

Table DS1 Overview of Cochrane systematic reviews on the effect of psychosocial interventions for depression and psychosis on social functioning

Review	Intervention	Total # RCTs included	# RCTs with social functioning outcome	Effect on social functioning	MA
Reviews of psychosocial interventions for depression					
<i>Psychotherapy</i>					
Henken 2007 ⁶³	Family therapy vs. no intervention or alternative intervention	6	3	Not significant	N
Abbass 2006 ⁶⁴	Short-term psychodynamic psychotherapies vs. Treatment as usual	23	1	Significant positive association.	N
<i>Psycho-social interventions</i>					
Dennis 2007 ⁶⁵	Psychosocial interventions vs. Various	10	2	Mixed results (data not conclusive)	N
Reviews of psychosocial interventions for psychosis					
<i>Psychotherapy</i>					
Xia 2011 ⁶⁶	Psycho-education vs. standard levels of knowledge provision	44	9	Significant positive associations.	Y
McGrath 2000 ⁶⁷	Cognitive rehabilitation vs. Intensive Occupational Therapy (IOT)	3	1	Not significant	N
Buckley 2007 ⁶⁸	Supportive therapy vs. Cognitive Behavioural Therapy	21	2	Mixed results (data not conclusive)	N
Pharoah 2010 ⁶⁹	Family therapy vs. Standard care.	53	4	Significant positive association.	Y
He 2007 ⁷⁰	Morita Therapy vs. Standard care	12	2	Significant positive association.	Y

<i>Psycho-social interventions</i>					
Cleary 2008 ⁷¹	Psychosocial interventions vs. Standard care	25	Not specified	Mixed results (data not conclusive)	N
Crowther 2001 ⁷²	Vocational rehab vs. Usual services	18	2	Not significant	N
Tungpunkom 2008 ⁷³	Life skills programme vs. Attention control condition	4	1	Not significant	N
Gold 2005 ⁷⁴	Music therapy vs. Placebo and standard care	4	2	Significant positive association	Y
Ruddy 2005 ⁷⁵	Art therapy vs. Standard care and psychosocial intervention	2	2	Not significant	N
<i>Collaborative care models</i>					
Kisely 2011 ⁷⁶	Community-outpatient care vs. standard care	2	2	Not significant	Y
Marshall 2003 ⁷⁷	Day hospital vs. Inpatient care	9	4	Not significant	N
Shek 2090 ⁷⁸	Day hospital vs. outpatient care	4	3	Mixed results (data not conclusive)	Y
Dieterich 2010 ⁷⁹	Intensive Case Management (caseload <20) vs. non-Intensive Case Management (caseload >20) & standard community care	38	15	Not significant	Y

MA = meta-analysis

Table DS2 Social functioning outcome scales used in studies included in review

Scale	Description of scale	Social functioning domains measured by the scale												
		Developed for psychiatric population?	Developed for LMIC population?	Acceptable validity and reliability?	# studies using scale in review*	Parental role	Marital role	Household role	Social/recreational activities	Interpersonal relationships	Independence/self care	Occupation/education	Physical limitations	Emotional functioning
Short-Form 36 social functioning sub-scale (SF-36) ¹³	Self-assessed. Extent and frequency with which health problems interfered with normal social activities.	No	No	Yes	4				X					
Social Functioning Scale (SFS) ⁸⁰	Self-assessed. 79 questions covering 7 domains: Social withdrawal, relationships, social activities, recreational activities, independence (performance and competence), employment. Developed to assess functioning essential for integration of people with schizophrenia in the community.	Yes	No	Yes	1		X	X	X	X	X	X		
Lambert's Outcome Questionnaire (OQ-45.2) ⁸¹	Self-assessed. 45 items divided into five categories. The items assess the patient's state in three areas: symptoms, interpersonal relationships, and social role functioning with higher scores representing a dysfunctional population.	Yes	No	Not enough data to assess	1				X	X		X	X	
Uganda functional impairment score ¹⁷	Self-assessed. Locally developed and validated for Uganda sex-specific 9-item questionnaire to assess functional impairment. Scores from 0 "no more difficulty" to 4 "frequently unable to do task" for each item, combined into a single score with higher scores indicating more dysfunction.	No	Yes	Yes in this pop.	1	X		X	X		X	X	X	

Global Assessment of Functioning (GAF) ⁸²	Clinician rated. 100-point single item scale. "1-10 persistent danger" to "91-100" superior functioning in a wide range of activities. No symptoms".	No	No	Yes	1				X	X	X	X	X	X
Global Assessment Scale (GAS) ⁸³	Clinician rated. 100-point single item scale. From "1-10 hypothetically most impaired individual" to "91-100 hypothetically healthiest individual". Scale designed to assess functioning in psychiatric patients, developed from the GAF.	Yes	No	Yes	2				X	X	X	X	X	X
Social and Occupational Functioning Assessment Scale (SOFAS) ⁸⁴	Clinician rated. 100-point single item scale. From "1-10 superior functioning in a wide range of activities" to "1-10 persistent inability to maintain minimal personal hygiene. Unable to function without harming self or others or without considerable external support". Developed from GAF.	Yes	No	Not enough data to assess	1				X	X	X	X		X
World Health Organisation Disability Assessment Scale (WHO-DAS II) ⁸⁵	Self-assessed. Assesses day to day functioning in six activity domains. Results provide a profile of functioning across the domains, as well as an overall disability score.	No	Yes	Yes	1			X	X	X	X	X	X	X
Social Disability Screening Schedule (SDSS) ⁴⁹	Self-assessed. Adapted from the WHO-DAS. Measures 10 items with 3 levels of scoring: "no loss of social functioning" to "severe loss of social functioning".	Yes	Yes	Yes in this pop.	12	X	X	X	X	X	X	X		
Brief Disability Questionnaire (BDQ) ⁸⁶	Self-assessed. Assesses disability in everyday activities from a low score of 1-6 "not at all impaired" to a high score of 14-22 "definitely impaired".	No	Yes	Yes in this pop	1			X	X	X	X	X	X	

*The total adds up the 25 as 1 study (Pang 2002)⁴² used 2 scales to measure social functioning at different time points.

Table DS3 Summary of included studies: Depression

Author Year Country	Trial design and participants	Intervention and control groups	Social functioning outcomes and timing of outcome assessment	Cochrane risk of bias*	Effect on social functioning	Clinical effect	M/A	
STRUCTURED PSYCHOTHERAPIES								
Interpersonal therapy								
Bolton 2003¹⁷/ Bass 2006¹⁸ Uganda	Cluster RCT 284 adults living in the community who met DSM-IV criteria for major or sub-syndromal depression, identified through community screening.	Therapy vs. TaU Int: 139 people from 15 villages randomised to 16 weeks of weekly 90 minute sessions of community based group interpersonal psychotherapy delivered in gender-specific groups of between 8 – 10 people. Ctrl: 145 people from 15 villages randomised to receive usual care (normally no treatment).	Sex-specific 9-item questionnaire to assess functional impairment with higher scores indicating more dysfunction. Assessed 4 ½ months* and 10 months post baseline.	Sequence gen	L	Positive association The intervention group had significantly lower functional impairment scores at both follow-up times compared to the control group.	Yes	Yes
				Alloc conceal	U			
				Partic. blind	L			
				Outcome blind	L			
				Incomplete out	L			
				Select report.	L			
				Other	L			
de Mello 2001¹⁹ Brazil	Individual RCT 35 adults who met ICD-10 criteria for dysthymic disorder (chronic depression), referred to 2 psychiatric hospital outpatient clinics.	Therapy vs. TaU Int: 16 patients randomized to receive anti-depressant (moclobemide) plus 16 weekly followed by 6 monthly interpersonal therapy (IPT) sessions Ctrl: 19 patients randomized to receive anti-depressant (moclobemide) and routine clinical management .	Global Assessment of Functioning (GAF) Assessed 12 weeks, 6 months* and 48 weeks from baseline.	Sequence gen	U	No association Non-significant trend of greater improvement in mean GAF scores over time in the intervention group compared to the control.	No	Yes
				Alloc conceal	U			
				Partic. blind	L			
				Outcome blind	L			
				Incomplete out	H			
				Select report.	L			
				Other	H			
Ye	Individual RCT	Therapy vs TaU	Social Disability Screening	Sequence gen	L	Positive association	Yes	Yes

