Appendix II Annex IV

Summary of the quality assessment

This table summarizes the assessment of the quality of the reviews and primary studies. The overall quality rating is provided, as well as a rating for major criteria (the key can be found immediately following the table). In case a study was found not to be acceptable, a short narrative description of the main reasons why this was the case is provided.

First Author, Year of Publication	Type of review	Quality rating (overall)	А	В	с	D	Justification if 'not acceptable'
Agostinelli 2002	Literature review	Not acceptable	•	•	•	•	Methodology not reported
Akbar 2011	Systematic review	Not acceptable	~~	√ √	•	•	No outcomes reported
Anderson 2009	Systematic Review	Acceptable	$\checkmark \checkmark \checkmark \checkmark$	$\checkmark\checkmark$	~ ~~	$\checkmark\checkmark$	
Anderson 2009	Review of reviews	Not acceptable	~	•	~	~	Search strategy not reported in detail, process underlying selection of studies unclear
Aos 2004	Cost-benefit-analysis	Not acceptable	~~	•	•	$\checkmark\checkmark$	Lack of detail concerning search strategy and individual studies
Bader 2011	Systematic review	Not acceptable	~~	~	•	~	Lack of detail concerning search strategy and data extraction
Ballesteros 2002	Meta-analysis	Not acceptable	~ ~ ~	•	~ ~ ~ ~	$\checkmark\checkmark$	Lack of detail concerning search strategy

First Author, Year of Publication	Type of review	Quality rating (overall)	А	В	С	D	Justification if 'not acceptable'
Ballesteros 2004	Meta-analysis	Good	~~~~	~ ~~~	~ ~~~	~ ~~~	
Beich 2003	Meta-analysis	Acceptable	√ √√	~ ~	~ ~~~	~~~	
Bertholet 2005	Systematic Review / Meta-analysis	Good	~ ~~~~	~ ~~~	~ ~~~	~ ~~~	
Bien 1993	Literature Review / Meta-Analysis	Not acceptable	•	•	~~~	~ ~ ~	Search strategy not reported
Bledsoe 2002	Meta-Analysis	Not acceptable	~~	~	~	•	Outcome measure is too broad (not limited to substance use)
Bolier 2011	Literature review	Acceptable	~~	~	VV	~~~~	
Bonell 2007	Literature review	Not acceptable	•	•	~	~	Methodology not reported, no evidence of systematic search or data extraction
Brennan 2011	Systematic review	Acceptable	√ √	~ ~~~	~	~ ~	
Buckley 2007	Systematic review	Not acceptable	~~	~~	•	٠	Lack of detail concerning individual studies, weaknesses in analytic approach
Bühler 2008	Review of reviews and primary studies	Acceptable	~ ~~~	~ ~~~	~~~	~	
Calafat 2009	Literature review	Not acceptable	•	•	•	•	Methodology not reported, no evidence of systematic search or data extraction
Carey 2009	Meta-analysis	Not acceptable	~ ~ ~	~~~	•	~~	Lack of detail concerning individual study results
Carney 2012	Meta-analysis	Acceptable	$\checkmark \checkmark \checkmark \checkmark$	$\checkmark\checkmark$	~ ~~~	√√	
Catalano 2012	Literature review of reviews and primary studies	Not acceptable	~~	•	~~~	~~	Methodology not reported in detail, search strategy not systematic
Chaloupka 2011	Literature review	Not acceptable	•	•	•	~	Methodology not reported in detail, expert overview rather than a systematic review
Champion 2012	Systematic review	Good	~ ~~~	~~	~ ~~~	~ ~~~	
Christakis 2003	Systematic Review	Acceptable	√ √√	~~~~	~ ~~~	~~	

