Appendix O: Clinical evidence – forest plots for all studies

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Abbreviations

ABCS Abel and Becker Cognitions Scale
ACT acceptance and commitment therapy
APQ Alabama Parenting Questionnaire

ASI-6 Addiction Severity Index-6
BDI Beck Depression Inventory
BSI Brief Symptom Inventory
CBT cognitive behavioural therapy

CES-D Centre for Epidemiological Studies Depression scale

CIB Coding Interactive Behaviour scales

CJS criminal justice system

CMHS (-M/W) Correctional Mental Health Screen (for Men/Women)

ECBI Eyberg Child Behaviour Inventory

HELP-PC

MORS Mother's Object Relations Scale
MPA medroxyprogesterone acetate
PANAS Positive and Negative Affect Scale
PDI Parent Development Interview

PSS Perceived Stress Scale RDS Referral Decision Scale

ROC receiver operating characteristic randomised controlled trial SCL-90-R Symptom Checklist-90-Revised SIP Short Inventory of Problems

SOR sex offender's register

SOTP sex offender treatment programme

VISCI Viennese Instrument for Suicidality in Correctional Institutions

O.1 Assessment tools

O.1.1 Tools for the recognition of mental health problems

Figure 1: Sensitivity and specificity of index tests for the recognition of depression

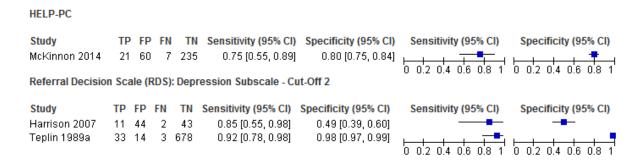


Figure 2: Summary ROC curves for the index tests for depression

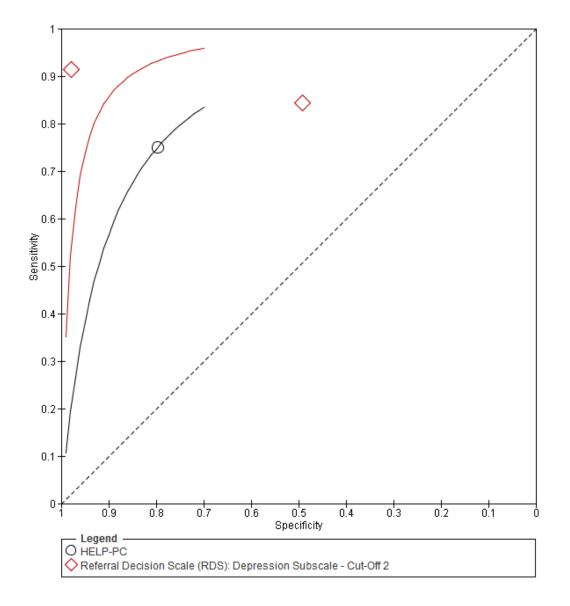


Figure 3: Sensitivity and specificity of the RDS for the recognition of bipolar disorder

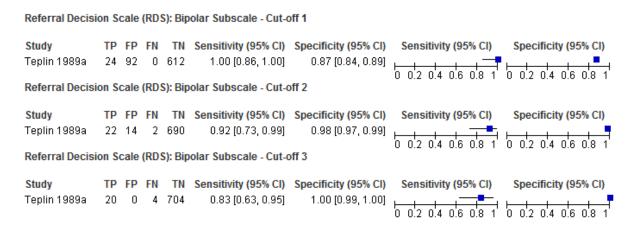


Figure 4: Summary ROC curves for the RDS for bipolar disorder

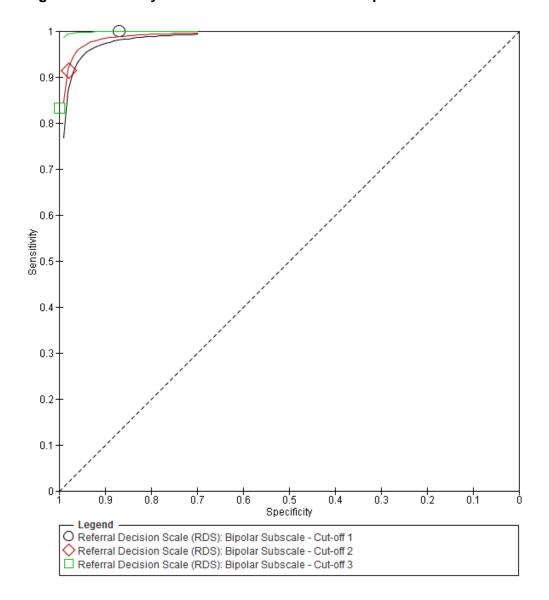


Figure 5: Sensitivity and specificity of index tests for the recognition of affective disorder

Correctional Mental Health Screen for Men (CMHS-M) - Cut-off 7 - All Men Study TP FP FN TN Sensitivity (95% CI) Specificity (95% CI) Sensitivity (95% CI) Specificity (95% CI) Ford 2007 0.83 [0.63, 0.95] 4 129 0.73 [0.66, 0.79] Correctional Mental Health Screen for Men (CMHS-M) - Cut-off 7 - Caucasian Men Study TP FP FN TN Sensitivity (95% CI) Specificity (95% CI) Sensitivity (95% CI) Specificity (95% CI) 0.78 [0.67, 0.86] Ford 2007 0.94 [0.73, 1.00] 17 18 1 62 Correctional Mental Health Screen for Men (CMHS-M) - Cut-off 7 - Black Men TP FP FN TN Sensitivity (95% CI) Specificity (95% CI) Sensitivity (95% CI) Specificity (95% CI) Ford 2007 0 46 1.00 [0.29, 1.00] 0.70 [0.57, 0.80] Correctional Mental Health Screen for Women (CMHS-W) - Cut-off 5 Sensitivity (95% CI) TP FP FN TN Sensitivity (95% CI) Specificity (95% CI) Specificity (95% CI) Ford 2007 0.73 [0.54, 0.87] 0.70 [0.58, 0.81]

Figure 6: Summary ROC curves for the index tests for affective disorder

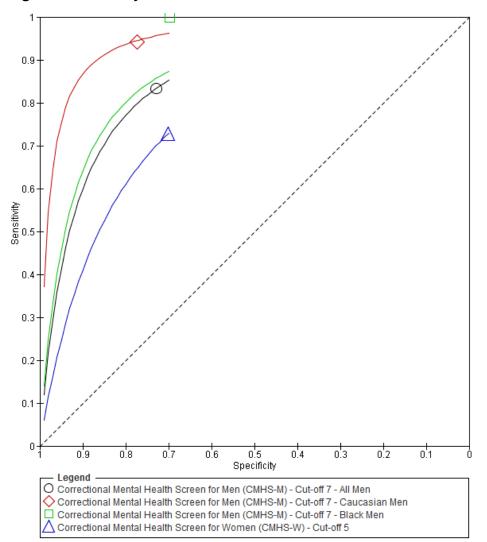


Figure 7: Sensitivity and specificity of the HELP-PC (cut-off 1) for the recognition of learning disabilities

 Study
 TP FP FN TN Sensitivity (95% CI)
 Specificity (95% CI)
 Sensitivity (95% CI)
 Specificity (95% CI)
 Specificity

Figure 8: Summary ROC curve for the HELP-PC for learning disabilities

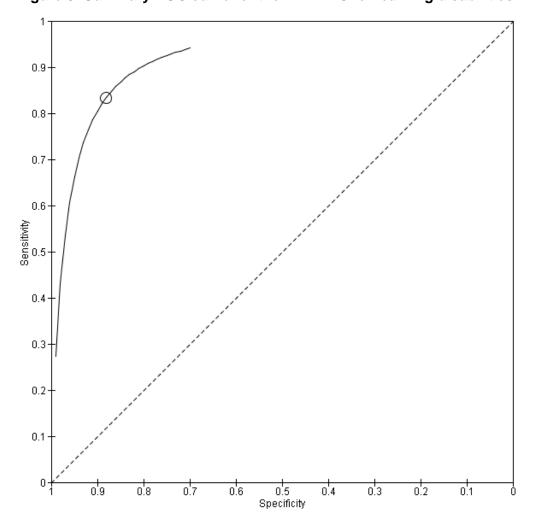


Figure 9: Sensitivity and specificity of RDS: schizophrenia subscale (cut-off 1) for the recognition of schizophrenia

 Study
 TP FP FN TN
 Sensitivity (95% CI)
 Specificity (95% CI)
 Sensitivity (95% CI)
 Specificity (95% CI)

Figure 10: Summary ROC curve for the RDS: schizophrenia subscale for schizophrenia

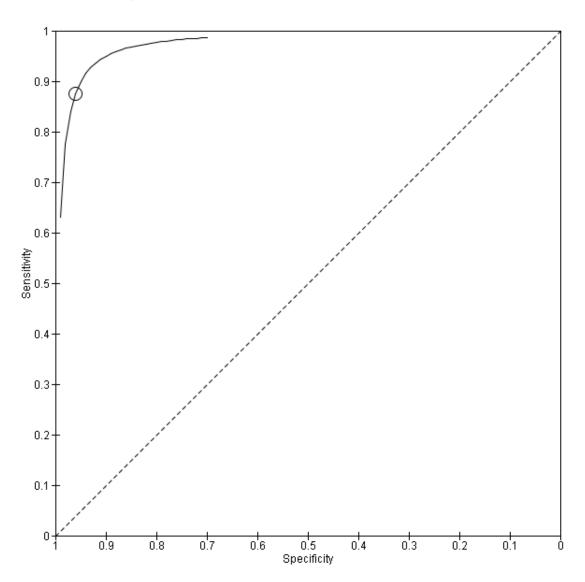


Figure 11: Sensitivity and specificity of the HELP-PC (cut-off not reported) for the recognition of psychosis



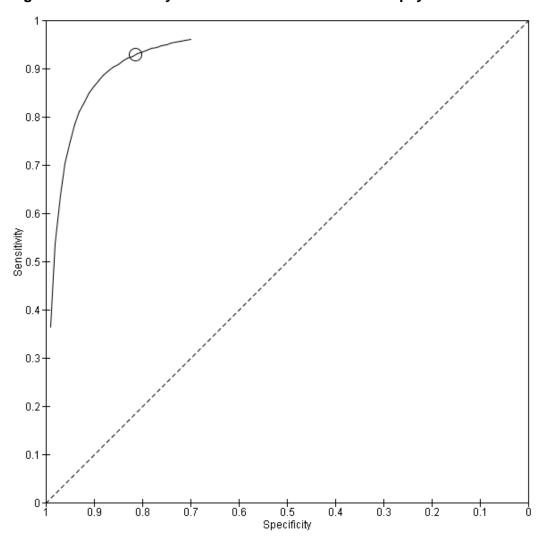


Figure 12: Summary ROC curve for the HELP-PC for psychosis

Figure 13: Sensitivity and specificity of the CMHS-W (cut-off 4) for the recognition of Axis-I or Axis-II disorder

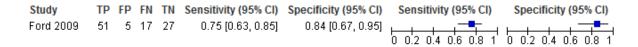


Figure 14: Summary of ROC curve for the CMHS-W for Axis-I or Axis-II disorder

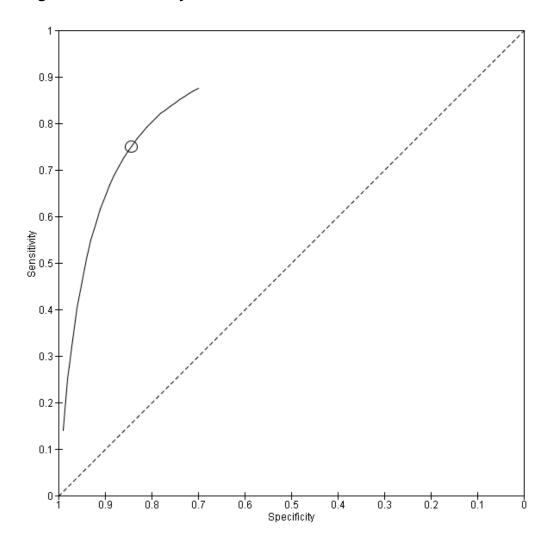


Figure 15: Sensitivity and specificity of index tests for the recognition of Axis-I or Axis-II disorder excluding Anti-Social Personality Disorder

Correctional Mental Health Screen for Men (CMHS-M) - Cut-off 5 TP FP FN TN Sensitivity (95% CI) Specificity (95% CI) Sensitivity (95% CI) Specificity (95% CI) Study Ford 2009 37 13 9 47 0.80 [0.66, 0.91] 0.78 [0.66, 0.88] 0 0.2 0.4 0.6 0.8 1 0 0.2 0.4 0.6 0.8 1 Correctional Mental Health Screen for Men (CMHS-M) - Cut-off 6 TP FP FN TN Sensitivity (95% CI) Specificity (95% CI) Sensitivity (95% CI) Specificity (95% CI) Ford 2007 0.74 [0.62, 0.84] 0.75 [0.67, 0.82] 51 33 18 99 0.70 [0.54, 0.82] Ford 2009 32 10 14 50 0.83 [0.71, 0.92] 0 0.2 0.4 0.6 0.8 1 Correctional Mental Health Screen for Men (CMHS-M) - Cut off 6 - Caucasian Men Study TP FP FN TN Sensitivity (95% CI) Specificity (95% CI) Sensitivity (95% CI) Specificity (95% CI) Ford 2007 27 14 6 50 0.82 [0.65, 0.93] 0.78 [0.66, 0.87] 0 0.2 0.4 0.6 0.8 1 Correctional Mental Health Screen for Men (CMHS-M) - Cut-off 6 - Black Men TP FP FN TN Sensitivity (95% CI) Specificity (95% CI) Sensitivity (95% CI) Specificity (95% CI) Study Ford 2007 16 14 4 35 0.80 [0.56, 0.94] 0.71 [0.57, 0.83] Correctional Mental Health Screen for Women (CMHS-W) - Cut-off 4 Study TP FP FN TN Sensitivity (95% CI) Specificity (95% CI) Sensitivity (95% CI) Specificity (95% CI) 0.72 [0.55, 0.85] Ford 2009 45 11 16 28 0.74 [0.61, 0.84] 0 0.2 0.4 0.6 0.8 1 0 0.2 0.4 0.6 0.8 1 Referral Decision Scale (RDS) - Cut-off 3 TP FP FN TN Sensitivity (95% CI) Specificity (95% CI) Sensitivity (95% CI) Specificity (95% CI) Ford 2007 11 2 4 10 0.73 [0.45, 0.92] 0.83 [0.52, 0.98] 0 0.2 0.4 0.6 0.8 1 0 0.2 0.4 0.6 0.8 1