2006²⁰ China	60 patients who were inpatients of a psychiatric hospital between Aug 2004 and May 2005 who met the DSM-IV criteria for depression with an HAMD score of more than 17 and a CRS score of more than 10.	Int: 60 patients randomized to receive group Interpersonal psychotherapy for 12 weeks and anti-depressants Ctrl: 60 patients randomized to receive anti-depressants	Schedule (SDSS) Assessed after the 12-week intervention, 3 months * from baseline.	<table border="1"> <tr><td>Alloc conceal</td><td>U</td></tr> <tr><td>Partic. blind</td><td>L</td></tr> <tr><td>Outcome blind</td><td>U</td></tr> <tr><td>Incomplete out</td><td>H</td></tr> <tr><td>Select report.</td><td>L</td></tr> <tr><td>Other</td><td>U</td></tr> </table>	Alloc conceal	U	Partic. blind	L	Outcome blind	U	Incomplete out	H	Select report.	L	Other	U	Significantly greater improvement in the intervention group in social functioning after treatment than in the control group (social functioning in both groups improved).				
Alloc conceal	U																				
Partic. blind	L																				
Outcome blind	U																				
Incomplete out	H																				
Select report.	L																				
Other	U																				
Problem solving therapy therapy																					
Patel 2003²¹ India	Individual RCT 450 adults who scored 15 or more on the Revised Clinical Interview Schedule (CISR) identified through outpatient clinics in 2 general hospitals	Therapy vs. Placebo Int 2: 150 patients randomized to problem solving therapy - 6 sessions delivered by a non-medical health worker over 3 months Ctrl: 150 patients randomized to receive a placebo pill . A further 150 patients were randomized to 6 months of antidepressant (fluoxetine SSRI) treatment, but these results are not included in this review.	Disability measured with Brief Disability Questionnaire (BDQ) Assessed 2, 6 months* and 12 months from baseline.	<table border="1"> <tr><td>Sequence gen</td><td>L</td></tr> <tr><td>Alloc conceal</td><td>L</td></tr> <tr><td>Partic. blind</td><td>L</td></tr> <tr><td>Outcome blind</td><td>L</td></tr> <tr><td>Incomplete out</td><td>L</td></tr> <tr><td>Select report.</td><td>L</td></tr> <tr><td>Other</td><td>L</td></tr> </table>	Sequence gen	L	Alloc conceal	L	Partic. blind	L	Outcome blind	L	Incomplete out	L	Select report.	L	Other	L	No association No significant differences in functioning at any time point between the placebo and therapy groups.	No	Yes
Sequence gen	L																				
Alloc conceal	L																				
Partic. blind	L																				
Outcome blind	L																				
Incomplete out	L																				
Select report.	L																				
Other	L																				
OTHER INTERVENTIONS																					
Morita therapy																					
Wei 2005²²	Individual RCT	Non-conventional treatment + drug vs. drug	Social Disability Screening Schedule (SDSS)	<table border="1"> <tr><td>Sequence gen</td><td>L</td></tr> <tr><td>Alloc conceal</td><td>U</td></tr> </table>	Sequence gen	L	Alloc conceal	U	Positive association	Yes	Yes										
Sequence gen	L																				
Alloc conceal	U																				

China	104 adults who met CCMD-3 for post-schizophrenic depression, with at least 18 points for HAMD total score; identified through a provincial psychiatric hospital	Int: 52 patients randomized to receive 12-week-long Morita therapy and anti-depressant in Morita therapy sickrooms Ctrl: 52 patients randomized to receive inpatient treatment as usual and anti-depressant (aminazine and venlafaxine).	Assessed immediately after the 12-week-intervention, 3 months* from baseline.	<table border="1"> <tr><td>Partic. blind</td><td>L</td></tr> <tr><td>Outcome blind</td><td>H</td></tr> <tr><td>Incomplete out</td><td>H</td></tr> <tr><td>Select report.</td><td>L</td></tr> <tr><td>Other</td><td>U</td></tr> </table>	Partic. blind	L	Outcome blind	H	Incomplete out	H	Select report.	L	Other	U	Significantly better social functioning in the intervention group compared to the control group at 3 months.						
Partic. blind	L																				
Outcome blind	H																				
Incomplete out	H																				
Select report.	L																				
Other	U																				
MULTI COMPONENT COLLABORATIVE CARE INTERVENTIONS																					
Patel 2011 ²³ India	Cluster RCT 2796 adults diagnosed with ICD-10 depression were recruited from 12 public and 12 private primary health care clinics.	Multi-component intervention vs. enhanced usual care Int: 1648 patients randomised to receive up to 6 months of collaborative stepped care comprising psycho-education, anti-depressants, inter-personal therapy and psychiatric referral . Cases were managed by a lay health counsellor who oversaw the non-drug treatments, including diagnosis and prescription by a primary care physician, and supervision from a psychiatrist. Ctrl: 1148 patients randomised to receive enhanced usual care (given screening results and a training manual).	12-item WHO Disability Assessment Schedule (WHO-DAS II) Assessed 2, 6 months* and 12 months from baseline.	<table border="1"> <tr><td>Sequence gen</td><td>L</td></tr> <tr><td>Alloc conceal</td><td>L</td></tr> <tr><td>Partic. blind</td><td>L</td></tr> <tr><td>Outcome blind</td><td>L</td></tr> <tr><td>Incomplete out</td><td>L</td></tr> <tr><td>Select report.</td><td>L</td></tr> <tr><td>Other</td><td>L</td></tr> </table>	Sequence gen	L	Alloc conceal	L	Partic. blind	L	Outcome blind	L	Incomplete out	L	Select report.	L	Other	L	Positive association Significantly better social functioning scores in the intervention compared to the control group at 2 months month follow-up in public Primary Health Care centres only. No significant difference between intervention and control groups at 6 or 12 month follow-up in public PHCs. No significant difference in private GP practices at any time point.	Yes, but in public clinics only	Yes
Sequence gen	L																				
Alloc conceal	L																				
Partic. blind	L																				
Outcome blind	L																				
Incomplete out	L																				
Select report.	L																				
Other	L																				

<p>Araya 2003²⁴ Chile</p>	<p>Individual RCT</p> <p>240 adult females who met DSM-IV criteria for major depression, identified through 3 primary-care clinics.</p>	<p>Multi-component intervention vs. TaU</p> <p>Int: 120 patients randomized to 3-months of multi-component stepped care led by non-medical health workers, comprising 7 weekly psycho-education group therapy sessions for all patients, and structured pharmacotherapy delivered by the primary care physician for those with severe/persistent depression, along with treatment adherence support.</p> <p>Ctrl: 120 patients randomised to receive treatment as usual.</p>	<p>Social functioning subscale of the SF-36</p> <p>Assessed 6 months* and 9 months from baseline.</p>	<table border="1"> <tr><td>Sequence gen</td><td>L</td></tr> <tr><td>Alloc conceal</td><td>L</td></tr> <tr><td>Partic. blind</td><td>L</td></tr> <tr><td>Outcome blind</td><td>L</td></tr> <tr><td>Incomplete out</td><td>L</td></tr> <tr><td>Select report.</td><td>L</td></tr> <tr><td>Other</td><td>H</td></tr> </table>	Sequence gen	L	Alloc conceal	L	Partic. blind	L	Outcome blind	L	Incomplete out	L	Select report.	L	Other	H	<p>Positive association</p> <p>Significant improvements in social functioning in intervention group compared to TaU at both 6 and 9 months from baseline.</p>	<p>Yes</p>	<p>Yes</p>
Sequence gen	L																				
Alloc conceal	L																				
Partic. blind	L																				
Outcome blind	L																				
Incomplete out	L																				
Select report.	L																				
Other	H																				
<p>Rojas 2007²⁵ Chile</p>	<p>Individual RCT</p> <p>230 mothers at any stage during their first postnatal year who met DSM-IV criteria for post-natal depression, identified through 3 primary health clinics.</p>	<p>Multi-component intervention vs. TaU</p> <p>Int: 114 mothers randomized to receive a multi-component intervention involving 8 weekly psycho-educational groups, treatment adherence support, and pharmacotherapy if needed.</p> <p>Ctrl: 116 mothers randomized to receive usual care including all services normally available in the primary health clinics.</p>	<p>Social functioning subscale on the SF-36</p> <p>Assessed 3 and 6 months* from baseline</p>	<table border="1"> <tr><td>Sequence gen</td><td>L</td></tr> <tr><td>Alloc conceal</td><td>L</td></tr> <tr><td>Partic. blind</td><td>L</td></tr> <tr><td>Outcome blind</td><td>L</td></tr> <tr><td>Incomplete out</td><td>L</td></tr> <tr><td>Select report.</td><td>L</td></tr> <tr><td>Other</td><td>L</td></tr> </table>	Sequence gen	L	Alloc conceal	L	Partic. blind	L	Outcome blind	L	Incomplete out	L	Select report.	L	Other	L	<p>Positive association</p> <p>Significantly better social functioning scores in intervention group compared to TaU at 3 months but not 6 months.</p>	<p>Yes</p>	<p>Yes</p>
Sequence gen	L																				
Alloc conceal	L																				
Partic. blind	L																				
Outcome blind	L																				
Incomplete out	L																				
Select report.	L																				
Other	L																				

