

**Table F.1.f. People with major clinical depression, relationship between physical activity and health-related outcomes**

**Questions:** What is the association between **physical activity** and health-related outcomes?

**Population:** People with major clinical depression

**Exposure:** Greater volume, duration, frequency, or intensity of physical activity

**Comparison:** No physical activity or lesser volume, duration, frequency, or intensity of physical activity

**Outcome:** Health-related QOL

Outcome	Systematic review evidence Review credibility	No. of studies/ Study design No. of participants	Quality Assessment					Summary of findings	Certainty	US PAGAC evidence (39)
			Risk of bias	Inconsistency	Indirectness †	Imprecision	Other			
Health-related QOL	Stubbs 2018 <sup>a</sup> (31) Moderate	1 ESR (6 RCTs, N=198)	NA <sup>c</sup>					One high credibility review found exercise was associated with improved overall QOL (SMD = 0.39 [95% CI, 0.27 to 0.74], p=0.002, 5 trials) and physical and psychological QOL domains. There was no effect seen for social or environmental QOL domains.	MODERATE <sup>g, h</sup>	<a href="#">3 ESRs</a>  Limited evidence suggests that physical activity improves quality of life for adults with major clinical depression. <b>PAGAC Grade: Limited</b>
	Krogh 2017 (20) Moderate	9 RCTs N=827	Serious risk of bias	Serious inconsistency	Serious indirectness	Serious imprecision	NR	Mean age ranged from 21 to 75 years and 5 trials included participants with a mean age >60 years. Ten trials included inpatients. Comparisons were variable including exercise intervention vs. control group, comparison of various intensities of exercise, and comparison of one type of exercise vs. another.  Pooled analysis found no statistically significant difference in QOL scores among exercise vs. control groups (SMD = 0.40 [95% CI, -0.03 to 0.83], 9 trials).	VERY LOW <sup>ii</sup>	

Abbreviations: CI = confidence interval; CRF = cardiorespiratory fitness; ESR = existing systematic review; NA = not applicable; NR = not reported; NRSI = non-randomized study of an intervention; PAGAC = Physical Activity Guidelines Advisory Committee; QOL = quality of life; RCT = randomized clinical trial; RR = risk ratio; SMD = standardized mean difference

† Serious indirectness indicates measurement of intermediate/indirect outcomes or heterogeneity in exposures and comparisons assessed; certainty of evidence was not always downgraded for indirectness if it was not judged to impact the certainty in the findings for the outcome evaluated in the review

<sup>a</sup> Both Stubbs et al. 2018 and Ashdown-Franks et al. 2019 were review-of-reviews and included the same existing systematic reviews for evidence related to adults with major depression

<sup>b</sup> Total N calculated by adding n's of each review; total number may be lower if reviews included overlapping studies

<sup>c</sup> Not able to assign given review-of-review methodology

<sup>d</sup> Certainty of evidence not downgraded

<sup>e</sup> Stubbs 2018 (31) rated as 1+ evidence (Well-conducted meta-analyses, systematic reviews or RCTs with a low risk of bias)

<sup>f</sup> As reported by review authors. Certainty of evidence downgraded due to serious risk of bias of included studies, serious inconsistency (I<sup>2</sup>>70%), serious indirectness (heterogeneity and applicability of populations and comparisons), and possible publication bias

<sup>g</sup> Certainty of evidence downgraded given limited number of RCTs with no long-term data

<sup>h</sup> Stubbs 2018 (31) rated as -1 evidence (Meta-analyses, systematic reviews or RCTs with a high risk of bias)

<sup>l</sup> As reported by review authors. Certainty of evidence downgraded given serious risk of bias, inconsistency, and imprecision