Figure 16: Summary ROC curves for the index tests for Axis-I or Axis-II disorder excluding Anti-Social Personality Disorder

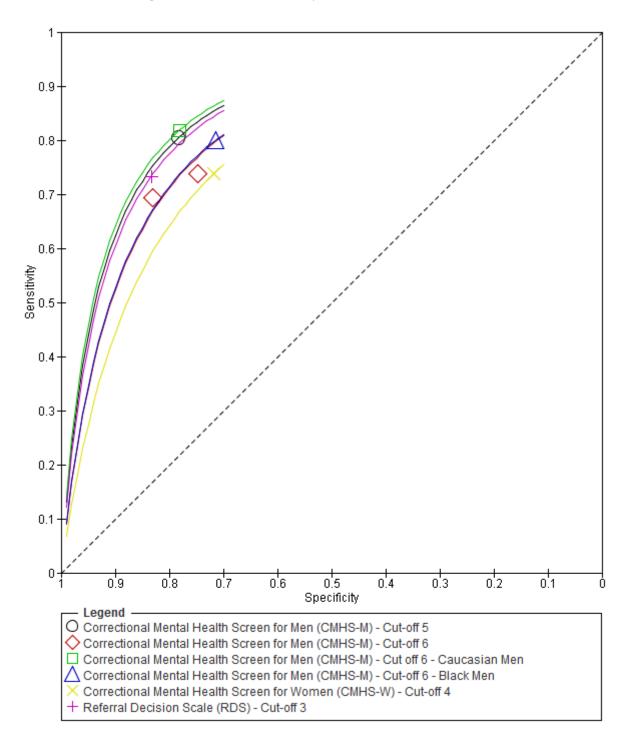
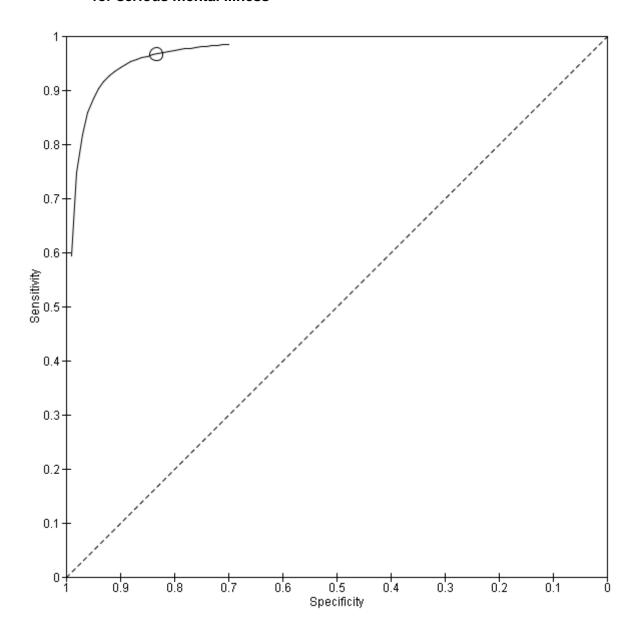


Figure 17: Sensitivity and specificity of the current prison reception health screen (cut-off 1) for the recognition of serious mental illness



Figure 18: Summary of ROC curve for the current prison reception health screen for serious mental illness



0.1.2 Risk assessment tools

0.1.2.1 VISCI for assessment of risk of sexual re-offending

Figure 19: VISCI using a cut-off of 3.38



O.2 Interventions for staff training

O.2.1 Organisational linkage intervention (OLI) plus Medication-assisted training (MAT) vs Training alone at post-treatment

Figure 20 Familiarity with medication: Methadone

	OLI plus training Training alone							Mean Difference	Mean Difference					
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI		IV, Fixe	d, 95% CI			
Friedmann 2015	0.4	1.42	383	0.26	1.01	464	100.0%	0.14 [-0.03, 0.31]			-			
Total (95% CI)			383			464	100.0%	0.14 [-0.03, 0.31]			•			
Heterogeneity: Not ap Test for overall effect			11)						-2	-1 Favours training alone	0 Favours OLI	l plus training	2	

Figure 21 Referral knowledge: Methadone

	ning	Train	ing ald	one		Mean Difference	Mean Difference						
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI		IV, Fixe	d, 95% CI		
Friedmann 2015	0.28	0.99	383	0.24	1.23	464	100.0%	0.04 [-0.11, 0.19]		_			
Total (95% CI)			383			464	100.0%	0.04 [-0.11, 0.19]		-	•		
Heterogeneity: Not a Test for overall effect			60)						!	-0.5 Favours training alone	0 (Favours Ol).5 LI plus trainin	1

Figure 22 Intent to refer clients to MAT: Methadone

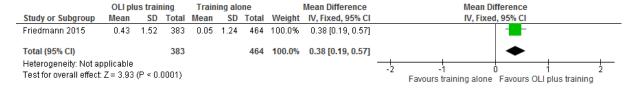


Figure 23 Overall perception and knowledge: Methadone

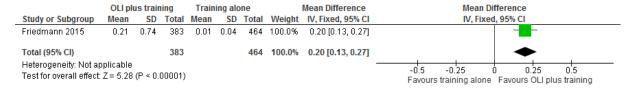


Figure 24 Familiarity with the medication: Buprenorphine

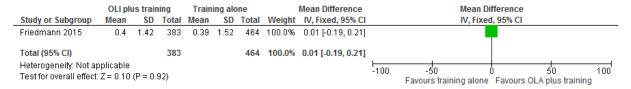


Figure 25 Referral knowledge: Buprenorphine

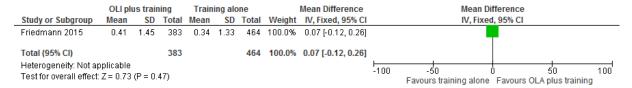
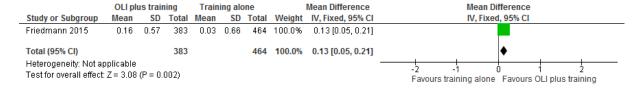


Figure 26 Intent to refer clients to MAT: Buprenorphine

	ning	Train	ing ald	ne		Mean Difference	Mean Difference					
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI			
Friedmann 2015	0.3	1.11	383	0.15	1.35	464	100.0%	0.15 [-0.02, 0.32]				
Total (95% CI)			383			464	100.0%	0.15 [-0.02, 0.32]	•			
Heterogeneity: Not ap Test for overall effect:			08)						-2 -1 0 1 2 Favours training alone Favours OLA plus training			

Figure 27 Overall perception and knowledge: Buprenorphine



Note – The scores ranged from 1 (strongly disagree) to 5 (strongly agree).

O.3 Interventions for promoting mental health and well being

O.3.1 Parent training for parent-child attachment versus treatment as usual for women with sub-threshold symptoms at post-treatment

Figure 28: Mean symptoms of depression as measured by the Center for Epidemiological Studies Depression Scale (CES-D)

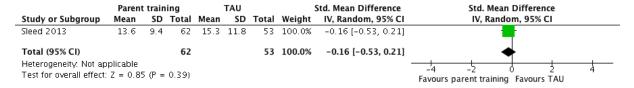


Figure 29: Number of participants with symptoms of depression (CES-D=>16)

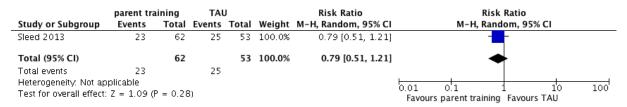


Figure 30: Mother-child attachment/interaction (after 4 week treatment): mean scores on the Reflective Functioning subscale of the Parent Development Interview (PDI)

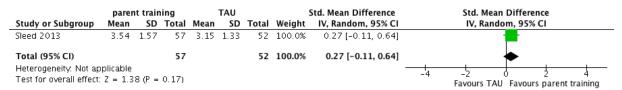


Figure 31: Mother-child attachment/interaction (after 4 week treatment): mean scores for dyadic attunement based on behavioural observation of mother-

infant interaction during free-play coded using Coding Interactive Behaviour (CIB) scales

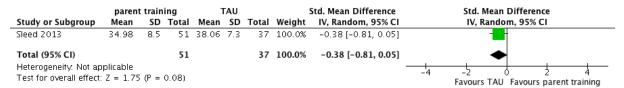


Figure 32: Maternal perceptions of child (after 4 week treatment): mean scores for positive perceptions of the infant as measured by the Mother's Object Relations Scale (MORS), Warmth subscale

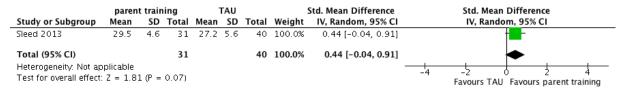


Figure 33: Maternal perceptions of child (after 4 week treatment): mean scores for negative perceptions of the infant as measured by the MORS, Invasion subscale

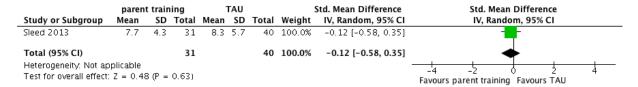


Figure 34: Maternal perceptions of child (after 30 week treatment): mean scores for parental reports of the intensity of children's problem behaviour as measured by the Eyberg Child Behavior Inventory (ECBI)

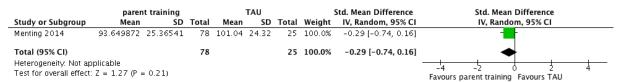


Figure 35: Maternal perceptions of child (after 30 week treatment): mean scores for the extent to which child behaviour is a problem for parents as measured by the ECBI

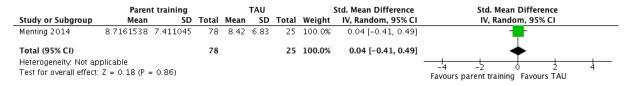


Figure 36: Maternal perceptions of child (after 30 week treatment): mean scores for maternal perceptions of their involvement with their child as measured by the Alabama Parenting Questionnaire (APQ), Involvement subscale

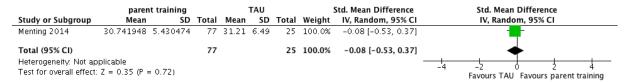


Figure 37: Maternal perceptions of child (after 30 week treatment): mean scores for maternal perceptions of their positive parenting as measured by the APQ, Positive parenting subscale

	parer	nt training			TAU			Std. Mean Difference		Std. Me	an Diff	erence	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI		IV, Random, 95% CI			
Menting 2014	25.052692	3.548054	78	27.28	2.51	25	100.0%	-0.66 [-1.12, -0.20]		-	F		
Total (95% CI)			78			25	100.0%	-0.66 [-1.12, -0.20]			▶		
Heterogeneity: Not ap Test for overall effect		= 0.005)							-4	-2 Favours T/	AU Fav	ours paren	t training

Figure 38: Maternal perceptions of child (after 30 week treatment): mean scores for maternal perceptions of their poor monitoring/supervision as measured by the APQ, Poor monitoring/supervision subscale

	parer	nt training			TAU			Std. Mean Difference	Std. Mean Difference					
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI		IV, Randor	n, 95% (1		
Menting 2014	11.202208	2.246847	77	10.48	2.04	25	100.0%	0.33 [-0.13, 0.78]		-	-			
Total (95% CI)			77			25	100.0%	0.33 [-0.13, 0.78]		•	•			
Heterogeneity: Not a Test for overall effect		0.16)							-4 Favours par	-2 0 ent training	Favours	2 TAU	4	

Figure 39: Maternal perceptions of child (after 30 week treatment): mean scores for maternal perceptions of their inconsistent discipline as measured by the APQ, Inconsistent discipline subscale

		TAU			Std. Mean Difference	Std. Mean Difference							
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI		IV, Random, 95% CI			
Menting 2014	12.856282	3.692783	78	15.88	3.79	25	100.0%	-0.81 [-1.27, -0.34]		-			
Total (95% CI)			78			25	100.0%	-0.81 [-1.27, -0.34]		•			
Heterogeneity. Not ap Test for overall effect:	•	= 0.0007)							-4 Favours	-2 s parent training	Favours T	AU	4

Figure 40: Maternal perceptions of child (after 30 week treatment): mean scores for maternal perceptions of their corporal punishment as measured by the APQ, Corporal punishment subscale

	TAU				Std. Mean Difference		Std. Me	an Differ	ence				
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI		IV, Rar	dom, 959	6 CI	
Menting 2014	4.5502564	1.895953	78	4.84	2.08	25	100.0%	-0.15 [-0.60, 0.30]			-		
Total (95% CI)			78			25	100.0%	-0.15 [-0.60, 0.30]			•		
Heterogeneity: Not ap Test for overall effect:	•	0.52)							-4 Favours	-2 parent traini	ng Favou	rs TAU	4