Vitriol 2009²⁶ Chile	<p>Individual RCT</p> <p>87 adult women who met ICD-10 criteria for severe depression and who had a history of childhood traumatic experiences, referred to a hospital outpatient clinic.</p>	<p>Multi-component intervention vs. TaU</p> <p>Int: 44 patients randomized to receive 3 months of out-patient structured intervention by a multidisciplinary team including medication and weekly cognitive trauma-based therapy.</p> <p>Ctrl: 43 patients randomized to receive TaU following clinical guidelines including psychotherapy and medication.</p>	<p>Social role functioning subscale on the Lambert's Outcome Questionnaire (OQ-45.2) with high scores (max 36) indicating worse social functioning</p> <p>Assessed 3 and 6 months* from baseline</p>	<table border="1"> <tr><td>Sequence gen</td><td>U</td></tr> <tr><td>Alloc conceal</td><td>U</td></tr> <tr><td>Partic. blind</td><td>L</td></tr> <tr><td>Outcome blind</td><td>L</td></tr> <tr><td>Incomplete out</td><td>L</td></tr> <tr><td>Select report.</td><td>L</td></tr> <tr><td>Other</td><td>L</td></tr> </table>	Sequence gen	U	Alloc conceal	U	Partic. blind	L	Outcome blind	L	Incomplete out	L	Select report.	L	Other	L	<p>Borderline association</p> <p>No significant difference in social functioning scores between the control and intervention groups at 3 months. Borderline significantly better functioning in the intervention compared to the control group at 6 months.</p>	<p>Yes</p>	<p>Yes</p>
Sequence gen	U																				
Alloc conceal	U																				
Partic. blind	L																				
Outcome blind	L																				
Incomplete out	L																				
Select report.	L																				
Other	L																				
Fritsch Chile²⁷ 2007	<p>Individual RCT</p> <p>345 adult mothers living with children aged 6-16 years who met DSM-IV criteria for major depression, identified through 5 primary-care clinics.</p>	<p>Multi-component intervention vs. TaU</p> <p>Int: 175 received pharmacological intervention with telephone re-enforcement including treatment adherence and psycho-education by trained non-professional staff.</p> <p>Ctrl: 170 received usual care in primary care including pharmacotherapy and psychological therapy.</p>	<p>Social functioning subscale of the SF-36</p> <p>Assessed 3 and 6 months* from baseline.</p>	<table border="1"> <tr><td>Sequence gen</td><td>L</td></tr> <tr><td>Alloc conceal</td><td>L</td></tr> <tr><td>Partic. blind</td><td>L</td></tr> <tr><td>Outcome blind</td><td>L</td></tr> <tr><td>Incomplete out</td><td>U</td></tr> <tr><td>Select report.</td><td>L</td></tr> <tr><td>Other</td><td>U</td></tr> </table>	Sequence gen	L	Alloc conceal	L	Partic. blind	L	Outcome blind	L	Incomplete out	U	Select report.	L	Other	U	<p>Borderline association</p> <p>The intervention group had borderline statistically significant better social functioning scores than the control group at 3 months, with borderline non-significantly better functioning at 6 months.</p>	<p>Yes</p>	<p>Yes</p>
Sequence gen	L																				
Alloc conceal	L																				
Partic. blind	L																				
Outcome blind	L																				
Incomplete out	U																				
Select report.	L																				
Other	U																				

Hu 2007²⁸ China	Individual RCT	Multi-component intervention vs. TaU Int: On discharge, 39 patients randomised to receive 1.5 – 2 years family-based treatment package including medication, psychotherapy, positive intervention and maintenance therapy. Ctrl: 37 randomised to standard outpatient treatment.	Social Disability Screening Schedule (SDSS) Assessed 6 months* , 12, 18 and 24 months from baseline.	Sequence gen	L	Positive association The intervention group had significantly better social functioning scores than the control group throughout the follow-up period. Time of follow-up not reported in paper.	Yes	Yes
	Alloc conceal			U				
	Partic. blind			L				
	Outcome blind			L				
	Incomplete out			H				
	Select report.			H				
	Other			U				

Table DS4 Summary of included studies: Schizophrenia

Author Year Country	Trial design and participants	Intervention and control groups	Social functioning outcomes and timing of outcome assessment	Cochrane risk of bias*	Effect on social functioning	Clinical effect	M/A	
STRUCTURED PSYCHOTHERAPIES								
Family psycho-education								
Xiang 1994³⁰ China	Individual RCT. 77 adults with schizophrenia or affective psychoses (69 schizophrenia; 8 affective disorders) living in three rural communities.	Family psycho-education vs. TaU Int: 36 patients randomized to receive community-based family psycho-education plus drug treatment (haloperidol decanoate) for 4 months. Ctrl: 41 patients randomized to receive drug treatment (haloperidol decanoate) only.	Social Disability Screening Schedule (SDSS) Assessed immediately post-intervention at 4 months* from baseline.	Sequence gen	U	Positive association Significantly better improvements in social functioning in intervention group compared to controls.	Yes	No as no data in the paper
				Alloc conceal	U			
				Partic. blind	L			
				Outcome blind	L			
				Incomplete out	U			
				Select reporting	U			
				Other	H			
Li 2005³³ China	Individual RCT 101 psychiatric hospital in-patients who met CCMD-II-R criteria for schizophrenia and was living with a family member at least 3 months prior to the current hospital admission. Respondents identified through	Family psycho-education vs. TaU Int: 46 patients and their families randomized to receive 44 hours of psycho-education and skills training while in hospital, plus 2 hours per month for 3 months post-discharge. Ctrl: 55 patients and their families randomized to receive standard inpatient treatment.	Chinese version of the Global Assessment Scale (GAS) Assessed at 6 and 12 months* from baseline.	Sequence gen	H	Positive association Significant improvements in social functioning in intervention group at 9 months post-discharge, but not at 3 months or at discharge.	Yes, at 9 months only	Yes
				Alloc conceal	H			
				Partic. blind	L			
				Outcome blind	H			
				Incomplete out	H			
				Select report.	L			
				Other	H			

	hospital screening.							
Wang 2008³⁴ China	Individual RCT 220 then- outpatients (all rural) who were once inpatients of an 'An Kang' (enforced treatment) psychiatric hospital between Jun 2002 and Oct 2003, and met the CCMD-3 criteria for schizophrenia	Family psycho-education vs. TaU Int: 110 patients randomized to receive monthly family-psycho education (once a month in year 1, once every two months in year 2) on disease knowledge and management with their family, and anti-psychotic medication and outpatient consultations on a regular basis Ctrl: 110 patients randomized to receive anti-psychotic medication and outpatient consultations on a regular basis.	Social Disability Screening Schedule (SDSS) Assessed 6, 12 months* , 18 and 24 months from baseline.	Sequence gen	H	Positive association Significantly greater improvement in social functioning in intervention group compared with control group at 12, 18 and 24 months.	Yes	Yes
				Alloc conceal	H			
				Partic. blind	L			
				Outcome blind	U			
				Incomplete out	L			
				Select report.	L			
				Other	U			
Patient psycho-education								
Wei 1997³⁵ China	Individual RCT 100 inpatients in a psychiatric hospital who met CCMD-2 criteria for schizophrenia with positive symptoms	Patient psycho-education vs. TaU Int: 50 patients randomized to receive 4 weeks of psycho-education about independent living, family relationships, social relationships and knowledge	Social Disability Screening Schedule (SDSS) Assessed 1 year and 1 month* post-baseline.	Sequence gen	U	Positive association Significant improvements in social functioning in intervention group after the treatment and at 1-	Yes	Yes
				Alloc conceal	U			
				Partic. blind	L			
				Outcome blind	U			
				Incomplete out	H			
				Select report.	L			
				Other	U			

	under control after receiving previous treatment.	about schizophrenia and its treatment. Involved lectures, exams and role-plays. Ctrl: 50 patients randomized to standard inpatient treatment			year follow-up.			
Social Skills training								
Cui 2004³¹ China	Individual RCT 100 male patients who were inpatients in a general hospital between 1999 and 2001 who met the CCMD-2-R criteria for schizophrenia, and have had the condition for more than 5 years.	Therapy vs. TaU Int: 50 patients randomized to receive 12-week group social skills training course and stable anti-psychotic medication Ctrl: 50 patients randomized to receive stable anti-psychotic medication	Social Disability Screening Schedule for inpatients (SDSI) Assessed post-intervention 12 weeks* from baseline.	Sequence gen	L	Positive association Significantly greater improvement in social functioning in intervention compared to control group after the intervention.	Yes	No Mean scores not reported
				Alloc conceal	U			
				Partic. blind	L			
				Outcome blind	L			
				Incomplete out	H			
				Select report.	H			
				Other	U			
Multi-component structured psychotherapy								
Chen 2003³⁶ China	Individual RCT 64 patients who were inpatients in a psychiatric hospital between Jul 2001 and	Therapy vs. TaU Int: 32 patients randomized to receive 10-weekly session of psycho-education and social skills training plus their usual anti-	Social Disability Screening Schedule (SDSS) Assessed 1 year 10 weeks* from baseline.	Sequence gen	L	Positive association Significantly greater improvement in social functioning in the intervention group than	Yes	Yes
				Alloc conceal	U			
				Partic. blind	L			
				Outcome blind	L			
				Incomplete out	L			
				Select report.	H			

