 (80%).

| Study                            | Reviewer 1<br>COMIN<br>score | Reviewer 2<br>COMIN<br>score | Mean<br>scores of<br>reviewers | Included<br>in review<br>(Yes/No) | Statistical<br>Power ( $\beta$ )<br>(%) |
|----------------------------------|------------------------------|------------------------------|--------------------------------|-----------------------------------|---|
| Ahtiainen et al., 2011           | 3.38                         | 3.25                         | 3.31                           | Yes                               | <b>46.3</b>                             |
| <b>Bae et al., 2007</b>          | <b>2.50</b>                  | <b>2.64</b>                  | <b>2.57</b>                    | <b>No</b>                         | 81.3                                    |
| Böhm et al., 2016                | 3.25                         | 3.25                         | 3.25                           | Yes                               | <b>25.4</b>                             |
| Bouchard et al., 2010            | 3.00                         | 3.00                         | 3.00                           | Yes                               | 89.2                                    |
| Butcher et al., 2008             | 3.13                         | 3.13                         | 3.13                           | Yes                               | 13.6                                    |
| <b>Caldow et al., 2015</b>       | <b>2.63</b>                  | <b>2.63</b>                  | <b>2.63</b>                    | <b>No</b>                         | 98.1                                    |
| <b>Camera et al., 2010</b>       | <b>2.50</b>                  | <b>2.63</b>                  | <b>2.56</b>                    | <b>No</b>                         | <b>NR</b>                               |
| <b>Christiansen et al., 2010</b> | <b>2.75</b>                  | <b>2.75</b>                  | <b>2.75</b>                    | <b>No</b>                         | <b>53.6</b>                             |
| <b>Cięszczyk et al., 2016</b>    | <b>2.75</b>                  | <b>2.75</b>                  | <b>2.75</b>                    | <b>No</b>                         | 96                                      |
| Clarkson et al., 2005            | 3.00                         | 3.00                         | 3.00                           | Yes                               | 100                                     |
| Colakoglu et al., 2005           | 3.25                         | 3.13                         | 3.19                           | Yes                               | 100                                     |
| Daidsen et al., 2010             | 3.13                         | 3.00                         | 3.06                           | Yes                               | <b>78.8</b>                             |
| <b>Denham et al., 2018</b>       | <b>2.50</b>                  | <b>2.50</b>                  | <b>2.50</b>                    | <b>No</b>                         | <b>54.5</b>                             |
| Dohlmann et al., 2018            | 3.25                         | 3.25                         | 3.25                           | Yes                               | 84.3                                    |
| Egan et al., 2013                | 3.00                         | 3.00                         | 3.00                           | Yes                               | <b>77.4</b>                             |
| Erskine et al., 2012             | 3.13                         | 3.13                         | 3.13                           | Yes                               | 96.1                                    |
| Gentil et al., 2011              | 3.25                         | 3.25                         | 3.25                           | Yes                               | 85                                      |
| Gentil et al., 2012              | 3.38                         | 3.50                         | 3.44                           | Yes                               | 98.3                                    |
| <b>Hamel et al., 1986</b>        | <b>2.88</b>                  | <b>2.88</b>                  | <b>2.88</b>                    | <b>No</b>                         | <b>54.7</b>                             |
| <b>Harmon et al., 2010</b>       | <b>2.88</b>                  | <b>2.88</b>                  | <b>2.88</b>                    | <b>No</b>                         | 100                                     |
| He et al., 2010                  | 3.00                         | 3.00                         | 3.00                           | Yes                               | <b>46.8</b>                             |
| Kazior et al., 2016              | 3.00                         | 3.00                         | 3.00                           | Yes                               | 99.9                                    |
| Konopka et al., 2013             | 3.00                         | 3.13                         | 3.06                           | Yes                               | 84.1                                    |
| Lamas et al., 2010               | 3.00                         | 3.00                         | 3.00                           | Yes                               | 99.7                                    |
| Little et al., 2010              | 3.00                         | 3.00                         | 3.00                           | Yes                               | 84.2                                    |
| Lundberg et al., 2014            | 3.00                         | 3.13                         | 3.06                           | Yes                               | <b>75.4</b>                             |
| McPhee et al., 2011a             | 3.13                         | 3.13                         | 3.13                           | Yes                               | 89.3                                    |
| McPhee et al., 2011b             | 3.00                         | 3.13                         | 3.06                           | Yes                               | 100                                     |
| <b>Murakami et al., 2002</b>     | <b>2.88</b>                  | <b>2.75</b>                  | <b>2.81</b>                    | <b>No</b>                         | 99.9                                    |
| <b>Nader et al., 2014</b>        | <b>2.63</b>                  | <b>2.63</b>                  | <b>2.63</b>                    | <b>No</b>                         | 100                                     |
| <b>Parcell et al., 2005</b>      | <b>2.63</b>                  | <b>2.63</b>                  | <b>2.63</b>                    | <b>No</b>                         | 97.6                                    |
| Parra et al., 2000               | 3.00                         | 3.00                         | 3.00                           | Yes                               | 100                                     |
| Rankinen et al., 2000a           | 3.38                         | 3.38                         | 3.38                           | Yes                               | 100                                     |
| Rankinen et al., 2000b           | 3.25                         | 3.25                         | 3.25                           | Yes                               | 100                                     |
| Rico-Sanz et al., 2004           | 3.00                         | 3.00                         | 3.00                           | Yes                               | 100                                     |
| <b>Schrauwen et al., 2002</b>    | <b>2.00</b>                  | <b>2.00</b>                  | <b>2.00</b>                    | <b>No</b>                         | <b>19.4</b>                             |
| Silva et al., 2015               | 3.00                         | 3.13                         | 3.06                           | Yes                               | 90.7                                    |
| Thomis et al., 2004              | 3.38                         | 3.38                         | 3.38                           | Yes                               | 97.1                                    |

|                             |             |             |             |           |      |
|-----------------------------|-------------|-------------|-------------|-----------|------|
| Thompson et al., 2004       | 3.13        | 3.13        | 3.13        | Yes       | 97.6 |
| <b>Walker et al., 2004</b>  | <b>2.88</b> | <b>3.00</b> | <b>2.94</b> | <b>No</b> | 99.9 |
| Wilkinson et al., 2008      | 3.13        | 3.13        | 3.13        | Yes       | 100  |
| Yu et al., 2014             | 3.00        | 3.00        | 3.00        | Yes       | 86.8 |
| <b>Zarebska et al.,2014</b> | <b>2.25</b> | <b>2.25</b> | <b>2.25</b> | <b>No</b> | 81.1 |

- Bold highlight = did not meet the threshold scores; NR = not reported (unable to calculate power due to lack of data presented).