First Author, Year of Publication	Type of review	Quality rating (overall)	А	В	С	D	Justification if 'not acceptable'
Cuijpers 2002	Systematic review of reviews and primary studies	Not acceptable	~~	~	~	~	Search strategy not comprehensive, lack of detail concerning individual studies
D'Onise 2010	Systematic review	Good	$\checkmark\checkmark\checkmark$	$\checkmark\checkmark\checkmark$	~ ~~~	$\checkmark\checkmark\checkmark$	
D'Onofrio 2002	Systematic Review	Not acceptable	~ ~ ~ ~	~~	~~	~	Lack of detail in reporting of methods and results
Dobbins 2008	Review of reviews	Acceptable	$\checkmark\checkmark$	~ ~	✓	$\checkmark\checkmark\checkmark$	
DuBois 2002	Meta-Analysis	Not acceptable	~ ~ ~	~ ~~~	~	•	Outcome measure is too broad (not limited to substance use)
Dunn 2001	Systematic review	Acceptable	VV	√√	√ √√√	~ ~	
Durlak 2011	Meta-Analysis	Not view view view view view view view view		~	Outcome measure is too broad (not limited to substance use)		
Dusenbury 1995	Literature review and expert interviews	Not acceptable	•	•	•	٠	No evidence of systematic process to search, select and review literature
Dusenbury 2000	Literature review and expert interviews	Not acceptable	~	•	•	~	Lack of detail concerning methodology and individual studies
Emmen 2004	Systematic review	Good	~ ~~~	~ ~~~	~ ~~~	~~~~	
Evans-Whipp 2004	Literature review	Not acceptable	•	•	~	•	Methodology not reported, no evidence of systematic search or data extraction
Fager 2004	Literature review	Acceptable	~ ~~~~	√√	√ √√√	~ ~	
Faggiano & Vigna- Taglianti 2008	Review of reviews, reports and guidelines (Entry in the International Encyclopedia of Public Health)	Not acceptable	~	•	•	~	Lack of detail concerning methodology and included studies
Flay 2000	Literature review	Not acceptable	~	•	•	٠	Lack of detail concerning methodology and individual studies
Fletcher 2008	Systematic review	Good	~ ~~~	~~~	√ √√√	~ ~~~	
Gottfredson 2003	Meta-Analysis	Not acceptable	~ ~ ~ ~	~	~	~	Lack of detail concerning methodology and individual studies

First Author, Year of Publication	Type of review	Quality rating (overall)	A	В	С	D	Justification if 'not acceptable'
Hawkins 2002	Literature review	Not acceptable	~	•	~	~	Methodology not reported, introduction to CTC model written by the developers
Hopfer 2010	Systematic review	Not acceptable	~~~	~	•	~	Lack of detail concerning search methodology and individual studies
Jackson 2012	Systematic review	Acceptable	√ √	√ √	~ ~~~	~~~~	
Jensen 2011	Meta-Analysis	Acceptable	$\checkmark \checkmark \checkmark \checkmark$	√ √	VV	~	
Jones 2006	Systematic review of reviews and primary studies	Good	~ ~~~	~~	<i>~~~</i>	~ ~~~	
Kahan 1995	Systematic review	Acceptable	$\checkmark \checkmark \checkmark \checkmark$	√ √	VV	VV	
Khadjesari 2010	Systematic Review / Meta-analysis	Good	$\checkmark \checkmark \checkmark \checkmark$	~ ~~~	~ ~~~	~ ~~~	
Knerr 2013	Systematic review	Good	$\checkmark \checkmark \checkmark \checkmark$	~ ~~~	$\checkmark\checkmark\checkmark$	~ ~~~	
Lemstra 2010	Systematic review	Good	$\checkmark\checkmark\checkmark$	~ ~~~	~ ~~~	~ ~~~	
McBride 2003	Systematic review of reviews and recent primary studies	Not acceptable	~ ~~~	~~	•	•	Lack of detail concerning individual studies
McGrath 2006	Review of reviews	Acceptable	√ √	√ √	~	~~~~	
Mejia 2012	Literature review and Systematic Review	Acceptable	~~~	~~	~ ~~~	~ ~	
Moyer 2002	Meta-analysis	Not acceptable	~~~	~	~	~~	Lack of detail concerning search strategy and individual studies
Müller- Riemenschneider 2008	Meta-analysis	Good	~~	<i>~~~</i>	~ ~~~	~ ~~~	
Najaka 2001	Meta-Analysis / Mediation analysis	Not acceptable	~ ~~~	~ ~~	~~	<i>√√√</i>	Outcome measure is too broad (not limited to substance use)
NCI 2008	Compendium of reviews	Acceptable	VV	√ √	VV	~	
Niccols 2012 (child outcomes)	Systematic review	Good	<i>√√√√</i>	<i>~~~</i>	<i>~~~</i>	~~~	
Niccols 2012 (parenting outcomes)	Systematic review	Good	~ ~~~	<i>~~~</i>	<i>~~~</i>	~ ~~~	
Nilsen 2008	Systematic review	Acceptable	~ ~~~	√ √	~ ~~~	$\checkmark\checkmark$	