	Apr 2002, met the ICD-10 and/or CCMD-3 criteria for schizophrenia, living with at least one guardian.	psychotic medication. Ctrl: 32 patients randomized to receive their usual anti-psychotic medication.		Other	U	the control group.		
Guo 2010³⁷ China	Individual RCT 1268 adults who met DSM-IV criteria for schizophrenia or schizophreniform disorder within past 5 years, and on maintenance treatment, identified through 10 outpatient psychiatric clinics	Psycho-education vs. TaU Int: 633 patients randomized to receive 12 months (48 sessions) of group psychosocial treatment comprising psycho-education, family intervention, skills training, and CBT plus their usual antipsychotic medication. Ctrl: 635 patients randomized to receive their usual antipsychotic medication only (various).	Chinese version of the Global Assessment Scale (GAS) Assessed at 6 and 12 months* from baseline.	Sequence gen	U	Positive association Significantly greater improvement in functioning scores over time in intervention group compared to controls.	Yes	Yes
				Alloc conceal	U			
				Partic. blind	L			
				Outcome blind	L			
				Incomplete out	H			
				Select report.	L			
				Other	U			
Yildiz 2004³⁸ Turkey	Individual RCT 30 clinically stable adults with DSM-IV schizophrenia were recruited from 2 hospital outpatient clinics	Therapy vs. TaU Int: 15 patients randomised to receive weekly sessions in an 8 month psychosocial skills training program including psycho-education, interpersonal therapy and family therapy plus their normal medication. Ctrl: 15 patients randomised to receive standard out-patient care	79 item Social Functioning Scale (SFS) Assessed post-intervention and 8 months* from baseline.	Sequence gen	H	Positive association Significant improvements in social and general functioning scores in the intervention compared to the control group after the intervention.	Yes	Yes
				Alloc conceal	H			
				Partic. blind	L			
				Outcome blind	H			
				Incomplete out	L			
				Select report.	L			
				Other	H			

		including their normal medication .						
Zimmer 2007³⁹ Brazil	Individual RCT. 56 adults with schizophrenia or schizoaffective disorder (ICD-10 criteria) identified through an outpatient program of a general hospital.	Therapy vs. TaU Int: 20 patients randomized to receive 12 weekly sessions of group Integrated Psychological Therapy (IPT) , designed to reduce basic cognitive defects in patients with schizophrenia and including cognitive differentiation, social perception, verbal communication, social skills training, interpersonal problem-solving and psycho-education components , plus routine medication . Ctrl: 36 patients randomized to receive standard outpatient treatment including routine medication. (2:1 ratio, ctrl:int).	Social and Occupational Functioning Assessment Scale (SOFAS) . Assessed post-intervention at 3 months* from baseline.	Sequence gen	L	Positive association Significantly greater improvements in GAF and SOFAS mean scores in intervention group compared to controls.	Yes	Yes
				Alloc conceal	U			
				Partic. blind	L			
				Outcome blind	L			
				Incomplete out	H			
				Select report.	L			
				Other	H			
OTHER INTERVENTIONS								
Art Therapy								
Meng 2005⁴⁰ China	Individual RCT 100 patients who were inpatients admitted for compulsory treatment for least 2 months in a psychiatric hospital between Mar-Sep 2003,	Art therapy vs. TaU Int: 50 patients randomized to receive art therapy (twice a week for 15 weeks in groups of 6-8) plus regular therapy Ctrl: 50 patients randomized to	Chinese version of the Global Assessment Scale (GAS) Assessed after the intervention, 4 months* from baseline.	Sequence gen	U	Positive association Significant improvements in social functioning in intervention group compared with control group	Yes	Yes
				Alloc conceal	U			
				Partic. blind	L			
				Outcome blind	U			
				Incomplete out	L			
				Select report.	L			
				Other	L			

	and met ICD-10 criteria for schizophrenia	receive regular therapy (except art)						
MULTI-COMPONENT COMMUNITY-BASED CARE INTERVENTIONS								
Li 2002⁴¹ China	Individual RCT 76 patients who were newly admitted inpatients of a psychiatric hospital between Jun 1999 and Mar 2001, and met the CCMD-2-R criteria for first onset schizophrenia.	Community care intervention vs TaU Int: 38 patients randomized to receive weekly home care and social rehabilitation and regular antipsychotic medication (mainly sulpiride) for a maximum of 3 months. Ctrl: 38 patients randomized to receive standard inpatient care and regular antipsychotic medication (mainly sulpiride)	Social Disability Screening Schedule (SDSS) Assessed after the intervention, up to 3 months* from baseline.	Sequence gen	H	Positive association Significant improvement in social functioning in intervention group after treatment but not the control group; difference between intervention group and control group after treatment was significant.	No	Yes
				Alloc conceal	H			
				Partic. blind	L			
				Outcome blind	U			
				Incomplete out	H			
				Select report.	H			
				Other	U			
Pang 2002⁴² China	Individual RCT 240 in-patients (all males) who were admitted to two general hospitals between 2004 and 2006 (3 years) and met the CCMD-2 criteria for paranoid schizophrenia.	Community care intervention vs. TaU Int: 120 males were randomized to receive 4 weeks of individual psycho-therapy as an inpatient plus medication (mainly chlorpromazine) and routine clinical follow-ups . Post discharge, family involvement in therapy sessions and community involvement to support patients not living with family and to	Social Disability Screening Schedule (SDSS) assessed 2 years and 1 month* from baseline. Chinese version of the Global Assessment Scale (GAS) assessed 1 month from baseline only.	Sequence gen	H	Positive association Significant improvements in SDSS which were sustained after 2 years of the treatment. No difference in GAS score 1 month from baseline.	No	Yes
				Alloc conceal	U			
				Partic. blind	L			
				Outcome blind	U			
				Incomplete out	H			
				Select report.	H			
				Other	U			

		encourage adherence. Ctrl: 120 males were randomized to receive medication (mainly chlorpromazine) followed by routine clinical follow-ups .						
Xiong 1994³² China	Individual RCT. 63 patients admitted to hospital diagnosed with schizophrenia (DSM-III-R) and living with at least one family member.	Community care intervention vs. TaU Int: 34 randomised to receive an individualised family-based multi-component intervention lasting 1 to 2 years including monthly 45 minute family counselling sessions and 90 minute family group sessions, home visits and medication supervision, followed by maintenance treatment. Ctrl: 29 randomised to receive standard outpatient treatment including usual medication.	Social Disability Screening Schedule (SDSS) Assessed 6, 12 months* and 18 months post-baseline.	Sequence gen Alloc conceal Partic. blind Outcome blind Incomplete out Select report. Other	U U L L L H H	Positive association At the 6, 12, and 18-month evaluations, intervention group had better social functioning scores than control group, but this was only significant at 12 and 18 months (no statistics reported).	Yes	No. No data in paper

Risk of bias rating:



Low risk of bias



Unclear



High risk of bias

<A>Additional references

63 Henken, H.T., et al., *Family therapy for depression*. Cochrane Database Syst Rev, 2007(3): p. CD006728.

64 Abbass, A.A., et al., *Short-term psychodynamic psychotherapies for common mental disorders*. Cochrane Database Syst Rev, 2006(4): p. CD004687.

65 Dennis, C.L. and E. Hodnett, *Psychosocial and psychological interventions for treating postpartum depression*. Cochrane Database Syst Rev, 2007(4): CD006116.

