


Report Supplementary Material 15: GRADE Assessment of Outcome Evaluations – Short-term Outcomes

Question: Interventions for mental wellbeing compared to treatment as usual for mental health outcomes (short-term)


Setting: Short-term

Certainty assessment							Impact	Certainty	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations			


Externalising problems

18	randomised trials	serious ^a	not serious	not serious	serious ^b	none	SMD 0.30 SD lower (95% CI 0.53 to 0.08 lower)	 Low	
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Internalising problems

12	randomised trials	serious ^a	serious ^c	not serious	serious ^b	none	SMD 0.35 SD lower (95% CI 0.61 to 0.08 lower)	 Very low	
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Anxiety and depression

8	randomised trials	serious ^a	not serious	not serious	serious ^b	publication bias strongly suspected ^d	SMD 0.26 SD lower (95% CI 0.40 to 0.13 lower)	 Very low	
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Self-harm and suicidal ideation

1	randomised trials	serious ^a	not serious	not serious	extremely serious ^a	none	<i>HealthRHYTHMS (Bittman, 2009)</i> No effect on frequency self-harm: SMD 0.19 SD lower (95% CI 0.85 lower to 0.48 higher) No effect on suicidal ideation: SMD 0.27 SD lower (95% CI 0.94 lower to 0.39 higher)	 Very low	
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Subjective wellbeing

1	randomised trials	serious ^a	not serious	not serious	extremely serious ^a	none	<i>Wave by Wave Surf Therapy (Pereira, 2020):</i> No effect on health related QoL: SMD 0.25 SD higher (95% CI 0.76 higher to 0.26 lower)	 Very low	
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Total impaired functioning

10	randomised trials	serious ^a	not serious	not serious	serious ^b	none	SMD 0.18 SD lower (95% CI 0.31 to 0.05 lower)	 Low	
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Total problems

Certainty assessment							Impact	Certainty	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations			
11	randomised trials	serious ^a	not serious	not serious	serious ^b	none	SMD 0.15 SD lower (95% CI 0.28 to 0.02 lower)	 Low	

CI: confidence interval

Explanations

- All trials included appraised as 'some concerns'
- Confidence interval includes the MID of 0.2 SD.
- Between-study variance more than 50% of total variance in meta-analysis
- Robust Egger's regression yields one-sided $p < 0.05$
- Confidence interval includes the MID on both sides of the null effect.


GRADE Assessment of Outcome Evaluations – Long-term Outcomes

Question: Interventions for mental wellbeing compared to treatment as usual for mental health outcomes (long-term)


Setting: Long-term

Certainty assessment							Impact	Certainty	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations			


Externalising problems

9	randomised trials	serious ^a	not serious	not serious	very serious ^b	publication bias strongly suspected ^c	SMD 0.02 SD higher (95% CI 0.17 lower to 0.20 higher)	 Very low	
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Internalising problems

7	randomised trials	serious ^a	not serious	not serious	extremely serious ^d	none	SMD 0.03 SD lower (95% CI 0.31 lower to 0.25 higher)	 Very low	
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Anxiety and depression

4	randomised trials	very serious ^a	serious ^f	not serious	extremely serious ^d	none	<p><i>Fostering Individualised Assistance Program (Clark, 1994):</i> No effect on child or parent-rated anxiety/depression or withdrawal</p> <p><i>Triple P for Foster Parents (Job, 2022):</i> No effect on anxiety symptoms</p> <p><i>Mentoring intervention for teenage pregnancy (Mezey, 2015)</i> No effect on anxiety/depression</p> <p><i>Take Charge intervention (Geenen, 2012)</i> Lower anxiety/depression score at 12 months, self-rated (SMD 0.44 SD lower, 95% CI: 0.79 lower to 0.18 lower) and parent rated (SMD 0.65 SD lower, 95% CI: 1.02 lower to 0.29 lower) Lower withdrawal/depression score at 12 months, parent rated (SMD 0.41 SD lower, 95% CI: 0.77 lower to 0.05 lower) Lower anxiety/depression score at 18 months, parent rated (SMD 0.36 SD lower, 95% CI: 0.71 lower to 0.00 lower) Lower withdrawal/depression score at 18 months, parent rated (SMD 0.37 SD lower, 95% CI: 0.73 lower to 0.01 lower)</p>	 Very low	
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Self-harm and suicidal ideation

1	randomised trials	very serious ^h	not serious	not serious	extremely serious ^d	none	<i>Mentoring intervention for teenage pregnancy (Mezey, 2015):</i> No effect on reported incidents of self-harm or suicide attempts	 Very low	
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Subjective wellbeing SMD 0.03 SD higher (95% CI 0.63 lower to 0.69 higher)

Certainty assessment							Impact	Certainty	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations			
1	randomised trials	serious ^a	not serious	not serious	very serious ^b	none	<i>Fostering Healthy Futures (Taussig, 2010)</i> Higher health related quality of life at 9 months post intervention : SMD 0.42 SD higher (95% CI 0.12 higher to 0.71 higher) No effect on health related quality of life at 15 months: SMD 0.14 SD higher (95% CI 0.17 lower to 0.45 higher)	 Very low	
Total impaired functioning									
8	randomised trials	very serious ^a	not serious	not serious	very serious ^b	none	SMD 0.15 SD lower (95% CI 0.40 lower to 0.09 higher)	 Very low	
Total problems									
6	randomised trials	serious ^a	not serious	not serious	extremely serious ^a	none	SMD 0.07 SD lower (95% CI 0.38 lower to 0.25 higher)	 Very low	

CI: confidence interval

Explanations

- a. All trials rated as 'some concerns' or 'high risk' but 'high risk' <25% of included trials
- b. Confidence interval includes the MID of 0.2 SD and the null effect.
- c. Robust Egger's regression yields one-sided $p < 0.05$.
- d. Confidence interval includes the MID on both sides of the null effect.
- e. All trials rated as 'some concerns' or 'high risk' but 'high risk' >25% of included trials
- f. Visual inspection of effect estimates suggests substantial spread within and between studies.
- g. Evidence could not be pooled.
- h. Trial rated 'high risk'
- i. Trial rated as 'some concerns'
- j. All trials rated as 'some concerns'