**Supplemental Table 2: Risk of bias assessment**

| Study                  | PEDro final score | Eligibility criteria specified | Random allocation | Concealed allocation | Similar groups at baseline | Blinding of therapists | Blinding of assessors | Blinding of subjects | Measure one key outcome from 85% subjects | Intention-to-treat analysis | Between group statistical analysis for at least one outcome | Variability and point measurements for at least one outcome |
|------------------------|-------------------|--------------------------------|------------------|----------------------|---------------------------|------------------------|----------------------|-----------------------|-------------------------------------------|-----------------------------|----------------------------------------------------------|----------------------------------------------------------|
| Salehzadeh (2015)      | 6/10              | Yes                            | Yes              | No                   | Yes                       | No                     | No                   | No                    | Yes                                       | Yes                         | Yes                                                     | Yes                                                     |
| Brennan et al. (2018)  | 10/10             | Yes                            | Yes              | Yes                  | Yes                       | Yes                    | Yes                  | Yes                   | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Tiollier et al. (2007) | 10/10             | Yes                            | Yes              | Yes                  | Yes                       | Yes                    | Yes                  | Yes                   | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Huang et al. (2019)    | 10/10             | Yes                            | Yes              | Yes                  | Yes                       | Yes                    | Yes                  | Yes                   | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Gill et al. (2016a)    | 10/10             | Yes                            | Yes              | Yes                  | Yes                       | Yes                    | Yes                  | Yes                   | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Gill et al. (2016b)    | 10/10             | Yes                            | Yes              | Yes                  | Yes                       | Yes                    | Yes                  | Yes                   | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Haywood et al. (2014)  | 10/10             | Yes                            | Yes              | Yes                  | Yes                       | Yes                    | Yes                  | Yes                   | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Sashihara et al. (2013)| 10/10             | Yes                            | Yes              | Yes                  | Yes                       | Yes                    | Yes                  | Yes                   | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Shing et al. (2014)    | 10/10             | Yes                            | Yes              | Yes                  | Yes                       | Yes                    | Yes                  | Yes                   | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| West et al. (2011)     | 10/10             | Yes                            | Yes              | Yes                  | Yes                       | Yes                    | Yes                  | Yes                   | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Townsend et al. (2018) | 10/10             | Yes                            | Yes              | Yes                  | Yes                       | Yes                    | Yes                  | Yes                   | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Gepner et al. (2017)   | 10/10             | Yes                            | Yes              | Yes                  | Yes                       | Yes                    | Yes                  | Yes                   | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Carhuhn et al. (2018)  | 10/10             | Yes                            | Yes              | Yes                  | Yes                       | Yes                    | Yes                  | Yes                   | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Charlesson et al. (2013)| 5/10             | Yes                            | No                | No                   | Yes                       | No                     | No                   | No                    | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Strasser et al. (2016) | 10/10             | Yes                            | Yes              | Yes                  | Yes                       | Yes                    | Yes                  | Yes                   | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Marshall et al. (2017) | 6/10              | Yes                            | Yes              | No                   | Yes                       | No                     | No                   | No                    | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Salkirk et al. (2013)  | 6/10              | Yes                            | Yes              | No                   | Yes                       | Yes                    | No                   | No                    | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Cox et al. (2010)      | 10/10             | Yes                            | Yes              | Yes                  | Yes                       | Yes                    | Yes                  | Yes                   | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Michalickova et al. (2017)| 10/10| Yes                            | Yes              | Yes                  | Yes                       | Yes                    | Yes                  | Yes                   | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Michalickova et al. (2016)| 10/10| Yes                            | Yes              | Yes                  | Yes                       | Yes                    | Yes                  | Yes                   | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| O’Brien et al. (2015)  | 6/10              | Yes                            | Yes              | No                   | Yes                       | No                     | No                   | No                    | Yes                                        | Yes                         | Yes                                                     | Yes                                                     |
| Study                     | Effect Size | Baseline | Intervention | Follow-up | Nonresponse Bias | Attrition Bias | Confounding Bias | Publication Bias | Reporting Bias | Researcher Bias | Funding Bias |
|---------------------------|-------------|----------|--------------|-----------|------------------|----------------|------------------|------------------|----------------|------------------|--------------|
| Gleeson et al. (2016)     | 10/10       | Yes      | Yes          | Yes       | Yes              | Yes            | Yes              | Yes              | Yes            | Yes              | Yes          |
| Lamprecht et al. (2012)   | 10/10       | Yes      | Yes          | Yes       | Yes              | Yes            | Yes              | Yes              | Yes            | Yes              | Yes          |
| Pumpa et al. (2019)       | 10/10       | Yes      | Yes          | Yes       | Yes              | Yes            | Yes              | Yes              | Yes            | Yes              | Yes          |
| Jäger et al. (2016)       | 10/10       | Yes      | Yes          | Yes       | Yes              | Yes            | Yes              | Yes              | Yes            | Yes              | Yes          |
| Vaisberg et al. (2019)    | 10/10       | Yes      | Yes          | Yes       | Yes              | Yes            | Yes              | Yes              | Yes            | Yes              | Yes          |
| Komano et al. (2018)      | 10/10       | Yes      | Yes          | Yes       | Yes              | Yes            | Yes              | Yes              | Yes            | Yes              | Yes          |
| Pugh et al. (2019)        | 10/10       | Yes      | Yes          | Yes       | Yes              | Yes            | Yes              | Yes              | Yes            | Yes              | Yes          |
| Martarelli et al. (2011)  | 6/10        | Yes      | No           | Yes       | No               | No             | Yes              | Yes              | Yes            | Yes              | Yes          |
| Moreira et al. (2007)     | 10/10       | Yes      | Yes          | Yes       | Yes              | Yes            | Yes              | Yes              | Yes            | Yes              | Yes          |
| Kekkonen et al. (2007)*   | 10/10       | Yes      | Yes          | Yes       | Yes              | Yes            | Yes              | Yes              | Yes            | Yes              | Yes          |
| Välimäki et al. (2012)    | 10/10       | Yes      | Yes          | Yes       | Yes              | Yes            | Yes              | Yes              | Yes            | Yes              | Yes          |
| Roberts et al. (2016)     | 10/10       | Yes      | Yes          | Yes       | Yes              | Yes            | Yes              | Yes              | Yes            | Yes              | Yes          |
| Gleeson et al. (2011)     | 10/10       | Yes      | Yes          | Yes       | Yes              | Yes            | Yes              | Yes              | Yes            | Yes              | Yes          |
| Hoffmann et al. (2019)    | 10/10       | Yes      | Yes          | Yes       | Yes              | Yes            | Yes              | Yes              | Yes            | Yes              | Yes          |
| Meng et al. (2016)        | 8/10        | Yes      | Yes          | Yes       | No               | No             | Yes              | Yes              | Yes            | Yes              | Yes          |
| Mooren et al. (2020)      | 5/10        | Yes      | No           | No        | Yes              | No             | No               | Yes              | Yes            | Yes              | Yes          |
| Muhamad & Gleeson (2014)  | 5/10        | Yes      | No           | No        | Yes              | No             | No               | Yes              | Yes            | Yes              | Yes          |
| Ibrahim et al. (2018)     | 6/10        | Yes      | Yes          | Yes       | No               | No             | Yes              | Yes              | Yes            | Yes              | Yes          |
| West et al. (2012)        | 10/10       | Yes      | Yes          | Yes       | Yes              | Yes            | Yes              | Yes              | Yes            | Yes              | Yes          |
| West et al. (2014)        | 10/10       | Yes      | Yes          | Yes       | Yes              | Yes            | Yes              | Yes              | Yes            | Yes              | Yes          |

* Identical participants reported by Moreira et al. (2007).