First Author, Year of Publication	Type of review	Quality rating (overall)	Α	В	С	D	Justification if 'not acceptable'
Pan 2009	Meta-analysis	Acceptable	~~~	~	~~~~	~~~~	
Peters 2009	Review of reviews	Not acceptable	~	~~	~	•	Lack of detail concerning individual studies
Petrie 2007	Systematic review	Good	~ ~~~	~ ~~~	~ ~~~	~ ~~~	
Poikolainen 1999	Meta-analysis	Not acceptable	~~~	•	~ ~~~	~~	Lack of detail concerning search strategy
Popova 2009	Systematic review	Acceptable	~~	~~~~	~~	~	
Porath-Waller 2010	Meta-analysis	Acceptable	$\checkmark \checkmark \checkmark \checkmark$	~ ~	$\checkmark\checkmark$	√√	
Ranney 2006	Systematic review of reviews and primary studies	Acceptable	~ ~~~	~~	~ ~ ~	~~~	
Reavley 2010	Review of reviews and primary studies	Acceptable	~~	~~	~~	~~	
Richardson 2009	Systematic review of reviews and primary studies	Acceptable	~~	~~	~ ~~~	~ ~~	
Riper 2009	Meta-analysis	Good	~ ~~~	~ ~~~	~ ~~~	~ ~~~	
Roe 2005	Systematic review	Acceptable	~ ~~~	~~	~~~~	~~~	
Roussos 2000	Literature review	Not acceptable	~~	~~	•	•	Lack of detail concerning individual studies
Schröer-Günther 2011	Systematic review	Good	~~~	~ ~~~	~ ~~~	<i>~~~</i>	
Scott-Sheldon 2012	Meta-analysis	Not acceptable	~~~	~~	~~	~	Lack of detail concerning individual studies
Skara 2003	Systematic review	Acceptable	~ ~~~	~~~~	~ ~~~	~	
Smith 2009	Systematic review	Acceptable	√ √ √ √	~	~~~~	~~~~	
Soole 2008	Systematic review / Meta-analysis	Acceptable	√ √	~	~~	~ ~ ~	
Spoth 2008	Literature review / Review of reviews and primary studies	Acceptable	~~~	~~~	~~	<i>~~~</i>	
Strang 2012	Review of reviews and primary studies	Not acceptable	~~	~~	•	•	Lack of detail concerning methodology and included studies

First Author, Year of Publication	Type of review	Quality rating (overall)	Α	В	С	D	Justification if 'not acceptable'
Sullivan 2004	Literature review	Not acceptable	~	~~	•	~	No evidence of systematic data extraction, lack of detail concerning included studies
Tait 2003	Systematic review	Acceptable	~~	√√	~ ~~~	$\checkmark\checkmark$	
Thomas 2008	Systematic review	Good	~ ~~~	~ ~~~	VVV	$\checkmark\checkmark\checkmark$	
Tobler 1992	Meta-Analysis with Moderator Analysis	Not acceptable	~~	~	~	~	Methodology not reported
Tobler 1999	Meta-Analysis	Not acceptable	~ ~ ~	~~	~~	~	Lack of detail concerning individual studies
Tobler 2000	Meta-Analysis	Not acceptable	~ ~~~	~	~~	~	Lack of detail concerning search strategy and individual studies
Toumbourou 2007	Review of reviews	Not acceptable	~~~	~ ~	~	•	Expert overview rather than a systematic review, lack of detail concerning individual studies
Vasilaki 2006	Meta-analysis	Acceptable	~~	√√	√ √√√	~ ~~~	
Velleman 2005	Review of reviews and primary studies	Not acceptable	•	•	•	٠	Methodology not reported, process underlying study selection unclear
Wachtel 2010	Systematic review	Acceptable	~~	~	~ ~~~	~~~	
Wagenaar 2002	Systematic review	Acceptable	~~	~	VV	~~~	
Wagenaar 2009	Meta-analysis	Not acceptable	~~	~~	•	√ √	Lack of detail concerning individual studies
Wakefield 2010	Review of reviews and primary studies	Not acceptable	•	√ √	~	•	Expert overview rather than a systematic review, lack of detail concerning individual studies
Webb 2009	Systematic review	Acceptable	~~	~	VV	VV	
Webster-Stratton 2001	Literature review	Not acceptable	~~~	•	~~	~ ~	Search strategy not described
West 2004	Meta-analysis	Acceptable	~~~	~	√ √	~~	
White 2010	Systematic review	Acceptable	√ √	~	~ ~~~	~	
Wiehe 2005	Systematic review	Good	√ √ √	~~~~	~ ~~~	VV	
Wilk 1997	Meta-analysis	Acceptable	~ ~~~	~	~ ~~~	VV	

