**Supplemental Material 4.** Methodological Quality (MQ) of the 23 Studies Included in the Meta-Analysis

|  | Barrow et al. (2007) | Bose et al. (2016) | Cajanding et al. (2016) | Chang et al. (2005) | Curiati et al. (2005) | Dekker et al. (2012) | Freedland et al. (2015) | Gary et al. (2010) | Huang et al. (2016) | Jayadevappa et al. (2007) | Krishna et al. (2014) | Pen (2016) | Powell et al. (2010) | Pullen et al. (2010) | Pullen et al. (2008) | Redwine et al. (2019) | Seo et al. (2016) | Sherwood et al. (2017) | Swanson et al. (2009) | Wang et al. (2014) | Yeh et al. (2011) | Yeh et al. (2004) | Yu et al. (2007) | **% or M(SD)** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. **Hypotheses clearly defined** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | **100% [y]** |
| 1. **Participant characteristics clearly described** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | **100% [y]** |
| 1. **Sample representative of recruitment population** | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **4% [y]** |
| 1. **Type of random assignmenta** | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 2 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | **52% [4]**  **44% [3]**  **4% [2]** |
| 1. **Adequacy of control groupb** | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | **22% [3]**  **78% [2]** |
| 1. **Participants blind to group assignment** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | **4% [y]** |
| 1. **Quality control of treatmentc** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | **96% [1]** |
| 1. **Intervention compliance reported** | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | **70% [y]** |
| 1. **Outcomes clearly described** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | **100% [y]** |
| 1. **Outcome measures valid and reliable** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | **100% [y]** |
| 1. **Objective outcome measured** | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | **91% [y]** |
| 1. **Attempt to blind researchers** | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | **65% [y]** |
| 1. **Follow-up lengthd** | 0 | 2 | 0 | 2 | 0 | 1 | 2 | 1 | 2 | 1 | 0 | 2 | 2 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 2 | 0 | 0 | **35% [2]**  **17% [1]**  **48% [0]** |
| 1. **Described participants lost to follow-up** | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | **61% [y]** |
| 1. **Retention ratee** | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 0 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 1 | **44% [2]**  **52% [1]**  **4% [0]** |
| 1. **Appropriate statistical analysesf** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | **87% [2]**  **13% [1]** |
| 1. **Missing data reported and considered** | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | **52% [y]** |
| **Total MQ Score** | 16 | 19 | 15 | 22 | 19 | 18 | 21 | 18 | 18 | 18 | 16 | 15 | 19 | 18 | 20 | 19 | 18 | 22 | 18 | 15 | 20 | 18 | 18 | **18(2)** |
| **% MQ** | .64 | .76 | .60 | .88 | .76 | .72 | .84 | .72 | .72 | .72 | .64 | .60 | .76 | .72 | .80 | .76 | .72 | .88 | .72 | .60 | .80 | .72 | .72 | **73%** |

*Note*. All MQ variables were scored as no/not reported (0) or yes (1) except where noted.   
a0 = None, 1 = Quasi-experimental, 2 = Randomized groups, 3 = Matched, then randomized, 4 = True randomization b0 = No control group, 1 = Did not determine group equivalency, 2 = Compared for equivalence, 3 = Matched for equivalency

c0 = No standardization of treatment specified; 1 = Treatment standardized by manual, specific training, content coding, etc.

d0 = ≤3 months, 1 = 3-5 months, 2 = ≥6 months

e0 = <70% retention, 1 = 70-84% retention, 2 = 85-100% retention

f0 = Inadequate, 1 = Appropriate, did not control for relevant variables, 2 = Appropriate, controlled for relevant variables