# Multimedia Appendix 11. Grading of recommendations, assessment, development, and evaluation quality of evidence profile.

| Quality Assessment | | | | | | Summary of Findings | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | | | | | | **Number of Participants** | | | |
| **Number of Studies\*** | **Risk of Bias** | **Inconsistency** | **Indirectness** | **Imprecision** | **Publication Bias** | **mHealth** | **Control** | **Effect Size as SMD (95% CI)** | **Signi-ficance** | **Quality** |
| Walking (75 RCTs) | *Very Serious* 58/75 studies high risk of bias based on Cochrane criteria. Numerous studies with short intervention duration, small samples sizes and high attrition. As in most mHealth studies, blinding of participants and personnel is not possible. | *Not serious* Very high level of heterogenicity ($I^2$=84%) but range of results limited with 68/75 studies showing positive effects and CI [0.37-0.57] | *Not serious* Populations and interventions relevant | *Not serious* Low baseline risk (<5%), narrow confidence interval, sample size 12301) | *Undetected* Moderate sample size (mean=197, range=21-1442), funnel plot analysis does not suggest systematic publication bias. | 6307 | 5994 | 0.47 [0.37-0.57] | *P<.001* | ●●○○ |
| MVPA (61 RCTs) | *Very Serious* 47/61 studies high risk of bias based on Cochrane criteria. Numerous studies with short intervention duration, small samples sizes and high attrition. As in most mHealth studies, blinding of participants and personell is not possible. | *Not serious* Moderate to high level of heterogenicity ($I^2$=63%) but range of results limited with 53/61 studies showing positive effects and CI [0.22-0.36] | *Not serious* Populations and interventions relevant | *Not serious* Low baseline risk (<5%), narrow confidence interval, sample size 10861) | *Undetected* Moderate sample size (mean=225, range=29-1442), funnel plot analysis does not suggest systematic publication bias. | 5787 | 5074 | 0.29 [0.22-0.36] | *P<.001* | ●●○○ |
| Total PA (34 RCTs) | *Very Serious* 29/34 studies high risk of bias based on Cochrane criteria. Numerous studies with short intervention duration, small samples sizes and high attrition. As in most mHealth studies, blinding of participants and personnel is not possible. | *Not serious* Moderate to high level of heterogenicity ($I^2$=68%), moderate range of results [0.16-0.38] and 28/34 studies finding positive effects. | *Not serious* Populations and interventions relevant | *Not serious* Low baseline risk (<5%), narrow confidence interval, sample size 5144) | *Undetected* Moderate sample size (mean=189, range=15-1113), funnel plot analysis does not suggest systematic publication bias. | 2702 | 2442 | 0.27 [0.16-0.38] | *P<.001* | ●●○○ |
| Energy Expenditure (8 RCTs) | *Very Serious* 7/8 studies high risk of bias based on Cochrane criteria. Numerous studies with short intervention duration, small samples sizes and high attrition. As in most mHealth studies, blinding of participants and personnel is not possible. | *Very serious* High level of heterogenicity ($I^2$=87%), large effect range CI [0.13-1.00], small sample. | *Not serious* Populations and interventions relevant | *Not serious* Low baseline risk (<5%), narrow confidence interval, sample size 834) | *Undetected* Small sample size (mean=128, range=37-463), funnel plot analysis does not suggest systematic publication bias. | 481 | 353 | 0.57 [0.13-1.00] | *P=.01* | ○○○○ |

*Abbreviations*: GRADE, Grading of recommendations, assessment, development, and evaluation; RCT, randomized controlled trials; CI, confidence intervals
\* Number of studies that report results at end of intervention.