Figure 41: Drop out before the post-intervention assessment

	parent tra	ining	TAU	J		Risk Ratio	Risk Ratio						
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI						
Menting 2014	28	86	9	27	39.2%	0.98 [0.53, 1.80]	-+						
Sleed 2013	26	96	22	99	60.8%	1.22 [0.74, 2.00]	-						
Total (95% CI)		182		126	100.0%	1.12 [0.76, 1.64]	*						
Total events	54		31										
Heterogeneity: Tau² = Test for overall effect:				P = 0.5	(8); $I^2 = 0$)%	0.01 0.1 10 100 Favours parent training Favours TAU						

O.3.2 Yoga for promoting mental health and wellbeing versus waiting list control

Figure 42: Positive and negative affect (after 10 week treatment): mean scores of positive affect as measured by the Positive and Negative Affect Scale (PANAS)

		wa	itlist contro	l .	:	Std. Mean Difference	Std. Mean Difference					
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI		IV, Random	, 95% CI	
Bilderbeck 2013	37.16	7.781517	45	31.22	7.564522	55	100.0%	0.77 [0.36, 1.18]			-	
Total (95% CI)			45			55	100.0%	0.77 [0.36, 1.18]			•	
Heterogeneity. Not ap									-4	-5	<u> </u>	4
Test for overall effect:	2 = 3.6	9 (P = 0.00)	02)						Favours wai	tlist control F	avours yoga	

Figure 43: Positive and negative affect (after 10 week treatment): mean scores of negative affect as measured by the PANAS

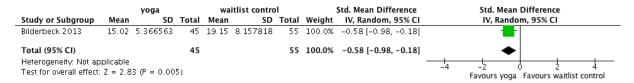


Figure 44: Stress (after 10 week treatment): mean scores on the Perceived Stress Scale (PSS)

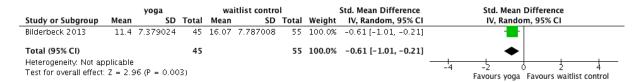


Figure 45: Psychological distress (after 10 week treatment): mean scores on the Brief Symptom Inventory (BSI)

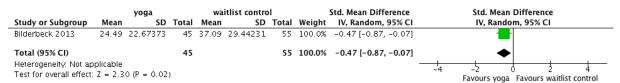
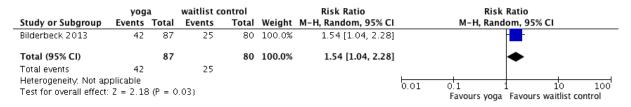


Figure 46: Drop-out (after 10 week treatment): number of participants who dropped out before the post-intervention assessment



O.3.3 Meditation for promoting mental health and well-being versus treatment as usual

Figure 47: Desire to throw things/hit people (after 7 week treatment): mean scores on study-specific measure within past month

			meditation	TAU		Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Std. Mean Difference	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Sumter 2009	-1.00612442	0.36967716	17	16	100.0%	-1.01 [-1.73, -0.28]	-
Total (95% CI)			17	16	100.0%	-1.01 [-1.73, -0.28]	•
Heterogeneity: Not ap Test for overall effect	oplicable : Z = 2.72 (P = 0.006)					-	-4 -2 0 2 4 Favours meditation Favours TAU

Figure 48 Being bothered by nail biting (after 7 week treatment): mean scores on study-specific measure within past month

Study or Subgroup	Std. Mean Difference	SE	meditation Total	TAU Total	Weight	Std. Mean Difference IV, Random, 95% CI	Std. Mean Difference IV, Random, 95% CI
Sumter 2009	-1.17552896	0.37717493	17	16	100.0%	-1.18 [-1.91, -0.44]	-
Total (95% CI)			17	16	100.0%	-1.18 [-1.91, -0.44]	•
Heterogeneity: Not ap Test for overall effect	oplicable : Z = 3.12 (P = 0.002)						-4 -2 0 2 4 Favours meditation Favours TAU

Figure 49: Feelings of guilt (after 7 week treatment): mean scores on study-specific measure within past month

			meditation	TAU		Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Std. Mean Difference	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Sumter 2009	-0.41727854	0.352082	17	16	100.0%	-0.42 [-1.11, 0.27]	
Total (95% CI)			17	16	100.0%	-0.42 [-1.11, 0.27]	•
Heterogeneity: Not ap Test for overall effect:	pplicable : Z = 1.19 (P = 0.24)					-	-4 -2 0 2 4 Favours meditation Favours TAU

Figure 50 Feelings of hopelessness (after 7 week treatment): mean scores on studyspecific measure within past month

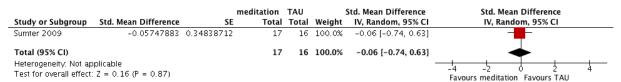


Figure 51: Being bothered by sleep difficulties (after 7 week treatment): mean scores on study-specific measure within past month

			meditation	TAU		Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Std. Mean Difference	SE	Total	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Sumter 2009	-0.27852953	0.34999852	17	16	100.0%	-0.28 [-0.96, 0.41]	-
Total (95% CI)			17	16	100.0%	-0.28 [-0.96, 0.41]	•
Heterogeneity: Not ap							-4 -2 0 2 4
Test for overall effect:	Z = 0.80 (P = 0.43)						Favours meditation Favours TAU

O.3.4 Physical exercise programmes for promoting mental health and well-being versus exercise as usual at post-treatment

Figure 52: Change in Symptom Checklist-90-Revised (SCL-90-R) Global Severity Index (GSI)

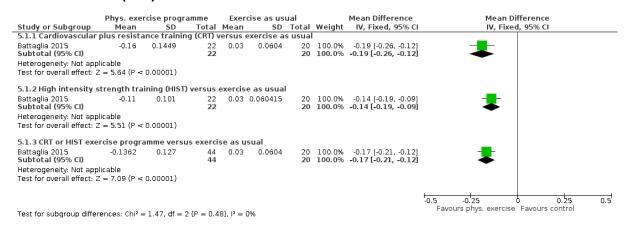


Figure 53: Change in Symptom Checklist-90-Revised (SCL-90-R) Positive Symptom Total (PST)

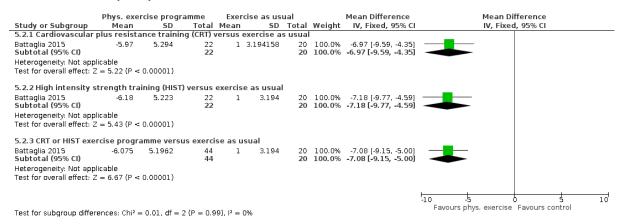
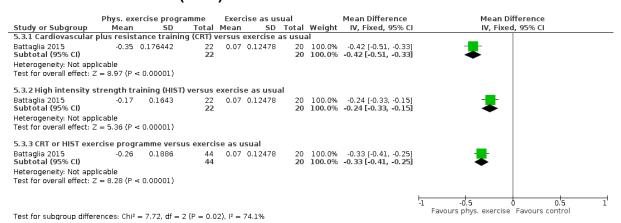


Figure 54: Change in Symptom Checklist-90-Revised (SCL-90-R) Positive Symptom Distress Index (PSDI)



O.4 Interventions for substance misuse

O.4.1 Psychological interventions

0.4.1.1 CBT versus active intervention

Figure 55: Days using cannabis during treatment

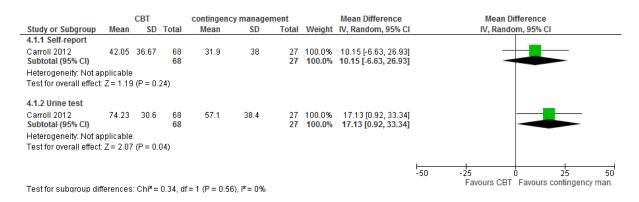


Figure 56: Days with a positive urine test during treatment

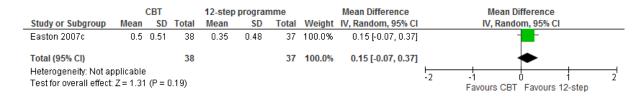


Figure 57: Days with a positive breathalyser test during treatment

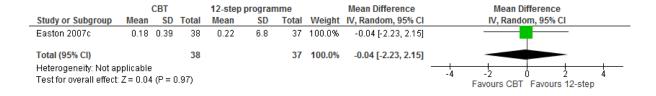


Figure 58: Days abstinent during treatment

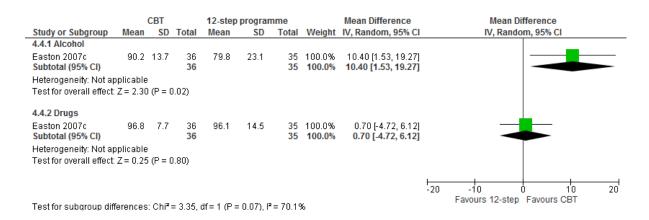


Figure 59: Addiction Severity Index (ASI-6): alcohol composite score at 26-38 weeks follow-up

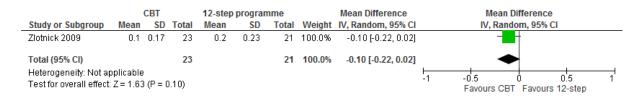


Figure 60: Addiction Severity Index (ASI-6): drug composite score at 26-38 weeks follow-up

		CBT		12-step	ргодгаг	nme		Mean Difference	Mean Difference			
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI			
Zlotnick 2009	0.16	0.14	23	0.18	0.11	21	100.0%	-0.02 [-0.09, 0.05]	5]			
Total (95% CI)			23			21	100.0%	-0.02 [-0.09, 0.05]	a			
Heterogeneity: Not ap Test for overall effect			0.60)						-1 -0.5 0 0.5 Favours CBT Favours 12-step	T		

Figure 61: Weeks abstinent (3 month follow-up) at 26-38 weeks follow-up

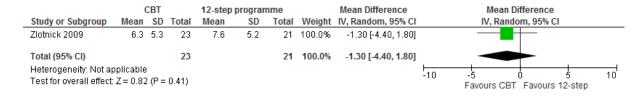


Figure 62: Re-incarceration at 26-38 weeks follow-up



0.4.1.2 CBT versus wait-list control

Figure 63: Addiction Severity Index (ASI-6): alcohol composite score at posttreatment

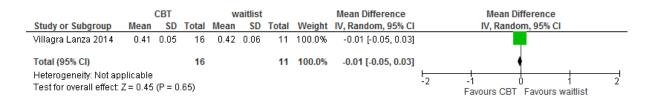


Figure 64: Addiction Severity Index (ASI-6): drug composite score at posttreatment

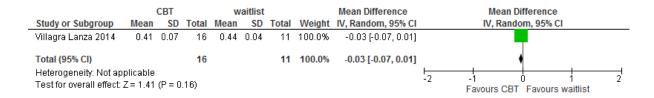
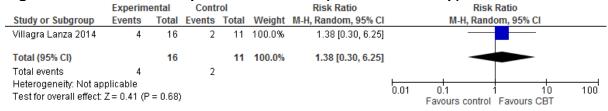


Figure 65: Abstinent in previous 3 months (6 month follow-up)



O.4.1.3 ACT versus CBT

Figure 66: Addiction Severity Index (ASI-6): alcohol composite score at posttreatment

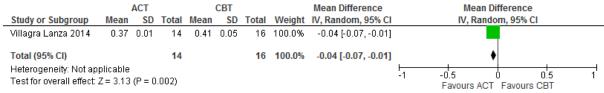


Figure 67: Addiction Severity Index (ASI-6): drug composite score at posttreatment

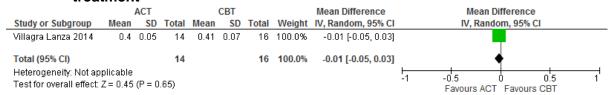
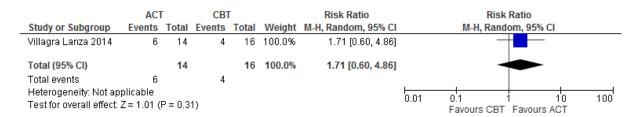


Figure 68: Abstinent from drugs in previous 3 months at post-treatment



0.4.1.4 ACT versus waitlist

Figure 69: Addiction Severity Index (ASI-6): alcohol composite score at 42 weeks follow-up

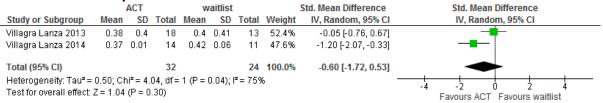


Figure 70: Addiction Severity Index (ASI-6): drug composite score at 42 weeks follow-up

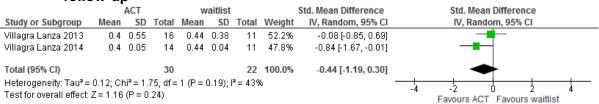
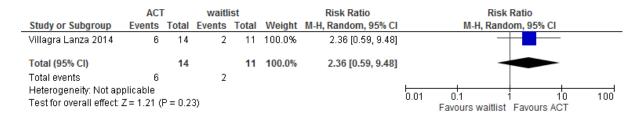


Figure 71: Abstinent from drugs in previous 3 months at 42 weeks follow-up



0.4.1.5 Mindfulness-based relapse prevention (MBRP) versus active intervention

Figure 72: Drug-use days at post-treatment

_	I	ИBRР		Relapse p	revention	(TAU)		Mean Difference		Mean Difference			
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI		IV, Ran	dom, 95	% CI	
Witkiewitz 2014	0.04	0.19	28	0.5	1.82	26		-0.46 [-1.16, 0.24]		_	+		
									-4	-2	-	2	-
										Favoure MRF	P Favo	ure TALL	