66 Xia, J., L.B. Merinder, and M.R. Belgamwar, *Psychoeducation for schizophrenia*. Cochrane Database Syst Rev, 2011(6): p. CD002831.

- 67 McGrath, J., Hayes, R.L., Cognitive rehabilitation for people with schizophrenia and related conditions. Cochrane Database of Syst Rev, 2000(3): p. CD000968. [AQ13 Please add a full reference for this study (included in Table DS1).]
- 68 Buckley, L.A., T. Pettit, and C.E. Adams, *Supportive therapy for schizophrenia*. Cochrane Database Syst Rev, 2007(3): p. CD004716.
- 69 Pharoah, F., et al., *Family intervention for schizophrenia*. Cochrane Database Syst Rev, 2010(12): p. CD000088.
- 70 He, Y. and C. Li, *Morita therapy for schizophrenia*. Cochrane Database Syst Rev, 2007(1): p. CD006346.
- 71 Cleary, M., et al., *Psychosocial interventions for people with both severe mental illness and substance misuse*. Cochrane Database Syst Rev, 2008(1): p. CD001088.
- 72 Crowther, R., et al., *Vocational rehabilitation for people with severe mental illness*. Cochrane Database Syst Rev, 2001(2): p. CD003080.
- 73 Tungpunkom, P. and M. Nicol, *Life skills programmes for chronic mental illnesses*. Cochrane Database Syst Rev, 2008(2): p. CD000381.
- 74 Gold, C., et al., *Music therapy for schizophrenia or schizophrenia-like illnesses*. Cochrane Database Syst Rev, 2005(2): p. CD004025.
- 75 Ruddy, R. and D. Milnes, *Art therapy for schizophrenia or schizophrenia-like illnesses*. Cochrane Database Syst Rev, 2005(4): p. CD003728.
- 76 Kisely, S.R., L.A. Campbell, and N.J. Preston, *Compulsory community and involuntary outpatient treatment for people with severe mental disorders*. Cochrane Database Syst Rev, 2011(2): p. CD004408.
- 77 Marshall, M., et al., *Day hospital versus admission for acute psychiatric disorders*. Cochrane Database Syst Rev, 2003(1): p. CD004026.
- 78 Shek, E., et al., *Day hospital versus outpatient care for people with schizophrenia*. Cochrane Database Syst Rev, 2009(4): p. CD003240.
- 79 Dieterich, M., et al., *Intensive case management for severe mental illness*. Cochrane Database Syst Rev, 2010(10): p. CD007906.
- 80 Birchwood, M., et al., *The Social Functioning Scale. The development and validation of a new scale of social adjustment for use in family intervention programmes with schizophrenic patients*. Br J Psychiatry, 1990. **157**: p. 853-9.
- 81 Lambert, M., *Introduction to psychotherapy research.*, in *Psychotherapy Research*, L. Beutler and M. Crago, Editors. 1991, America Psychological Association: Washington DC.
- 82 Hall, R., *Global Assessment of Functioning. A modified scale.* . Psychosomatics, 1995. **36**: p. 267-275.
- 83 Endicott, J., et al., *The global assessment scale. A procedure for measuring overall severity of psychiatric disturbance*. Arch Gen Psychiatry, 1976. **33**(6): p. 766-71.
- 84 American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorder, (4th edn) (DSM-IV)*. APA, 1994.
- 85 World Health Organization, *World Health Organization Disability Assessment Schedule II (WHODAS II)*. WHO, 2001.
- 86 Von Korff, M., et al., *Self-report disability in an international primary care study of psychological illness*. Journal of Clinical Epidemiology, 1996. **49**(3): p. 297-303.

Fig. DS1 Sensitivity analyses for depression studies: high-quality only

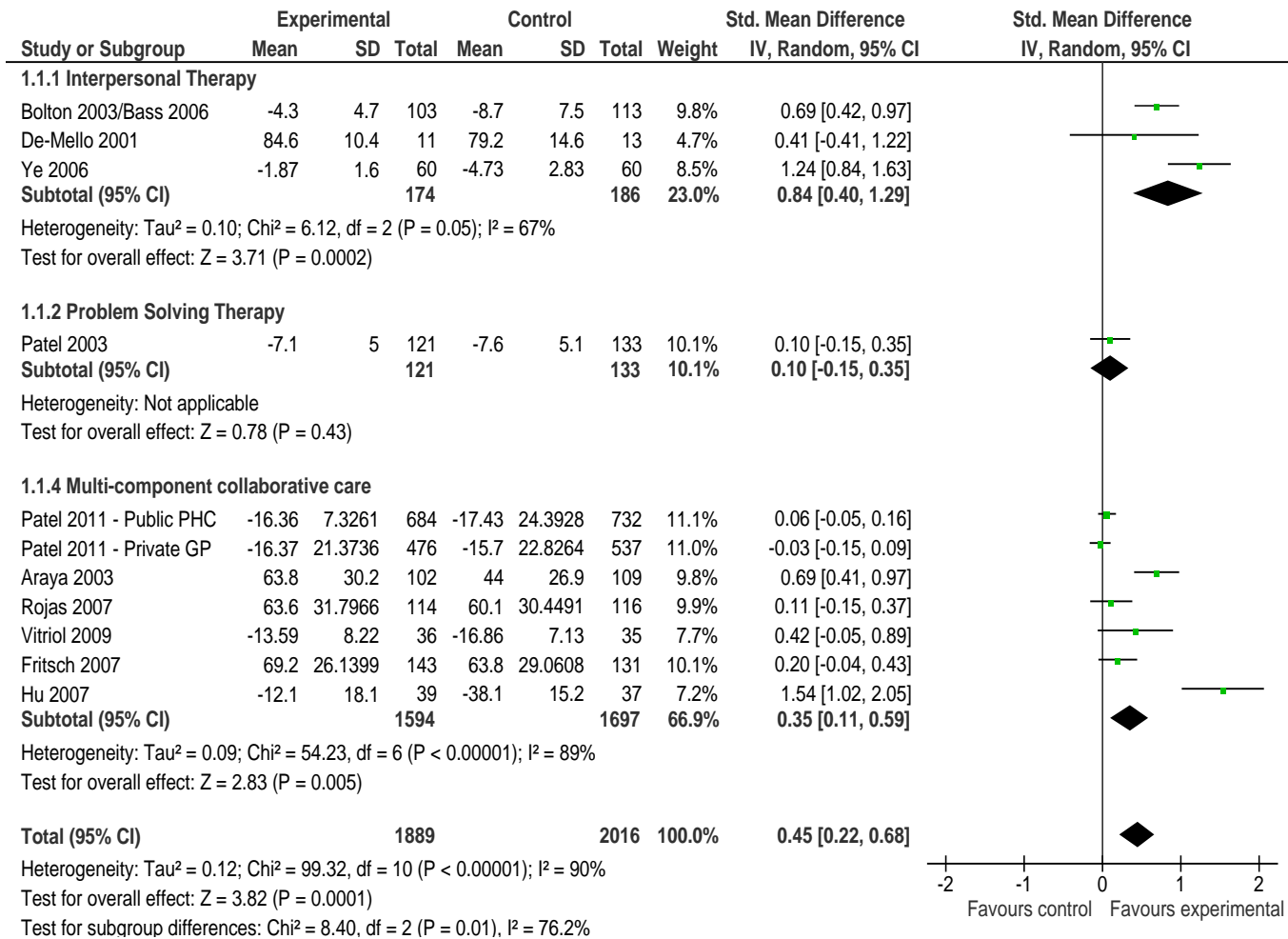


Fig. DS2 Sensitivity analyses for depression studies: Short-term follow-up (<6 months)