First Author, Year of Publication	Type of review	Quality rating (overall)	А	В	С	D	Justification if 'not acceptable'
Wilkinson 2009	Literature review	Not acceptable	•	•	•	•	Methodology not reported
Wilson 2001	Meta-Analysis	Not acceptable	~ ~ ~	\checkmark	~	$\checkmark\checkmark$	Lack of detail concerning search strategy and individual studies

First Author, Year of Publication	Study design	Quality rating (overall)	A	В	с	D	Justification if 'not acceptable'
Conrod 2006	RCT	Not acceptable	•	~~	~~~	~ ~~~	Random sequence generation not described
Conrod 2008	RCT	Acceptable	~~	~ ~~~	~~~	$\checkmark\checkmark\checkmark$	
Conrod 2010	RCT	Acceptable	~ ~~~	~ ~~~	~	~ ~~~	
Conrod 2011	RCT	Acceptable	~ ~~~	~ ~~~	~~~~	~~~~	
Conrod 2013*	Cluster-RCT	Acceptable	√ √√	~	~	~ ~~~	
O'Leary-Barrett 2010*	Cluster-RCT	Acceptable	~	~	~ ~~~	~~~~	
Faggiano 2008	Cluster-RCT	Acceptable	√ √√	~	~ ~~~	~ ~~~	
Goldberg 2007	RCT	Acceptable	~	~	~	√ √	
Humeniuk 2012	RCT	Acceptable	~ ~~~	~	~~~~	~~~~	
Kitzman 2010*	RCT	Acceptable	~~	~ ~~~	~	~~~~	
Olds 2010*	RCT	Acceptable	~~	~ ~~~	~	√√	
Longshore 2007	RCT	Not acceptable	•	~~	~~	~~	Random sequence generation not described
McDonald 2012	RCT	Not acceptable	•	~~	~	~	Lack of detail in reporting, data collection not completed
Reynolds 2011	Matched-group controlled trial	Acceptable	~ ~~~	~~	~~	~~ <i>~</i>	
van de Wiel 2003	RCT	Not acceptable	•	~~	~~	~~	Random sequence generation not described
van Lier 2004*	RCT	Not acceptable	•	~~	~~	~~	Random sequence generation not described
van Lier 2005*	RCT	Not acceptable	•	~~	~ ~~	~ ~ ~	Random sequence generation not described

First Author, Year of Publication	Study design	Quality rating (overall)	А	В	с	D	Justification if 'not acceptable'
van Lier 2009*	RCT	Not acceptable	•	√ √	\checkmark	~ ~ ~	Random sequence generation not described

Notes:

Review Criterion A: Clear, transparent and sufficient inclusion criteria for study selection

Review Criterion B: Transparent, broad and diverse methods for literature search

Review Criterion C: Sufficient detail on included studies concerning methodology, participants, intervention characteristics and findings

Review Criterion D: Documentation and quality of data analysis and interpretation

Primary study Criterion A: Randomization methods and baseline comparability of groups

Primary study Criterion B: Blinding of participants, personnel and/or outcome assessors

Primary study Criterion C: Amount, nature or handling of incomplete outcome data due to attrition (losses to follow-up) and exclusions

Primary study Criterion D: Other sources of bias, including fidelity of intervention implementation

✓✓✓✓ Both reviewers rated this aspect as 'good'

- $\checkmark \checkmark \checkmark$ One reviewer rated this aspect as 'good' and the other reviewer as 'acceptable'
- So the reviewers rated this aspect as 'acceptable', or one reviewer considered it 'good' and the other reviewer as 'not acceptable'
- ✓ One reviewer rated this aspect as 'acceptable' and the other reviewer as 'not acceptable'
- Both reviewers rated this aspect as 'not acceptable'

Cochrane review, Campbell reviews and Community Guide reviews were not quality assessed and are therefore not included in this table.

* indicates multiple publications on the same trials: Conrod 2013 and O'Leary-Barrett 2010 report on one trial but on different follow-up times; Kitzman 2010 and Olds 2010 report on different outcomes from one trial; and van Lier 2004, 2005, and 2009 report on different measures/follow-up times regarding one trial.