Figure 73: Short Inventory of Problems (SIP) follow-up at post-treatment

	N	IBRP		Relapse p	revention ((TAU)		Mean Difference		M	ean Differe	nce	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI		IV,	Random, 95	5% CI	
Witkiewitz 2014	14.6	16.5	28	21.9	15.4	26		-7.30 [-15.81, 1.21]	-				
									-10	-5	ò	5	10
										Favours	MRRP Favo	nurs TALL	

Figure 74: Addiction Severity Index (ASI-6) at post-treatment

		1BRP		Deleneen	-	•	,	Mean Difference	Mean Difference
04d			T-4-1		revention		107-1-1-4		
Study or Subgroup	Mean		Total	Mean	SD	Total	vveignt	IV, Random, 95% CI	IV, Random, 95% CI
3.3.1 Family-social c	•								<u>_</u>
Witkiewitz 2014	0.13	0.16	28	0.14	0.12	26	100.0%	-0.01 [-0.09, 0.07]	
Subtotal (95% CI)			28			26	100.0%	-0.01 [-0.09, 0.07]	1
Heterogeneity: Not ap									
Test for overall effect:	Z = 0.26	6 (P = 0	3.79)						
3.3.2 Legal composi	te score								
Witkiewitz 2014	0.04	0.12	28	0.35	0.35	26	100.0%	-0.31 [-0.45, -0.17]	
Subtotal (95% CI)			28			26	100.0%	-0.31 [-0.45, -0.17]	▼
Heterogeneity: Not as	plicable	!							
Test for overall effect:	Z = 4.29) (P < 0	0.0001)						
3.3.3 Medical compo									
Witkiewitz 2014	0.12	0.25	28	0.32	0.36		100.0%		_
Subtotal (95% CI)			28			26	100.0%	-0.20 [-0.37, -0.03]	•
Heterogeneity: Not ap									
Test for overall effect	Z = 2.35) (P = l	J.U2)						
3.3.4 Psychiatric cor	nposite	score							
Witkiewitz 2014	0.23	0.17	28	0.34	0.24	26	100.0%	-0.11 [-0.22, 0.00]	
Subtotal (95% CI)			28			26	100.0%	-0.11 [-0.22, 0.00]	₹
Heterogeneity: Not ap	oplicable	!							
Test for overall effect:	Z = 1.93	P = 0	0.05)						
									-4 -2 0 2 4
	_								Favours MBRP Favours TAU
Test for subgroup dif	ferences	:: Chi²:	= 15.36	6. df = 3 (P =	0.002), 2=	80.5%			

0.4.1.6 Contingency management versus active intervention at post-treatment



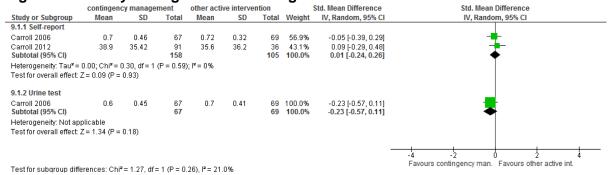


Figure 76: Addiction Severity Index (ASI-6): marijuana composite score at posttreatment

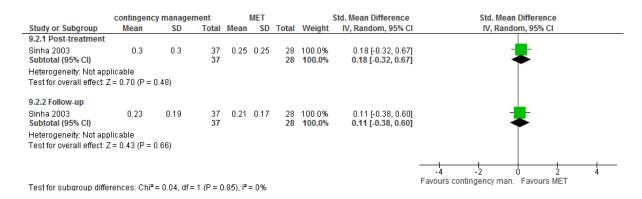


Figure 77: Days cannabis use per month at post-treatment

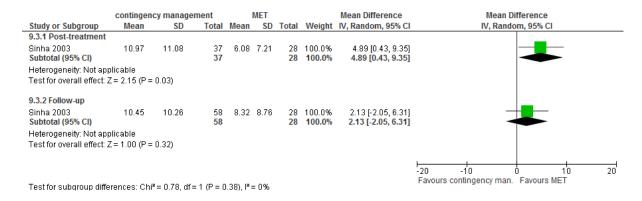


Figure 78: Participants still in treatment at follow-up at post-treatment

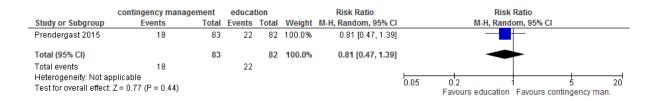
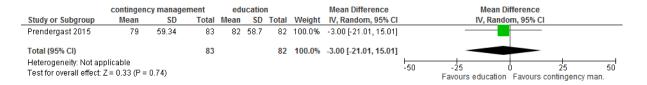
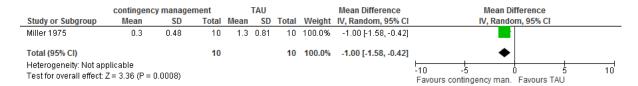


Figure 79: Number of days in treatment at post-treatment



0.4.1.7 Contingency management versus control at post-treatment

Figure 80: Arrests for public drunkenness



O.4.1.8 Motivational enhancement therapy versus active intervention

Figure 81: Percentage of days abstinent from alcohol (self-report) at post-treatment

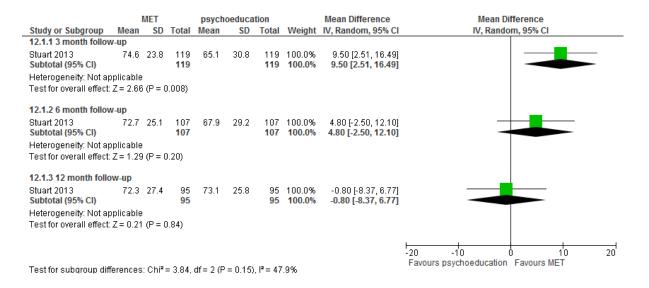


Figure 82: Percentage of days abstinent from alcohol and drugs at post-treatment

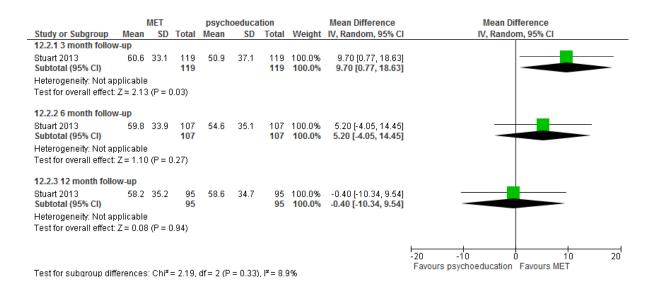
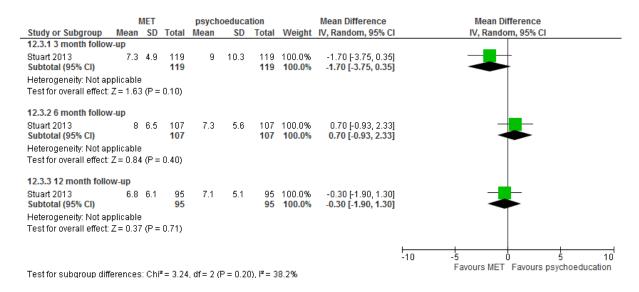


Figure 83: Drinks per drinking days at post-treatment



Percentage of days with cannabis use during treatment Figure 84:

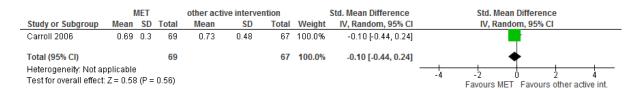
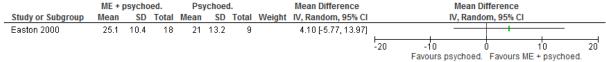


Figure 85: Percentage of urine tests positive for cannabis use during treatment other active intervention Std. Mean Difference Std. Mean Difference Mean SD Total Total Weight IV, Random, 95% CI IV, Random, 95% CI Study or Subgroup SD Carroll 2006 0.28 0.41 69 0.7 67 100.0% -0.91 [-1.27, -0.56] Total (95% CI) 69 67 100.0% -0.91 [-1.27, -0.56] Heterogeneity: Not applicable Test for overall effect: Z = 5.07 (P < 0.00001)

Favours MET Favours other active int.

Figure 86: Self-reported motivation to take steps to change substance abuse scores at post-treatment



O.4.1.9 Motivational interviewing or feedback versus control or treatment as usual

Figure 87: Self-reported drug use at post-treatment

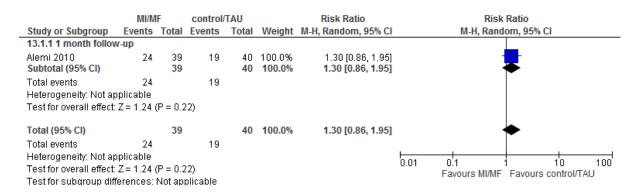


Figure 88: Self-reported days with drug use in the past 30 days (10 month follow-up)

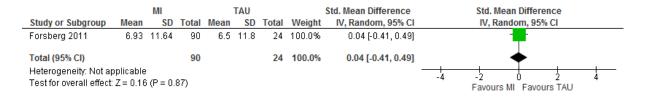
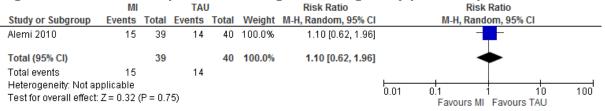


Figure 89: Urine test positive for drug use during study period at post-treatment





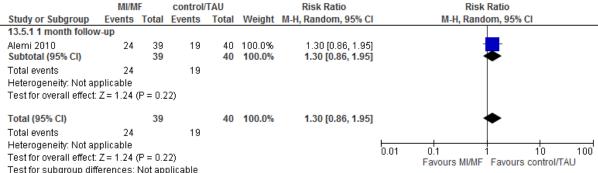


Figure 91: Days with illegal activity in the past 30 days (10 month follow-up)

		MI		1	ΓAU			Std. Mean Difference		Std. I	Aean Differ	ence	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI		IV, F	andom, 95	% CI	
Forsberg 2011	3.92	9.22	80	3.3	9	23	100.0%	0.07 [-0.40, 0.53]			-		
Total (95% CI)			80			23	100.0%	0.07 [-0.40, 0.53]			•		
Heterogeneity: Not ap Test for overall effect:	•		0.78)						-4	-2 Favou	o⊓ orsMIFavo	2 urs TAU	4

Figure 92: Drop-out from subsequent treatment (binge drinking group) at posttreatment

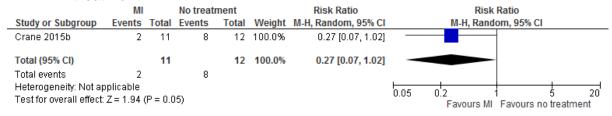


Figure 93: Drop-out from subsequent treatment (non-binge drinking group) at post-treatment

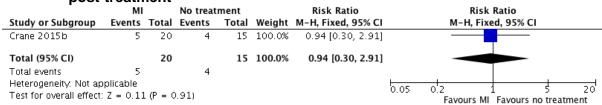


Figure 94: Number of subsequent treatment sessions attended (binge drinking group) at post-treatment

_		ΜI		No t	reatm	ent		Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Crane 2015b	14.6	10.08	10	3.44	5.77	9	100.0%	11.16 [3.86, 18.46]	
Total (95% CI)			10			9	100.0%	11.16 [3.86, 18.46]	
Heterogeneity: Not ap Test for overall effect:			0.003)						-20 -10 0 10 20 Favours no treatment Favours MI

Figure 95: Number of subsequent treatment sessions attended (non-binge drinking group) at post-treatment

•		ΜI		No	treatme	nt		Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Crane 2015b	11.35	8.45	20	13	10.86	15	100.0%	-1.65 [-8.28, 4.98]	
Total (95% CI)			20			15	100.0%	-1.65 [-8.28, 4.98]	
Heterogeneity: Not ap Test for overall effect:			0.63)						-10 -5 0 5 10 Favours no treatment Favours MI

Figure 96: Specialty addiction clinic attendance at post-treatment

	Motivational feedback		No treat	ment		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Davis 2003	8	17	4	13	100.0%	1.53 [0.59, 3.99]	
Total (95% CI)		17		13	100.0%	1.53 [0.59, 3.99]	
Total events	8		4				
Heterogeneity: Not app Test for overall effect: 7		9)					0.1 0.2 0.5 1 2 5 10 Favours no treatment Favours motivational

0.4.1.10 Group counselling versus treatment as usual

Figure 97: Re-arrest (12 month follow-up)

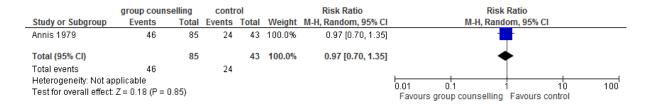


Figure 98: Number of reconvictions (12 month follow-up)