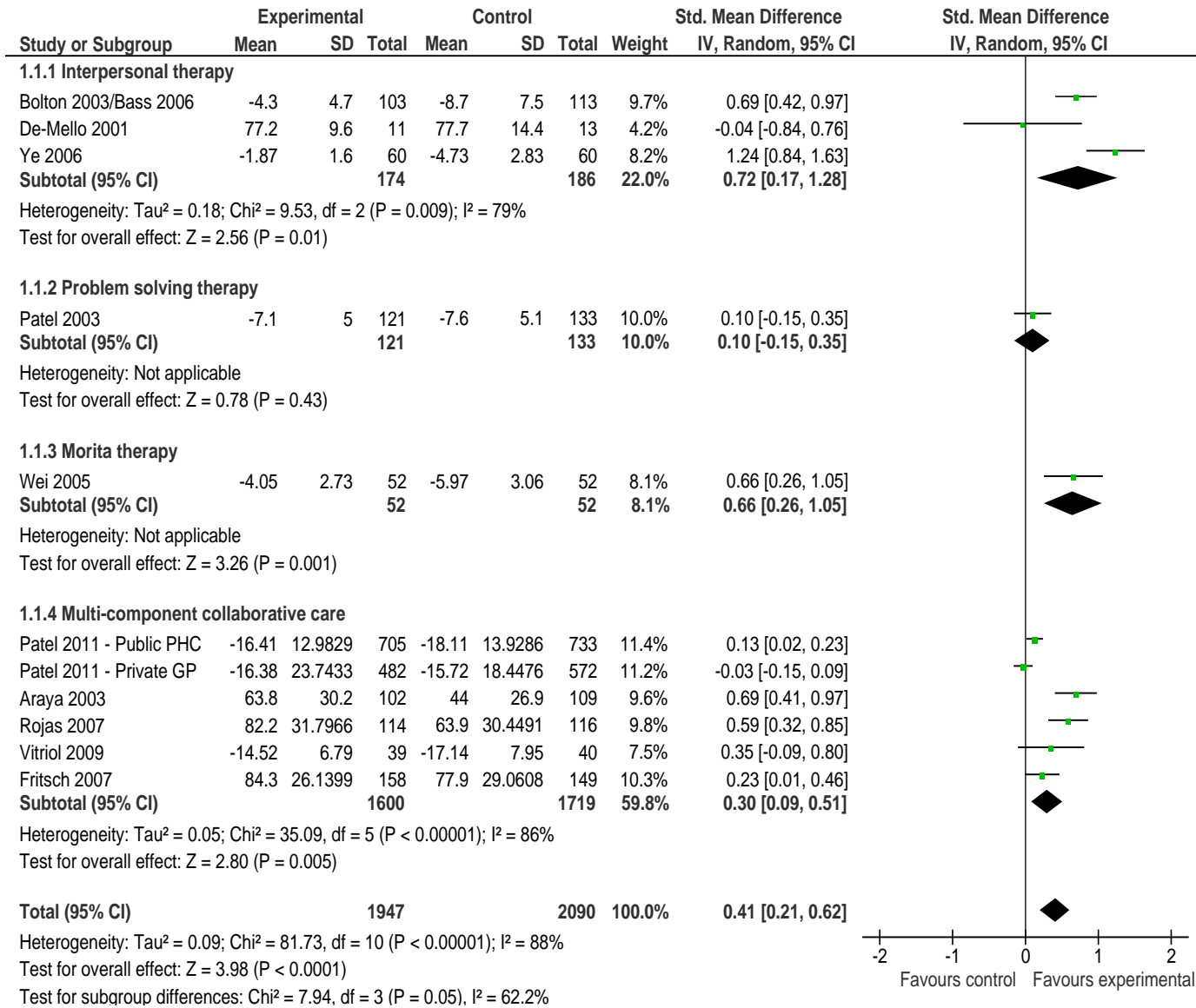


Fig. DS3 Sensitivity analyses for depression studies: long- term follow-up (>6 months)

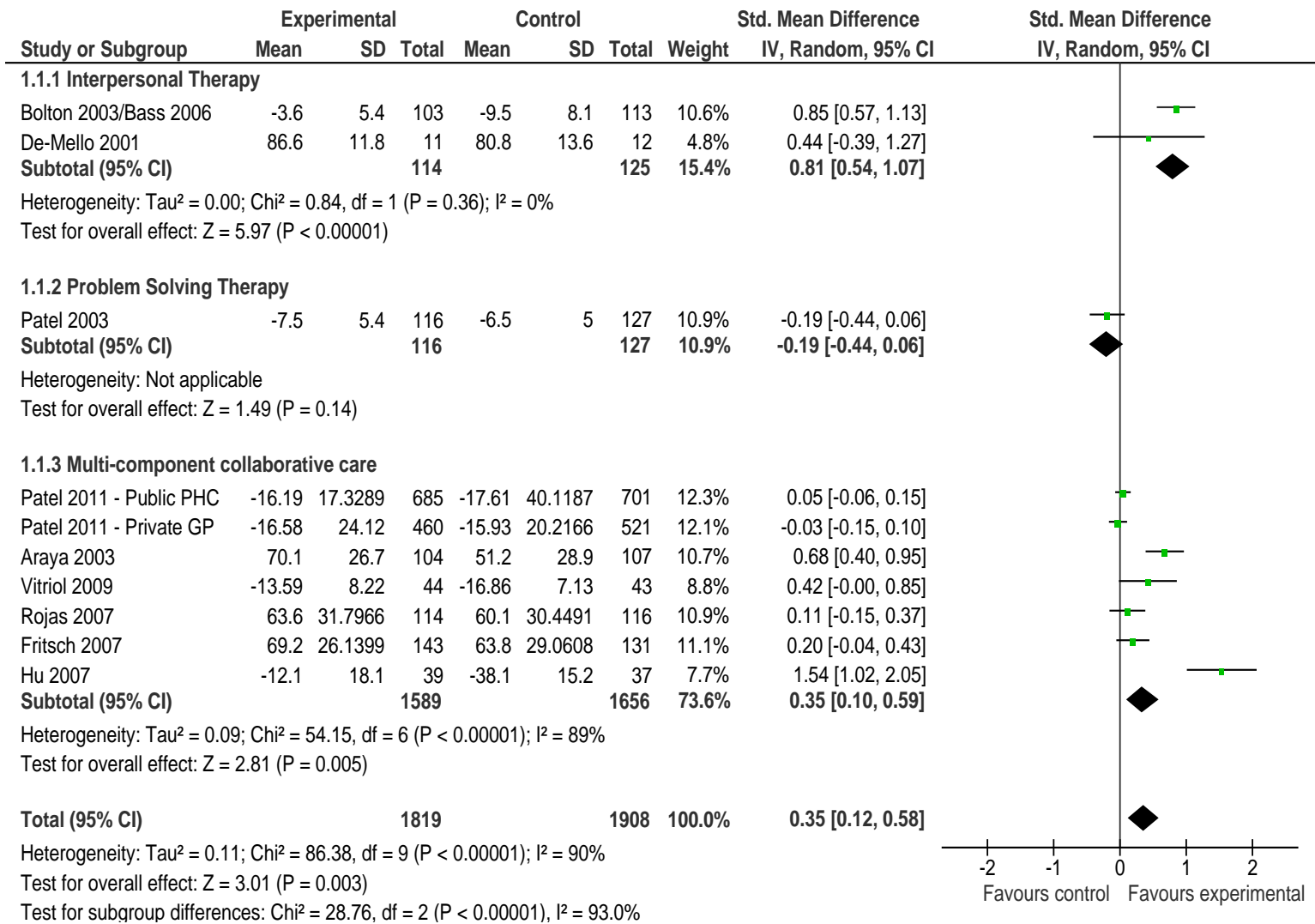


Fig. DS4 Sensitivity analyses for schizophrenia studies: high-quality studies only

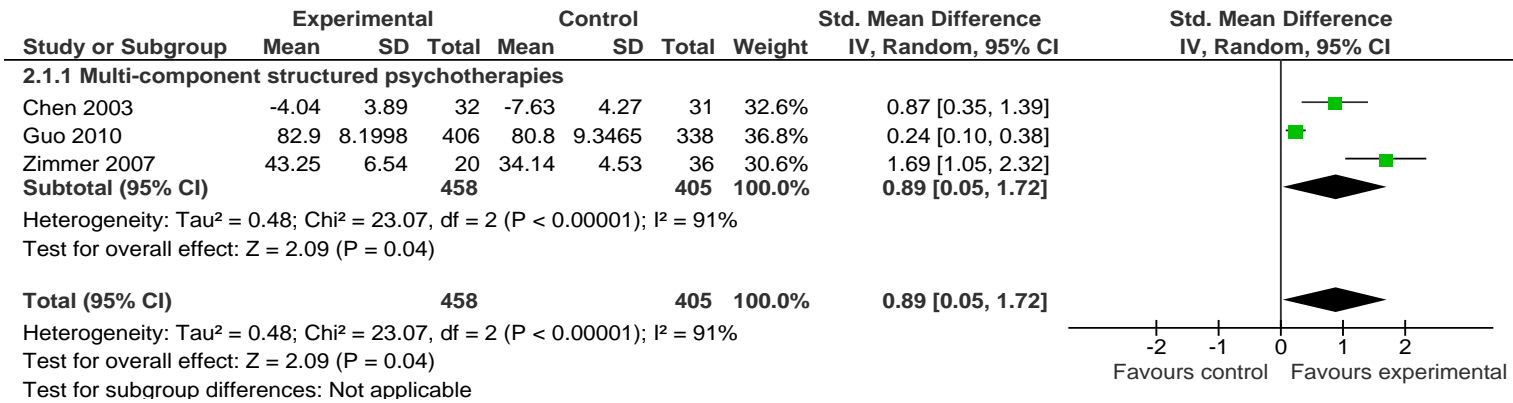


Fig. DS5 Sensitivity analysis for schizophrenia studies: short-term follow-up (<12m)