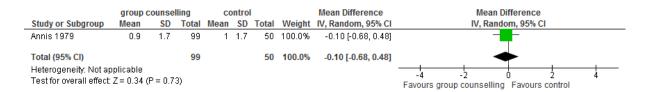
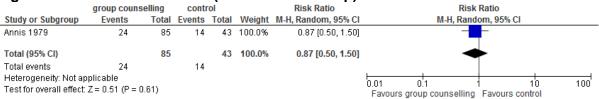
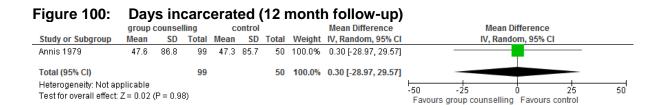
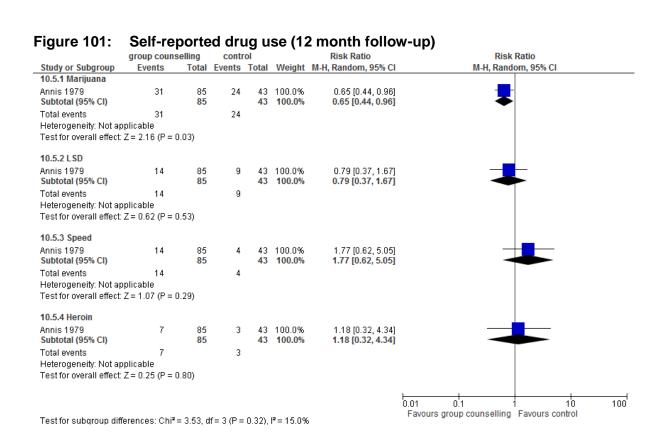


Figure 99: Re-incarceration (12 month follow-up)

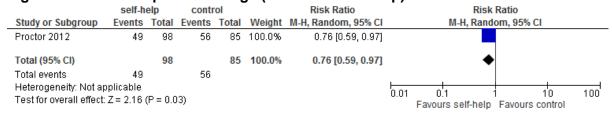






O.4.1.11 Self-help versus control

Figure 102: Subsequent bookings (12 month follow-up)



O.4.2 Pharmacological interventions

O.4.2.1 Naloxone versus placebo

Figure 103: Discontinued medication at post-treatment

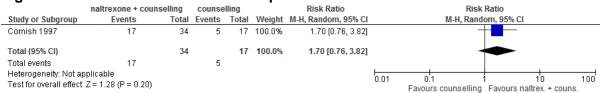
	naloxo	one	place	bo		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Hanlon 1977	16	55	8	42	100.0%	1.53 [0.72, 3.23]	_
Total (95% CI)		55		42	100.0%	1.53 [0.72, 3.23]	-
Total events	16		8				
Heterogeneity: Not applicable Test for overall effect: Z = 1.11 (P = 0.27)							0.01 0.1 1 10 100 Favours naloxone Favours placebo

Figure 104: Number of urine test positive at post-treatment

	naloxo	one	place	bo	Risk Ratio			Risk Ratio					
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI		M-H, Rar					
Hanlon 1977	5	73	10	90	100.0%	0.62 [0.22, 1.72]		_	+				
Total (95% CI)		73		90	100.0%	0.62 [0.22, 1.72]		-					
Total events	5		10										
Heterogeneity: Not applicable Test for overall effect: Z = 0.92 (P = 0.36)							0.01	0.1 Favours naloxon	1 e Favours	10 placebo	100		

0.4.2.2 Naltrexone versus active intervention

Figure 105: Retained in treatment at post-treatment



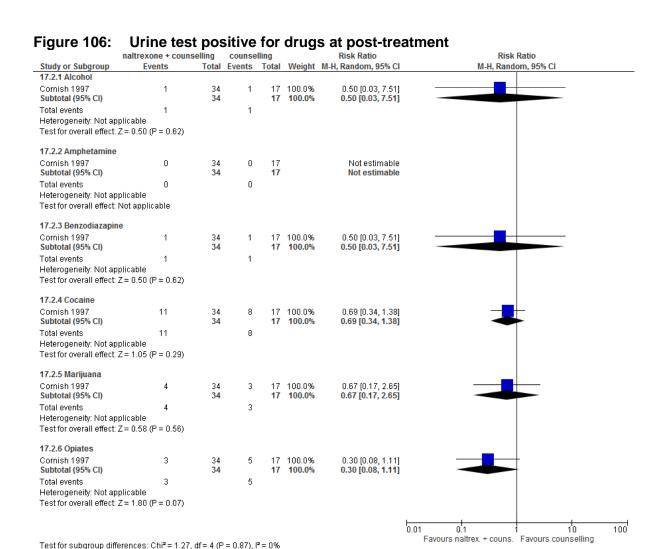


Figure 107: Cocaine use at post-treatment

	naltrexone		other active intervention			Risk Ratio		Risk Ratio			
Study or Subgroup	ıbgroup Events Total			Total	Weight	M-H, Random, 95% CI		M-H, Rai	M-H, Random, 95% CI		
Coviello 2010	5 31 2 32				100.0%	2.58 [0.54, 12.33]					
Total (95% CI)		31		32	100.0%	2.58 [0.54, 12.33]		-		_	
Total events	5		2								
Heterogeneity: Not a	pplicable						0.01	01	+	10	100
Test for overall effect	P = 0.2	!3)				0.01	Favours naltrexon	e Favours oth	er active		

Figure 108: Opioid use post-treatment

-											
	naltrex	cone	other active intervention			Risk Ratio	Risk Ratio				
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI		M-H, Random, 95% CI			
Coviello 2010	5	31	8	32	4.5%	0.65 [0.24, 1.76]					
Lee 2016	66	153	99	155	95.5%	0.68 [0.54, 0.84]					
Total (95% CI)		184		187	100.0%	0.67 [0.55, 0.83]			•		
Total events	71		107								
Heterogeneity: Tau² =	= 0.00; Ch	$i^2 = 0.0^\circ$	1, df = 1 (P = 0.93); l ²	= 0%			0.01	01	+	10	100
Test for overall effect	Z= 3.65	(P = 0.0)	1003)				0.01	Favours naltrexo	ne Favours	ther active	



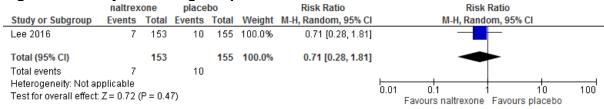


Figure 110: Days of drug use per month (6-month follow-up)

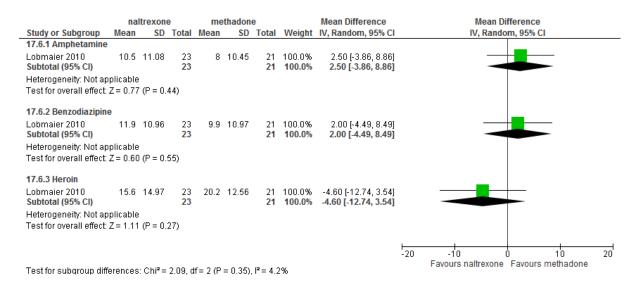


Figure 111: Re-incarceration at post-treatment

	naltrex	one o	ther active inter	vention		Risk Ratio		Risk Ratio)	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI		M-H, Random, 9	5% CI	
17.7.1 During treatm	ent									
Cornish 1997	9	34	9	17	20.1%	0.50 [0.24, 1.02]		-		
Subtotal (95% CI)		34		17	20.1%	0.50 [0.24, 1.02]		-		
Total events	9		9							
Heterogeneity: Not ap	pplicable									
Test for overall effect:	: Z= 1.89 (P = 0.06)								
17.7.2 Post-treatme	nt									
Lee 2016	35	153	45	155	71.2%	0.79 [0.54, 1.15]		-		
Subtotal (95% CI)		153		155	71.2%	0.79 [0.54, 1.15]		•		
Total events	35		45							
Heterogeneity: Not ap	pplicable									
Test for overall effect:	: Z= 1.23 (P = 0.22)								
17.7.3 6 month follow	w-up									
Lobmaier 2010	5	23	5	21	8.7%	0.91 [0.31, 2.71]			-	
Subtotal (95% CI)		23		21	8.7%	0.91 [0.31, 2.71]			-	
Total events	5		5							
Heterogeneity: Not ap	pplicable									
Test for overall effect	Z = 0.16 (P = 0.87)								
Total (95% CI)		210		193	100.0%	0.73 [0.53, 1.00]		•		
Total events	49		59							
Heterogeneity: Tau ^z =	= 0.00; Chi	² = 1.40, (df = 2 (P = 0.50);	l² = 0%			0.01	01 1	10	-
Test for overall effect:	: Z = 1.93 (P = 0.05)						U.1 1 Favours naltrexone Favo		
Test for subgroup dif	ferences: (Chi² = 1.3	9, df = 2 (P = 0.5)	$0), I^2 = 0\%$,	avours manuexume Favo	ours ourer active int	•

Figure 112: Parole violations at post-treatment

	naltrexone + psycho	social	psychos	ocial		Risk Ratio	Risk R	Ratio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Rando	m, 95% CI	
Coviello 2010	2	31	9	32	100.0%	0.23 [0.05, 0.98]			
Total (95% CI)		31		32	100.0%	0.23 [0.05, 0.98]			
Total events	2		9						
Heterogeneity: Not ap Test for overall effect:							0.01 0.1 1 Favours naltrex. + psych.	10 Favours psychosocial	100

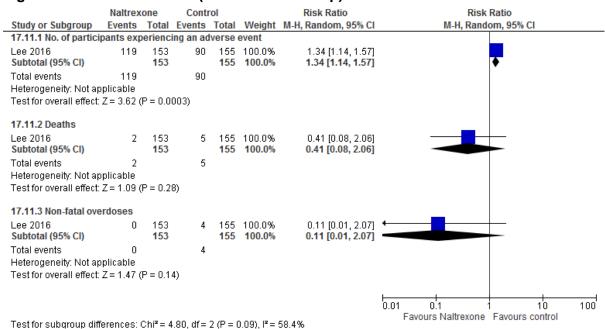
Figure 113: Drug charges at post-treatment

_	naltrexone + psycho	osocial	psychos	ocial		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Coviello 2010	3	31	1	32	100.0%	3.10 [0.34, 28.19]	
Total (95% CI)		31		32	100.0%	3.10 [0.34, 28.19]	
Total events	3		1				
Heterogeneity: Not ap Test for overall effect:							0.01 0.1 10 100 Favours naltrex. + psych. Favours psychosocial

Figure 114: Days of criminal activity per month (6 month follow-up)

	na	ltrexon	е	me	thadon	е		Mean Difference		Mear	Differenc	e	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI		IV, Raı	ndom, 95%	CI	
Lobmaier 2010	14.9	12.34	23	14.4	13.11	21	100.0%	0.50 [-7.04, 8.04]			-		
Total (95% CI)			23			21	100.0%	0.50 [-7.04, 8.04]		_	-	_	
Heterogeneity: Not ap Test for overall effect:			90)						-20	-10 Favours naltrexo	0 ne Favou	10 rs methadone	20

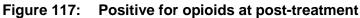
Figure 115: Adverse events (12-month follow-up)

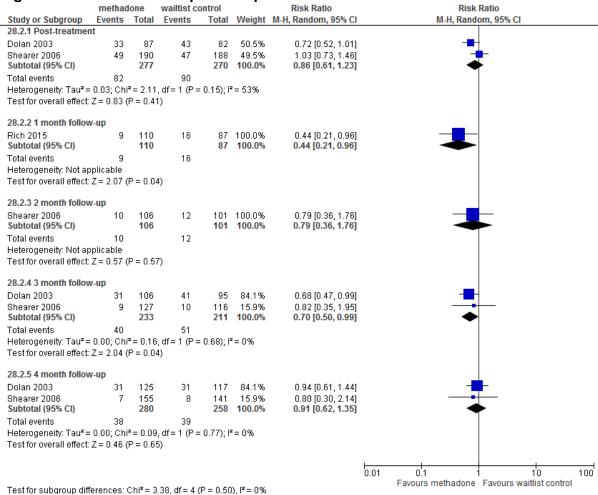


O.4.2.3 Methadone versus waitlist control

Figure 116: Drop-out at post-treatment









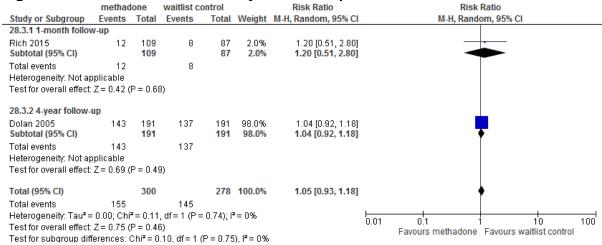


Figure 119: Adverse events (1-month follow-up)

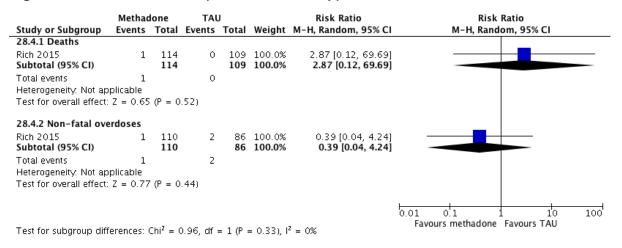


Figure 120: Number of participants in contact with MH/substance misuse services (1-month follow-up)

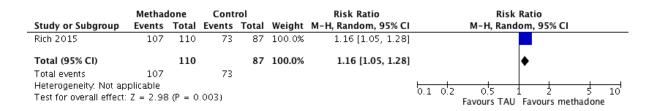
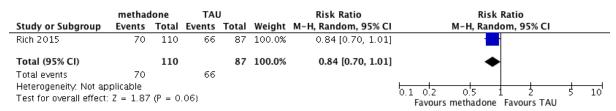


Figure 121: Any drug use (1-month follow-up)



0.4.2.4 Alpha-adrenergic agonists versus opioid maintenance

Figure 122: Total withdrawal symptoms at post-treatment

	Lo	fexidin	9	Me	thadon	е		Mean Difference		N	lean Differen	ce	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI		IV,	Random, 959	6 CI	
Howells 2002	596.1	208.3	29	572.1	184.1	34		24.00 [-73.86, 121.86]			+		
									-1000	-500	Ó	500	1000
										Favours lofe	exidine Favor	irs methado	ne

0.4.2.5 Opioid substitution versus active intervention

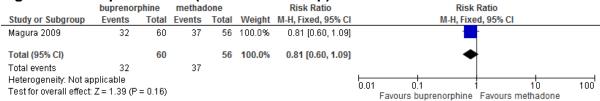
Figure 123: Drop-out at post-treatment

	buprenor	phine	other active interven	tion		Risk Ratio		Risk	Ratio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI		M-H, Rand	om, 95% CI	
Magura 2009	11	60	14	56	48.8%	0.73 [0.36, 1.48]		_	_	
Sheard 2009	10	42	15	48	51.2%	0.76 [0.38, 1.51]		-		
Total (95% CI)		102		104	100.0%	0.75 [0.46, 1.22]		•	-	
Total events	21		29							
Heterogeneity: Tau² =	0.00; Chi²:	= 0.01, d	lf = 1 (P = 0.94); l² = 0%	5			0.01	0.1	10	100
Test for overall effect:	Z=1.16 (P	= 0.24)					0.01		Favours other active int.	100

Figure 124: Abstinence at post-treatment

	buprenor	-	other active inter			Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
15.2.1 Post-treatmer	nt						<u>L</u>
Wright 2011 Subtotal (95% CI)	74	100 100	79		100.0% 100.0%	1.06 [0.90, 1.25] 1.06 [0.90, 1.25]	•
Fotal events	74		79				
Heterogeneity: Not ap	plicable						
Test for overall effect:	Z = 0.66 (P	= 0.51)					
15.2.2 1 month follow	v-up						
Wright 2011	45	72	64		100.0%	0.85 [0.68, 1.06]	
Subtotal (95% CI)		72		87	100.0%	0.85 [0.68, 1.06]	•
Total events	45		64				
Heterogeneity: Not ap							
Test for overall effect:	Z=1.46 (P	= 0.14)					
15.2.3 3 month follow	v-up						_
Wright 2011 Subtotal (95% CI)	31	46 46	27		100.0% 100.0%	1.20 [0.87, 1.65] 1.20 [0.87, 1.65]	.
Total events	31		27				
Heterogeneity: Not ap	plicable						
Test for overall effect:	Z = 1.11 (P	= 0.27)					
15.2.4 6 month follow	v-up						
Sheard 2009	. 5	42	5	48	10.7%	1.14 [0.36, 3.68]	
Wright 2011	21	33	16	27	89.3%	1.07 [0.72, 1.61]	—
Subtotal (95% CI)		75		75	100.0%	1.08 [0.74, 1.59]	◆
Total events	26		21				
Heterogeneity: Tau² =	0.00; Chi²	= 0.01, c	$f = 1 (P = 0.92); I^2 =$	0%			
Test for overall effect:	Z = 0.40 (P	= 0.69)					
							0.05 0.2 1 5 2
est for subaroup diff	ferences: C	hi² = 3.9	1. df = 3 (P = 0.27)	$I^2 = 23.3\%$			Favours other active int. Favours buprenorphine

Figure 125: Opioid abuse (3 month follow-up)





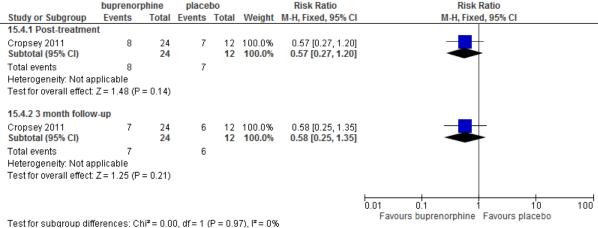


Figure 127: Number of times re-arrested (3 month follow-up)

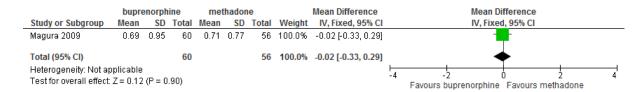


Figure 128: Re-arrest for drug crimes (3 month follow-up)

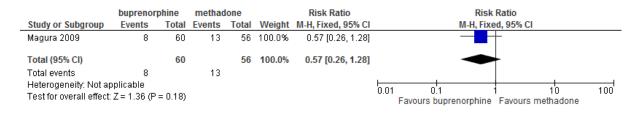


Figure 129: Re-incarceration at post-treatment

	buprenor	phine	methad	lone		Risk Ratio	Ris	sk Ratio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fi	xed, 95% CI	
Magura 2009	24	60	28	56	100.0%	0.80 [0.53, 1.20]	-		
Total (95% CI)		60		56	100.0%	0.80 [0.53, 1.20]	-	•	
Total events	24		28						
Heterogeneity: Not ap Test for overall effect:		= 0.28)					0.01 0.1 Favours buprenorphin	1 10 e Favours methadone	100

O.4.3 Combined psychological and pharmacological interventions

O.4.3.1 Antidepressants plus psychological therapy versus psychological therapy alone for substance misuse

Figure 130: Number of participants who failed to complete treatment at post-

treatment Antidepressant + psych. Psych. only Risk Ratio Study or Subgroup Events Total Events Total Weight M-H, Fixed, 95% CI M-H, Fixed, 95% CI George 2011 13 31 9 29 100.0% 1.35 [0.68, 2.67] Total (95% CI) 31 29 100.0% 1.35 [0.68, 2.67] Total events a Heterogeneity. Not applicable 0.05 0.2 Test for overall effect: Z = 0.86 (P = 0.39) Favours fluoxetine+psych Favours psych only

Figure 131: Spielberger State Anxiety Inventory score at post-treatment

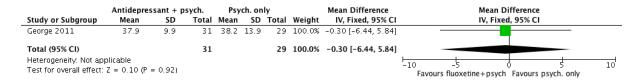
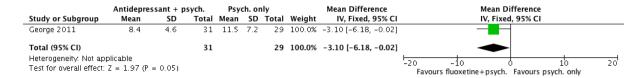


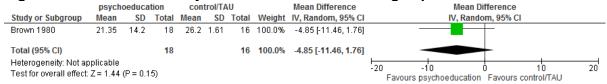
Figure 132: Hamilton Depression Rating Scale score at post-treatment



O.4.4 Support and educational interventions

0.4.4.1 Psychoeducation versus control or treatment as usual

Figure 133: Number of days with uncontrolled drinking at post-treatment



0.4.4.2 Employment workshop versus control or treatment as usual

Figure 134: Number of participants employed at post-treatment

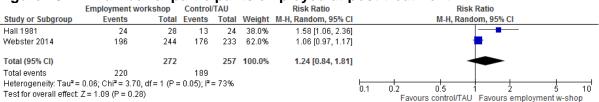


Figure 135: Days in paid employment at post-treatment



O.4.5 Physical interventions

O.4.5.1 Acupuncture versus active intervention

Figure 136: Drop-out at post-treatment

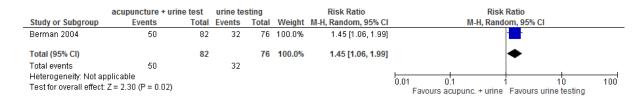


Figure 137: Urine test positive for drug use at post-treatment

_	acupuncture + ur	ine test	other active inter	vention	_	Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
Berman 2004	6	22	0	28	35.6%	16.39 [0.97, 276.07]	
Konefal 1995	9	24	8	34	64.4%	1.59 [0.72, 3.53]	+-
Total (95% CI)		46		62	100.0%	3.65 [0.33, 41.00]	
Total events	15		8				
Heterogeneity: Tau ² =		f=1 (P=0	0.09); I² = 66%				0.01 0.1 1 10 100
Test for overall effect:	Z = 1.05 (P = 0.29)						Favours acupunc. + urine Favours other active int.

O.5 Interventions for 'other' mental health disorders

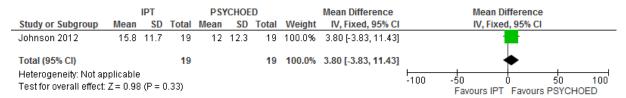
O.5.1 Depression

0.5.1.1 Psychotherapy vs PSYCHOED

Figure 138: Depression by HRSD scales (at post-treatment)

		IPT		PSY	CHOE	D		Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Johnson 2012	14.1	8.3	19	20.6	10.5	19	100.0%	-6.50 [-12.52, -0.48]	-
Total (95% CI)			19			19	100.0%	-6.50 [-12.52, -0.48]	•
Heterogeneity: Not ap Test for overall effect	•		0.03)						-20 -10 0 10 20

Figure 139: Depression by HRSD scales at 13-weeks follow-up



O.5.1.2 Group therapy vs Individual therapy

Figure 140: Depression by BDI scales at post-treatment

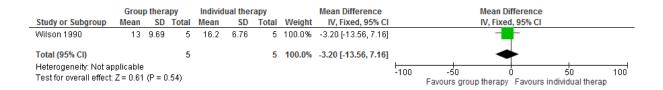


Figure 141: Depression by Hopeless scale at post-treatment

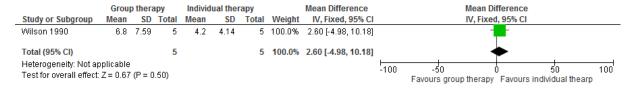


Figure 142: Depression by MMPI D scale at post-treatment

	Grou	ip thera	ру	Individ	lual the	rapy		Mean Difference		Mean D	ifference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI		IV, Fixe	d, 95% CI		
Wilson 1990	69.8	14.56	5	57.2	10.98	5	100.0%	12.60 [-3.38, 28.58]					
Total (95% CI)			5			5	100.0%	12.60 [-3.38, 28.58]			◆		
Heterogeneity: Not ap Test for overall effect:	•		12)						-100	-50 Favours group therapy	0 Favours inc	50 dividual thera	100 ap

Figure 143: Depression by MMPI D scale at 39-weeks follow-up

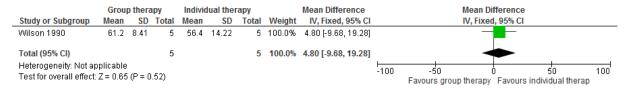
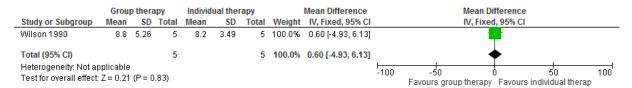


Figure 144: Depression by Multiple affect adjective checklist D scale at posttreatment



O.5.1.3 Arts-based Therapy vs TAU

Figure 145: Change in Adult Nowicki-Strickland Locus of Control Scale (ANS) at post-treatment

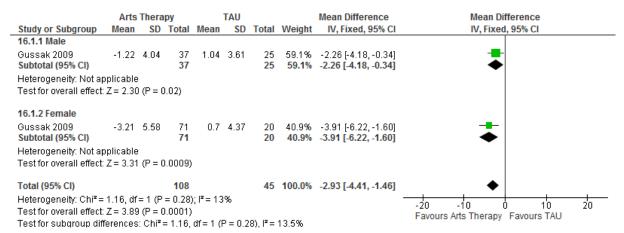


Figure 146: Change in Beck Depression Inventory (BDI): Total at post-treatment

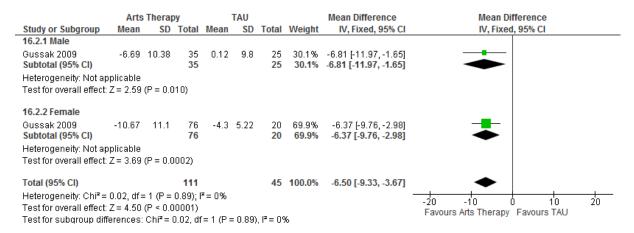
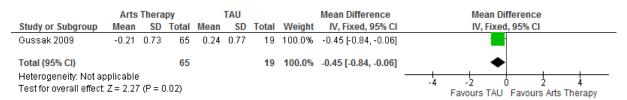


Figure 147: Change in formal elements of arts therapy scale rating guide (FEATS):

Prominence of colour at post-treatment

	Arts	Thera	ру		TAU			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Gussak 2009	-0.39	1.1	65	0.42	1.44	19	100.0%	-0.81 [-1.51, -0.11]	-
Total (95% CI)			65			19	100.0%	-0.81 [-1.51, -0.11]	•
Heterogeneity: Not a Test for overall effect	•		0.02)						-4 -2 0 2 4 Favours TAU Favours Arts Therapy

Figure 148: Change in formal elements of arts therapy scale rating guide (FEATS): Colour Fit at post-treatment



0.5.2 Vulnerable inmates with suicidal risks

O.5.2.1 Social problem solving group vs No treatment control

Figure 149: Depression by HADS scales at post-treatment

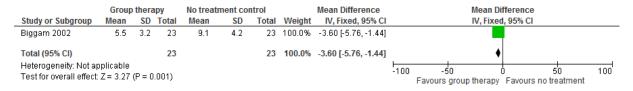


Figure 150: Anxiety by HADS scales at post-treatment

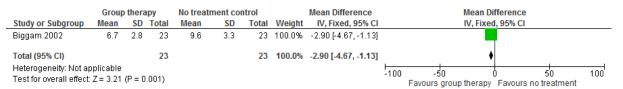


Figure 151: Depression by Beck Hopeless scales at post-treatment

	Group	thera	ару	No treatr	nent co	ntrol		Mean Difference	Mean D	ifference	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixe	d, 95% CI	
Biggam 2002	3.9	3.5	23	6.4	4.7	23	100.0%	-2.50 [-4.89, -0.11]			
Total (95% CI)			23			23	100.0%	-2.50 [-4.89, -0.11]		· .	
Heterogeneity: Not a Test for overall effect			1.04)						-100 -50 Favours group therapy	0 50 Favours no treatment	100