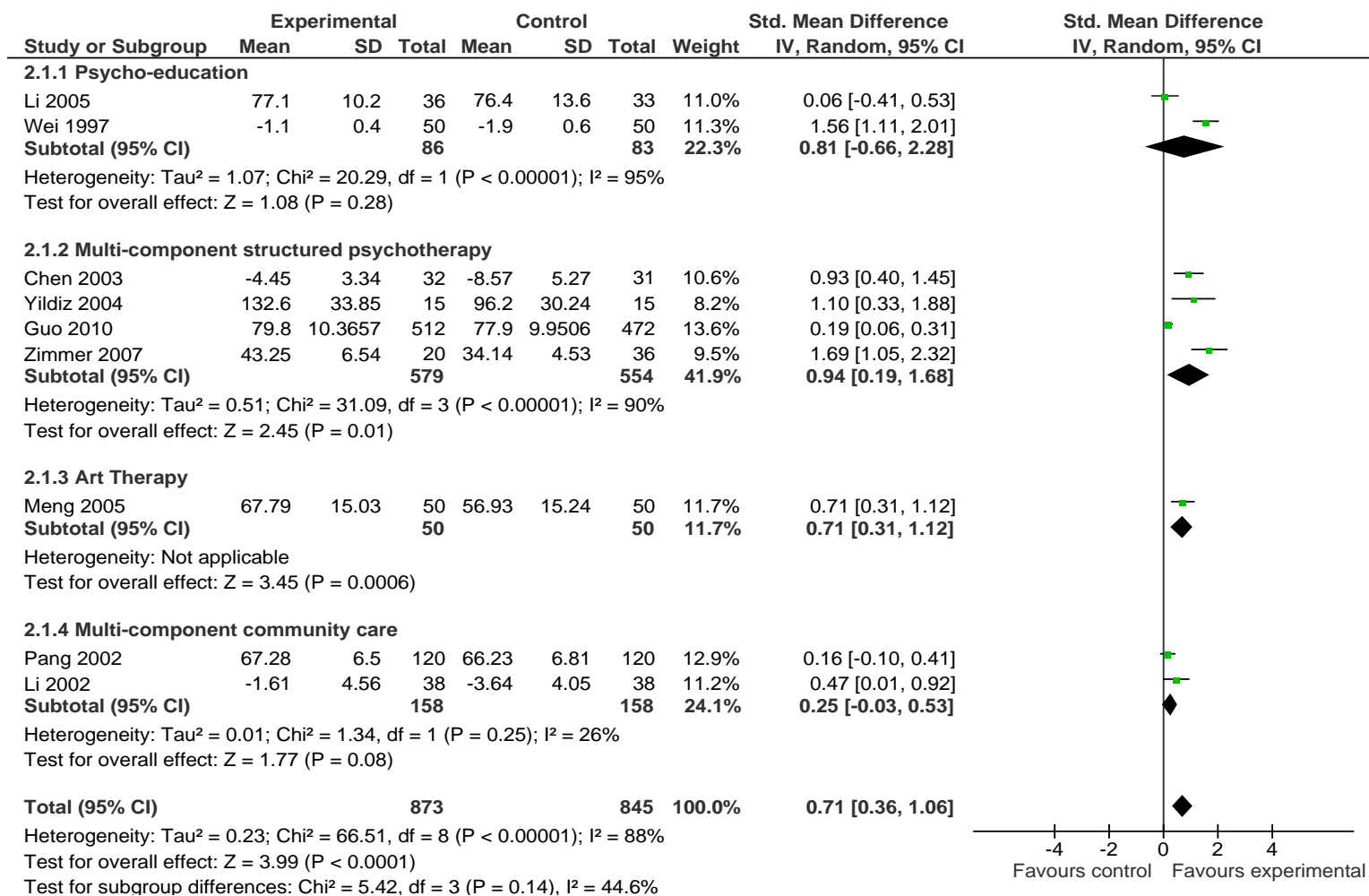


Fig. DS6 Sensitivity analysis for schizophrenia studies: long-term follow-up (>12m)

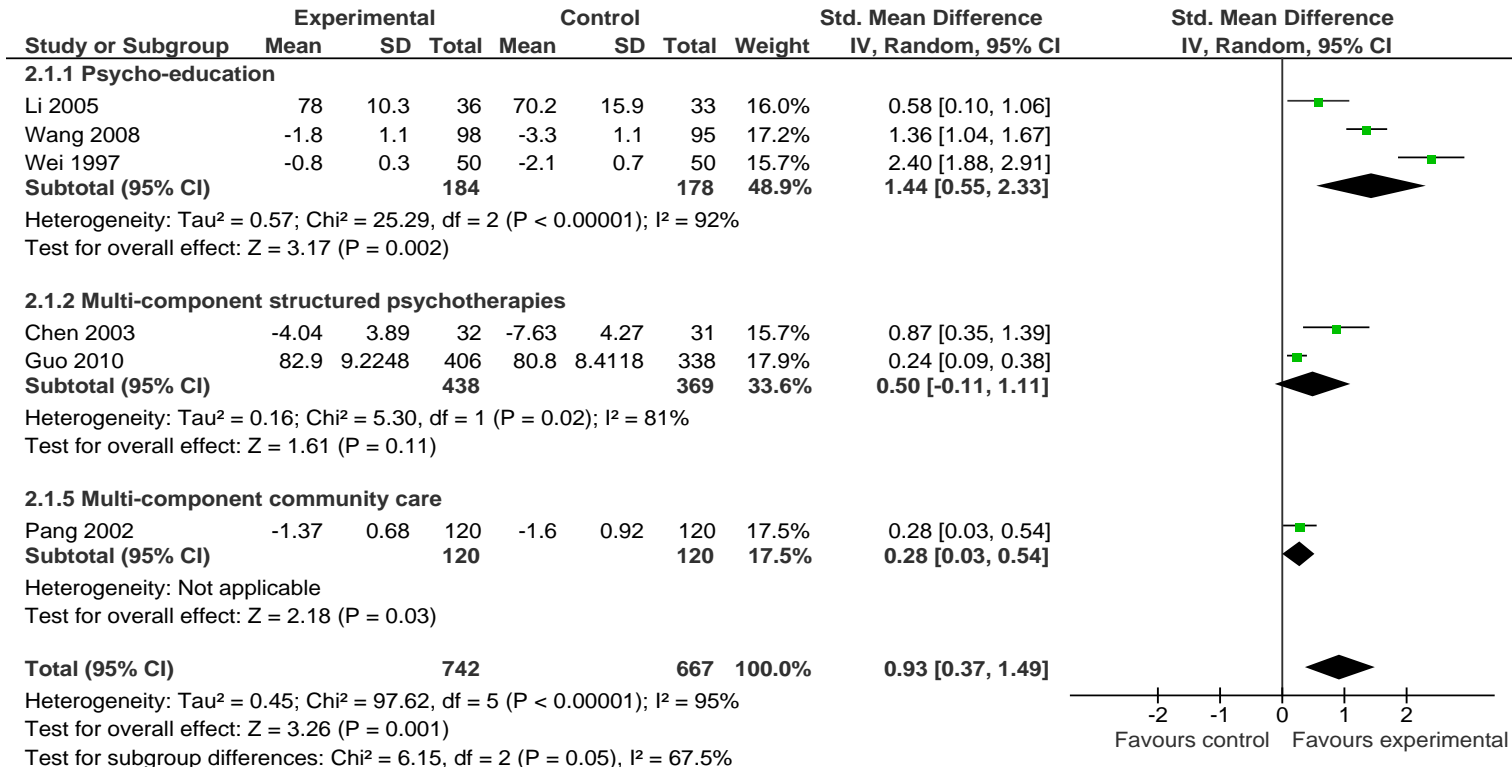


Fig. DS7 Funnel plot of main depression analysis. [AQ14 Please note forest plot has been altered to funnel plot – as detailed in text (and another heading that is no longer being included) – please confirm this is correct.] This is correct.