Figure 152: Decision making ability by SPSI:R scales at post-treatment

	Group therapy			No treat	ment cor	ntrol		Mean Difference	Mean Difference			
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI		IV, Fixed	d, 95% CI	
Biggam 2002	12.1	4.2	23	6.8	4.9	23	100.0%	5.30 [2.66, 7.94]				
Total (95% CI)			23			23	100.0%	5.30 [2.66, 7.94]			•	
Heterogeneity: Not ap Test for overall effect).0001)						-100	-50 Favours no treatment	0 50 Favours group thera	100 DV

Figure 153: Depression by HADS scales at 13-weeks follow-up

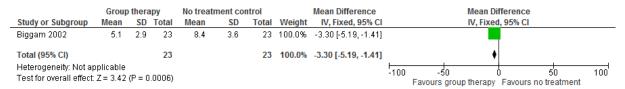


Figure 154: Anxiety by HADS scales at 13-weeks follow-up

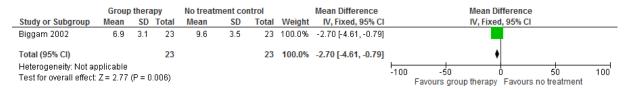


Figure 155: Depression by Beck Hopeless scales (13 weeks follow-up)

	Group	thera	ру	No treatr	nent cor	ntrol		Mean Difference	Mean Difference	e	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% (Э	
Biggam 2002	4.2	2.9	23	7	4.9	23	100.0%	-2.80 [-5.13, -0.47]			
Total (95% CI) Heterogeneity: Not ag	oplicable		23			23	100.0%	-2.80 [-5.13, -0.47]			
Test for overall effect:	Z= 2.36	(P = 0	.02)						-100 -50 0 Favours group therapy Favou	50 rs no treatment	100

O.5.3 Anxiety disorder

O.5.3.1 Self-help therapy vs Wait-list control

Figure 156: Anxiety by HADS scales at post-treatment

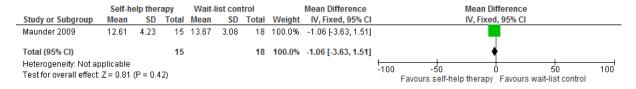


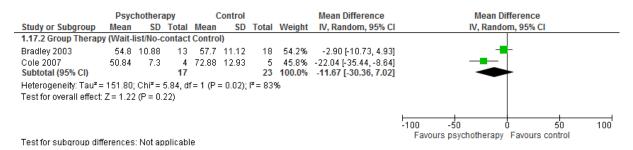
Figure 157: Anxiety by HADS scales at 4-weeks follow-up

	Self-he	lp ther	ару	Wait-l	list con	trol		Mean Difference		Mean D	ifference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI		IV, Fixe	d, 95% CI		
Maunder 2009	10.89	4.1	15	13.87	4.19	18	100.0%	-2.98 [-5.82, -0.14]					
Total (95% CI)			15			18	100.0%	-2.98 [-5.82, -0.14]		•			
Heterogeneity: Not ap Test for overall effect:	•	P = 0.0	14)						-100	-50 Favours self-help therapy	0 Favours wa	50 ait-list control	100

0.5.4 PTSD

0.5.4.1 Psychotherapy vs Control

Figure 158: Trauma by TSI at post-treatment



0.5.4.2 TIR vs Wait-list control

Figure 159: Depression by BDI scales at post-treatment

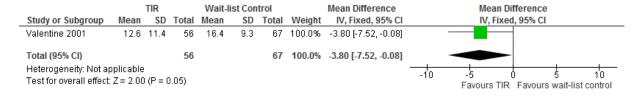


Figure 160: Depression by BDI scales at 13 weeks follow-up

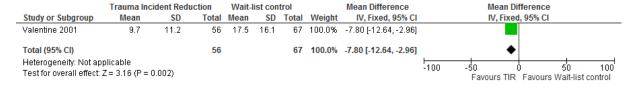


Figure 161: PTSD by PSS scales at post-treatment

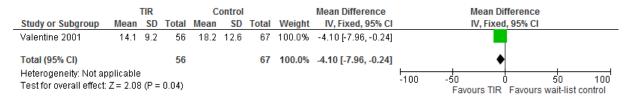


Figure 162: PTSD by PSS scales (13 weeks follow-up)

		TIR		C	ontrol			Mean Difference		Mea	n Differen	ice	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI		IV, F	ixed, 95%	CI	
Valentine 2001	8.5	9.7	56	15.8	13.9	67	100.0%	-7.30 [-11.49, -3.11]					
Total (95% CI)			56			67	100.0%	-7.30 [-11.49, -3.11]			•		
Heterogeneity: Not ap Test for overall effect:			0.0006	6)					-100	-50 Favours	0 TIR Favo	50 urs wait-list	100 control

Figure 163: Generalized Expectancy by Success scale at post-treatment

		TIR		Wait-l	ist con	trol		Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Valentine 2001	122	33.8	56	106.1	21.2	67	100.0%	15.90 [5.70, 26.10]	-
Total (95% CI)			56			67	100.0%	15.90 [5.70, 26.10]	•
Heterogeneity: Not ap Test for overall effect:			0.002)						-100 -50 0 50 100 Favours wait-list control Favours TIR

Figure 164: Generalized Expectancy for Success scales at 13-weeks follow-up

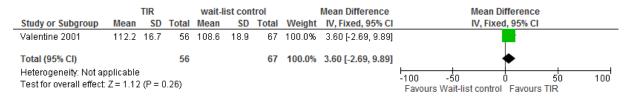


Figure 165: Clinical anxiety scales at post-treatment

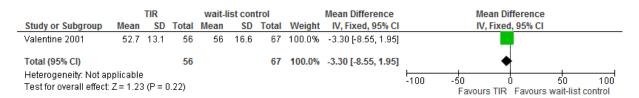
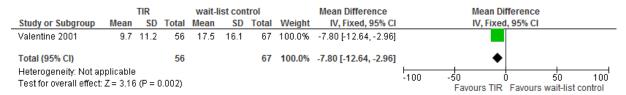


Figure 166: Clinical anxiety scales at 13-weeks follow-up at post-treatment



0.5.4.3 TARGET vs SGT

Figure 167: PTSD symptoms by CAPS scales at post-treatment

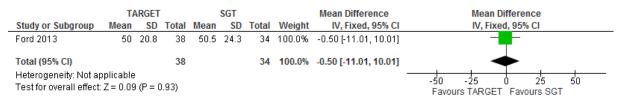


Figure 168: Heartland forgiveness scales at post-treatment

	T	ARGET			SGT			Mean Difference		Mea	n Differenc	e	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI		IV, F	ixed, 95% (CI	
Ford 2013	81.3	11.8	23	76.7	15.7	9	100.0%	4.60 [-6.73, 15.93]			-		
Total (95% CI)			23			9	100.0%	4.60 [-6.73, 15.93]			•		
Heterogeneity: Not ap Test for overall effect:			0.43)						-100	-50 Favours S	Ö GT Favou	50	100

O.5.4.4 Focused group therapy vs Wait-list control

Figure 169: Symptom checklist-90 R: Global Severity Index at post-treatment

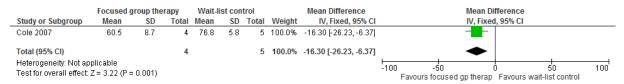


Figure 170: Symptom Checklist-90 R: Positive symptom distress index at posttreatment

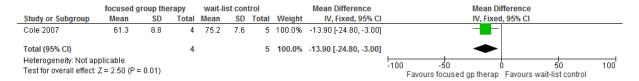
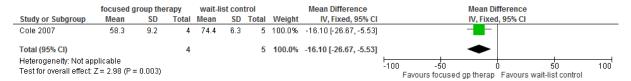
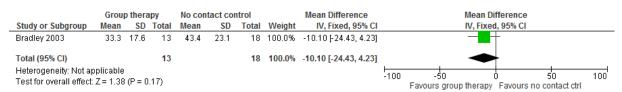


Figure 171: Symptom Checklist-90 R: Positive Symptom Total at post-treatment



O.5.4.5 Group Therapy vs No contact control

Figure 172: IIP-32 scales at post-treatment



O.5.5 ADHD

0.5.5.1 MPH vs Placebo

Figure 173: Conner Adult ADHD rating scale - Observer:Screening Version (CAARS-OSV) at post-treatment (52 weeks)

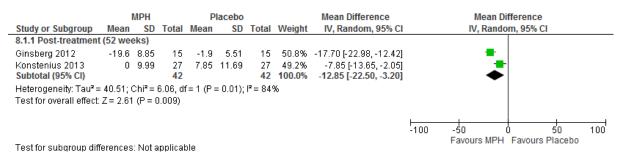


Figure 174: Conner Adult ADHD rating scale - Observer:Screening version (CAARS-OSV) at 3-years follow-up

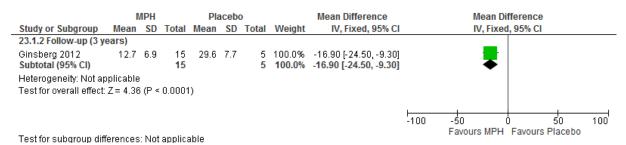
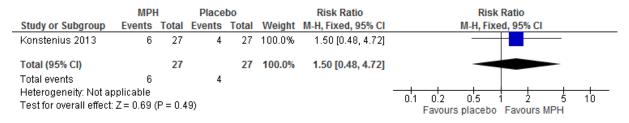


Figure 175: Number of participants with drug negative urine at post-treatment



O.5.6 Antisocial personality disorders

0.5.6.1 Tiagabine vs Placebo

Figure 176: Aggressive response at post-treatment

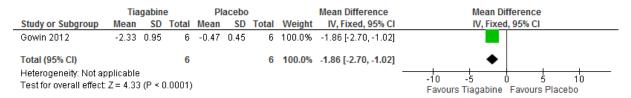


Figure 177: Number of subjects with adverse effects at post-treatment

	Tiagab	ine	Place	bo		Risk Ratio		Risk	Ratio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI		M-H, Fixe	ed, 95% CI	
Gowin 2012	6	157	6	65	100.0%	0.41 [0.14, 1.24]		_		
Total (95% CI)		157		65	100.0%	0.41 [0.14, 1.24]		-	-	
Total events	6		6							
Heterogeneity: Not ap Test for overall effect:	•	(P = 0.1	1)				0.01	0.1 Favours Tiagabine	10 Favours Placebo	100

O.5.7 Severe Mental Illness

0.5.7.1 IM Paliperidone vs Oral Antipsychotics for schizophrenia

Figure 178: First-time treatment failure at post-treatment

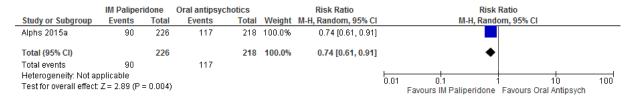
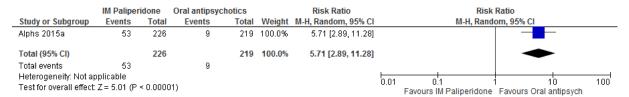


Figure 179: Incidence of prolactin-related side-effects at post-treatment



0.5.7.2 The Citizenship Project vs TAU

Figure 180: Change in overall quality of life at post-treatment

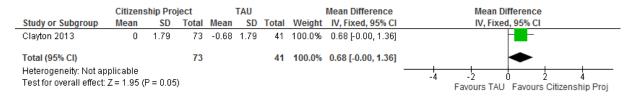


Figure 181: Change in number of all convictions at post-treatment

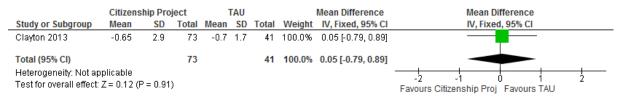


Figure 182: Change in alcohol composite ratio at post-treatment

	Citizen	ship Pro	ject		TAU			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Clayton 2013	0	0.732	73	0.29	0.732	41	100.0%	-0.29 [-0.57, -0.01]	-
Total (95% CI)			73			41	100.0%	-0.29 [-0.57, -0.01]	•
Heterogeneity: Not ap Test for overall effect:		(P = 0.04)						-1 -0.5 0 0.5 1 Favours Citizenship proj Favours TAU

Figure 183: Change in brief psychiatric rating scale: withdrawal symptoms at posttreatment

	Citizenship Project			TAU				Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Clayton 2013	0.28	0.7059	73	0	0.7059	41	100.0%	0.28 [0.01, 0.55]	_
Total (95% CI)			73			41	100.0%	0.28 [0.01, 0.55]	•
Heterogeneity: Not ap Test for overall effect: 2	•)						-1 -0.5 0 0.5 1 Favours Citizenship Proj Favours TAU

Figure 184: Change in addiction severity index: drug index at post-treatment

	Citize	nship Pro	ject		TAU			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI
Clayton 2013	0	0.1046	73	0.04	0.1046	41	100.0%	-0.04 [-0.08, 0.00]	-
Total (95% CI)			73			41	100.0%	-0.04 [-0.08, 0.00]	•
Heterogeneity: Not ap Test for overall effect:	•)						-0.2 -0.1 0 0.1 0.2 Favours Citizenship Proj Favours TAU

0.5.7.3 IPS vs Peer Support

Figure 185: Competitive job placement



Figure 186: Number of hospitalizations

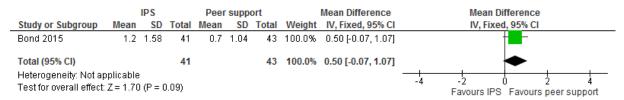
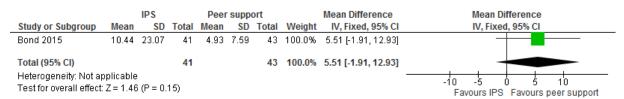