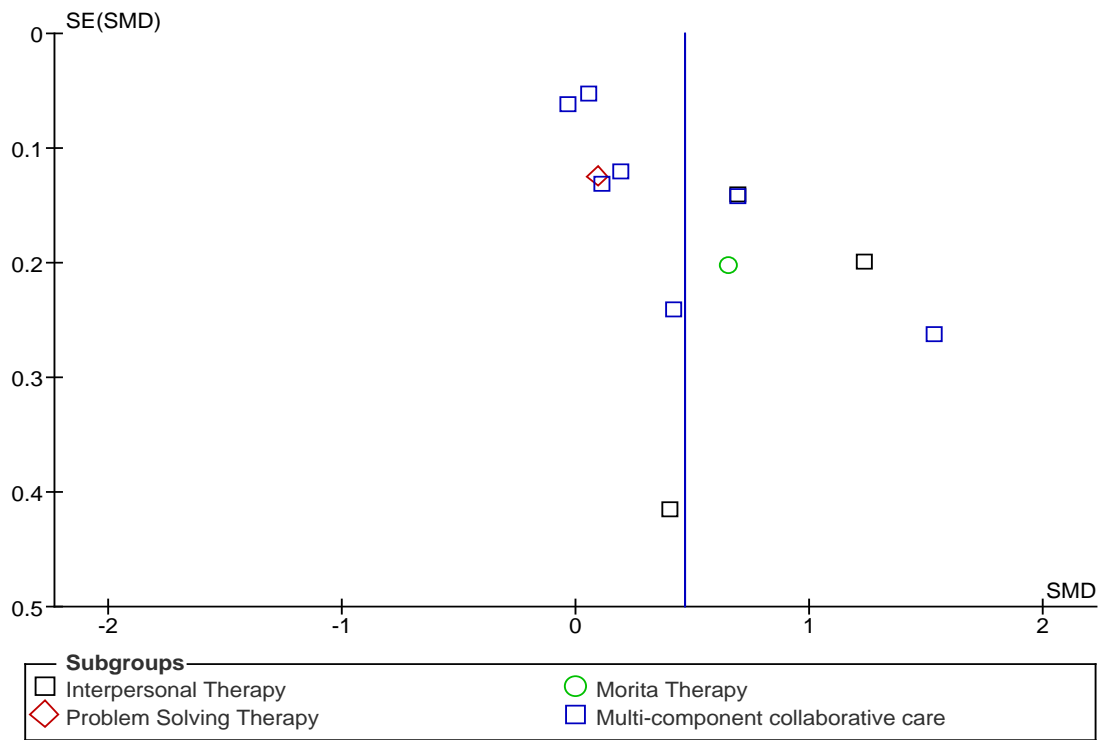
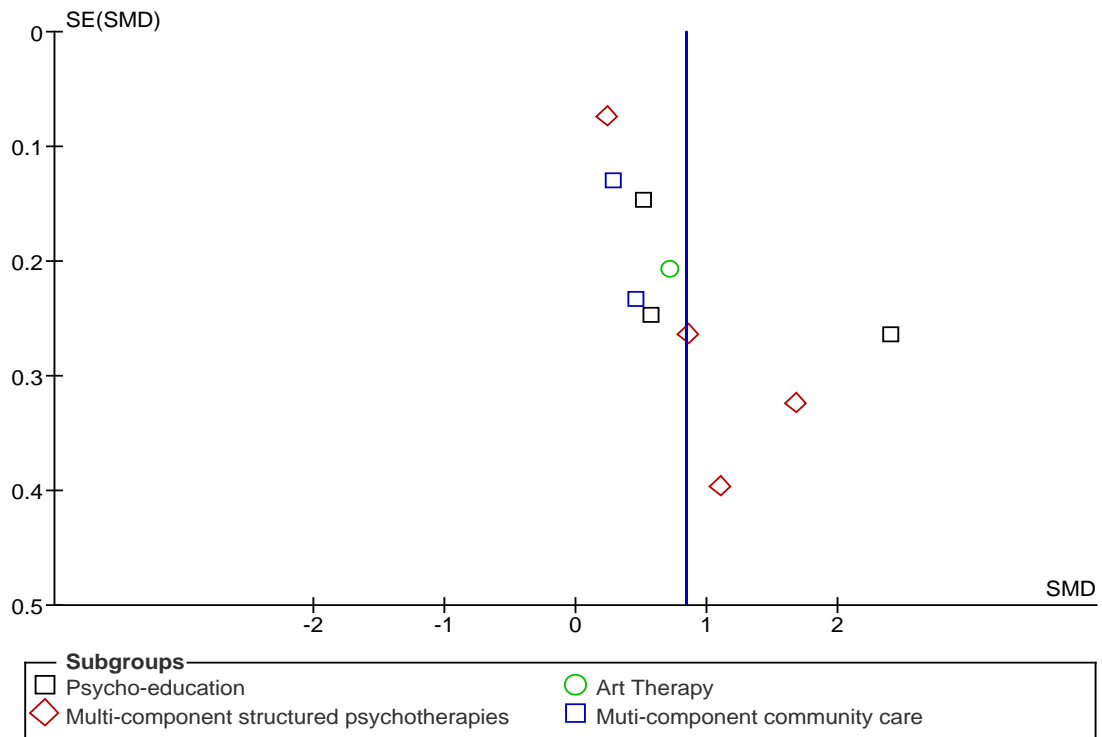


Fig. DS8 Funnel plot of main schizophrenia analysis. [AQ15 Please note forest plot has been altered to funnel plot – as detailed in text (and another heading that is no longer being included) – please confirm this is correct.] This is correct.



Online supplement

1. exp Developing Countries/

2. (algeria or egypt or libya or morocco or tunisia or cameroon or central african republic or chad or congo or "democratic republic of the congo" or equatorial guinea or gabon or burundi or djibouti or eritrea or ethiopia or kenya or rwanda or somalia or sudan or tanzania or uganda or angola or botswana or lesotho or malawi or mozambique or namibia or south africa or swaziland or zambia or zimbabwe or benin or burkina faso or cote d'ivoire or gambia or ghana or guinea or guinea-bissau or liberia or mali or mauritania or niger or nigeria or senegal or sierra leone or togo or antigua or bahamas or barbados or cuba or dominica or dominican republic or grenada or guadeloupe or haiti or jamaica or martinique or netherlands antilles or puerto rico or "saint kitts and nevis" or saint lucia or "saint vincent and the grenadines" or "trinidad and tobago" or "virgin islands of the united states" or belize or costa rica or el salvador or guatemala or honduras or nicaragua or panama or latin america or argentina or bolivia or brazil or chile or colombia or ecuador or french guiana or guyana or paraguay or peru or suriname or uruguay or venezuela or kazakhstan or kyrgyzstan or tajikistan or turkmenistan or uzbekistan or borneo or brunei or cambodia or east timor or indonesia or laos or malaysia or mekong valley or myanmar or philippines or singapore or thailand or vietnam or bangladesh or bhutan or india or afghanistan or bahrain or iran or iraq or israel or jordan or kuwait or lebanon or oman or qatar or saudi arabia or syria or turkey or united arab emirates or yemen or nepal or pakistan or sri lanka or china or korea or macao or mongolia or azores or bermuda or falkland islands or comoros or madagascar or mauritius or reunion or seychelles or fiji or new caledonia or papua new guinea or vanuatu or guam or palau or hawaii or pitcairn island or samoa or tonga). ab,ti.

3. 1 or 2

4. exp Mental disorders/

5. (mental* adj2 (health or ill* or disorder* or disab*)).ab,ti.

6. ((or (psychotic or mood or affective or obsessive?compulsive or panic or stress or child?behavio?r or child?mental or common mental)) adj2 disorder*).ab,ti.

7. (psychiatric or psychiatry or psycholog* or neurotic or neurosis or neuroses or depress* or anxiet* or anxious or schizophreni* or schizotyp* or psychos* or mania or manic or delusion* OCD or phobia* or phobic or somatic or somatoform or suicid* or dement* or Alzheimer* or epilep*).ab,ti.

8. ((substance or drug* or alcohol) adj3 (use* or misuse or abus*)).ab,ti.

9. 4 or 5 or 6 or 7 or 8

10. 3 and 9

11. social function* or functional status or patient function* or personal function* .ti.ab.

12. 10 and 11

13. randomized controlled trial.pt.

14. controlled clinical trial.pt.

15. randomized.ab.

16. placebo.ab.

17. drug therapy.fs.

18. randomly.ab.

19. trial.ab.

20. groups.ab.

21. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8

22. animals.sh. not (humans.sh. and animals.sh.)

23. 21 not 22

24. 12 and 23