Figure 187: Number of days being hospitalized



O.5.8 Uncategorized mental health disorders

0.5.8.1 Parenting from inside (PFI) vs TAU

Figure 188: Parenting Stress Index at post-treatment

		PFI			TAU			Mean Difference	Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
Loper 2011	2.18	0.62	60	2.14	0.64	76	100.0%	0.04 [-0.17, 0.25]	
Total (95% CI)			60			76	100.0%	0.04 [-0.17, 0.25]	
Heterogeneity: Not a Test for overall effect			0.71)						-0.5 -0.25 0 0.25 0.5 Eavours PEL Favours TAU

Figure 189: Parenting alliance at post-treatment

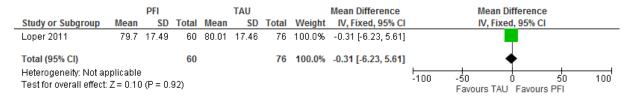
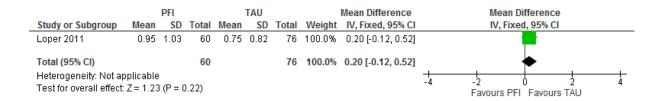


Figure 190: Brief Symptom Inventory (BSI): Total at post-treatment



0.5.8.2 Music therapy vs Standard care for mental health disorders

Figure 191: State and Trait Anxiety Inventory – State at post-treatment

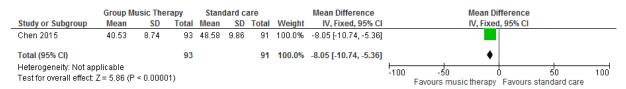


Figure 192: State and Trait Anxiety Inventory – Trait at post-treatment

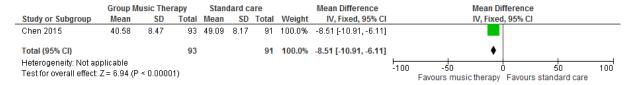


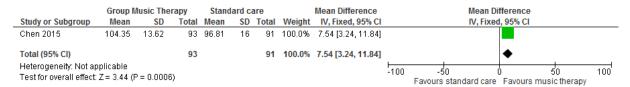
Figure 193: Brief Symptom inventory (BSI): Total at post-treatment

	Group Music There		ару	Standard care			Mean Difference			Mean Difference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI		IV, Fixed	1, 95% CI	
Chen 2015	11.51	7.78	93	20.32	12.47	91	100.0%	-8.81 [-11.82, -5.80]				
Total (95% CI)			93			91	100.0%	-8.81 [-11.82, -5.80]		•		
Heterogeneity: Not ap Test for overall effect: :		< 0.00001)						-100	-50 Favours music therapy	0 50 Favours standard care	100

Figure 194: Rosenberg self-esteem inventory at post-treatment

Group Music Thera				Stand	lard ca	are		Mean Difference	Mean Difference			
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI			
Chen 2015	29.27	4.25	93	27.01	4.6	91	100.0%	2.26 [0.98, 3.54]	-			
Total (95% CI)			93			91	100.0%	2.26 [0.98, 3.54]	•			
Heterogeneity: Not ap Test for overall effect:		= 0.0005)					-	-10 -5 0 5 10 Favours standard care Favours music therapy			

Figure 195: Texas social behaviour inventory at post-treatment



O.5.8.3 Music therapy vs Wait-list control for antisocial personality disorders

Figure 196: ASP-1: Change in self-management of psychiatric symptoms at posttreatment

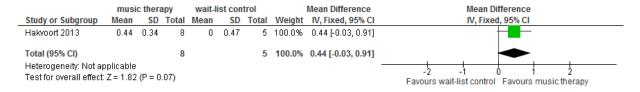


Figure 197: ASP-4: Change in self-management of assaultive symptoms at post-treatment

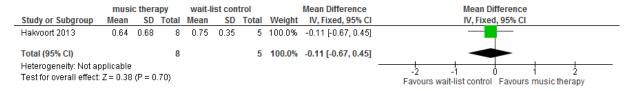


Figure 198: ASP-9: Change in interpersonal skills at post-treatment

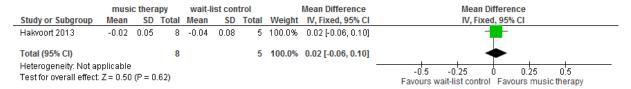
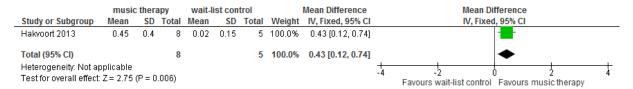


Figure 199: Change in social dysfunction and aggression scales at post-treatment

	musi	sic therapy wait-list control				trol		Mean Difference	Mean Difference			
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI			
Hakvoort 2013	0	2.06	8	0.8	1.48	5	100.0%	-0.80 [-2.73, 1.13]	-			
Total (95% CI)			8			5	100.0%	-0.80 [-2.73, 1.13]	•			
Heterogeneity: Not ap Test for overall effect:			.42)						-10 -5 0 5 10 Favours music therapy Favours wait-list control			

Figure 200: FP40: Change in positive coping skills at post-treatment



O.6 Interventions for paraphilic disorders

O.6.1 MPA + psych intervention vs psych intervention only at post-treatment

Figure 201: Reduced anomalous desires

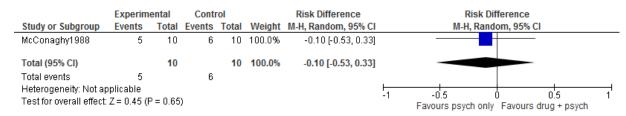


Figure 202: Repetition/persistence of anomalous behaviour

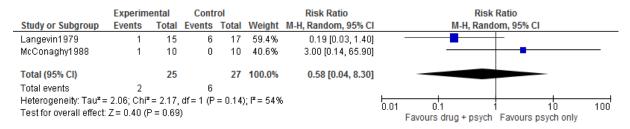
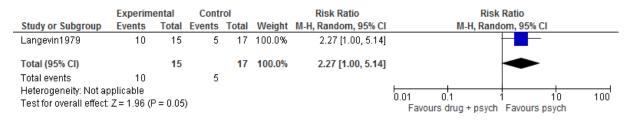


Figure 203: Drop out

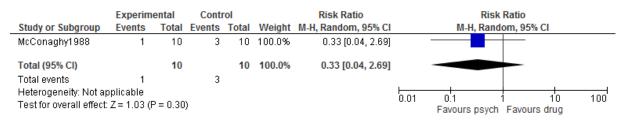


O.6.2 MPA only vs psych intervention only at post-treatment

Figure 204: Reduced anomalous desires

	Experim	ental	Conti	rol		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
McConaghy1988	3	10	6	10	100.0%	0.50 [0.17, 1.46]	_
Total (95% CI)		10		10	100.0%	0.50 [0.17, 1.46]	-
Total events	3		6				
Heterogeneity: Not ap Test for overall effect:		P = 0.21)				0.01 0.1 1 10 100 Favours psych Favours drug

Figure 205: Reduced anomalous behaviour



O.6.3 Psychoeducational interventions, principally CBT-informed psychoeducation (including SOTP) versus treatment as usual, no treatment or waitlist control for paraphilic disorders

Figure 206: Cognitive distortions (ABCS: Children and Sex Questionnaire)

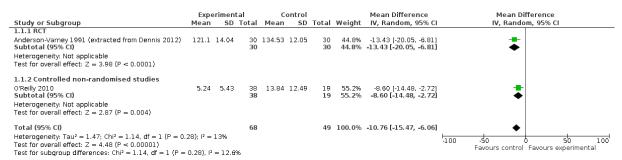


Figure 207: Sexual obsessions (RCTs)

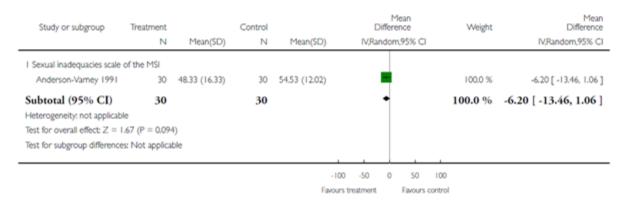


Figure 208: Reconviction (any): CJS database; controlled non-randomised studies; longest follow-up available 2-7 years

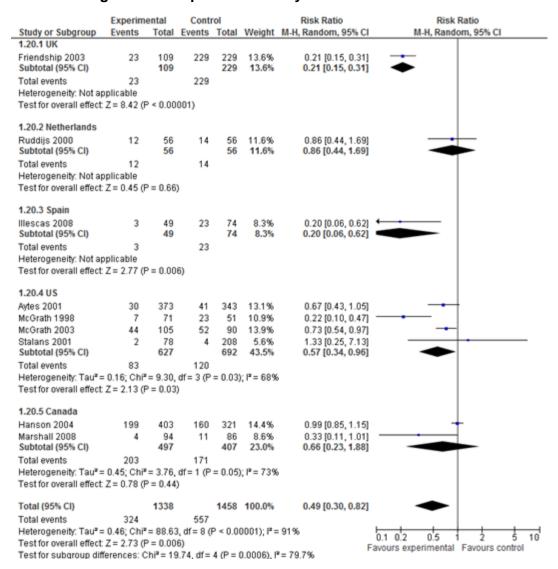


Figure 209: Sexual reconviction: CJS database; controlled non-randomised studies; longest follow-up available [2-11 years]

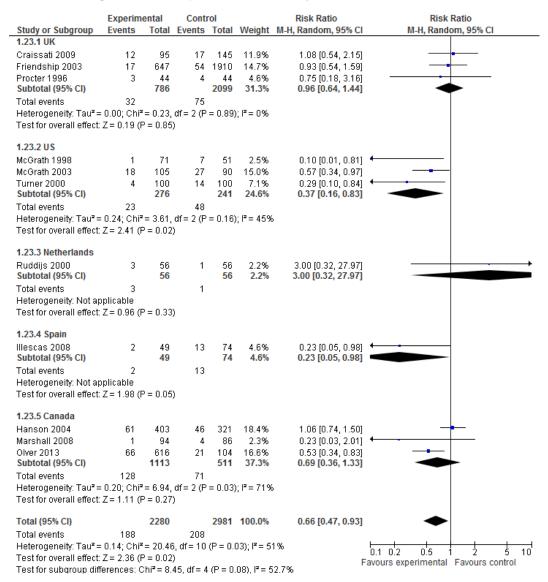


Figure 210: Violent reconviction: CJS database; controlled non-randomised studies; longest follow-up available [3-11 years]

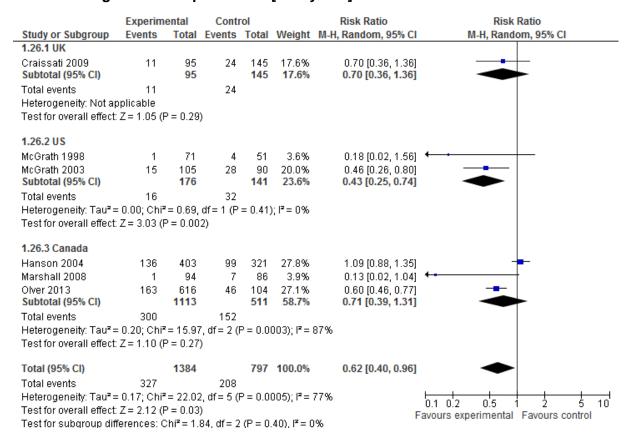


Figure 211: Revocation, breaches of the Sex Offender Register or probation violation (CJS database; controlled non-randomised studies; longest follow-up available [2-5 years])

	Experime	ental	Conti	ol		Risk Ratio	Risk	Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Rando	om, 95% CI
1.32.1 UK								
Craissati 2009 Subtotal (95% CI)	7	95 95	35	145 145	17.6% 17.6%	0.31 [0.14, 0.66] 0.31 [0.14, 0.66]		
Total events	7		35					
Heterogeneity: Not ap	plicable							
Test for overall effect:	Z = 3.02 (F	' = 0.00	2)					
1.32.2 US								
Lowden 2003	48	160	625	1310	23.1%	0.63 [0.49, 0.80]	-	
McGrath 1998	18	71	18	51	20.2%	0.72 [0.42, 1.24]		_
McGuire 2000	11	54	9	14	18.9%	0.32 [0.16, 0.61]		
Stalans 2001	20	78	22	208	20.2%	2.42 [1.40, 4.19]		
Subtotal (95% CI)		363		1583	82.4%	0.77 [0.39, 1.55]		-
Total events	97		674					
Heterogeneity: Tau ^z =	0.44; Chi²	= 26.18	3, df = 3 (1)	P < 0.00	0001); l² =	: 89%		
Test for overall effect:	Z = 0.73 (F	r = 0.47)					
Total (95% CI)		458		1728	100.0%	0.66 [0.35, 1.23]	•	-
Total events	104		709					
Heterogeneity: Tau ² =	0.43; Chi²	= 30.57	2 , df = 4 (1	o < 0.00	0001); l²=	: 87%	0.1 0.2 0.5	2 5 10
Test for overall effect:	Z = 1.32 (F	= 0.19)				0.1 0.2 0.5 1 Favours experimental	2 0 10
Test for subgroup diff				(P = 0.	$.08$), $I^2 = 6$	i7.5%	avours experimental	ravours control

O.6.4 Reintegration programmes versus treatment as usual for paraphilic disorders

Figure 212: Reconviction at 2- to 4-year follow-up (CJS database)

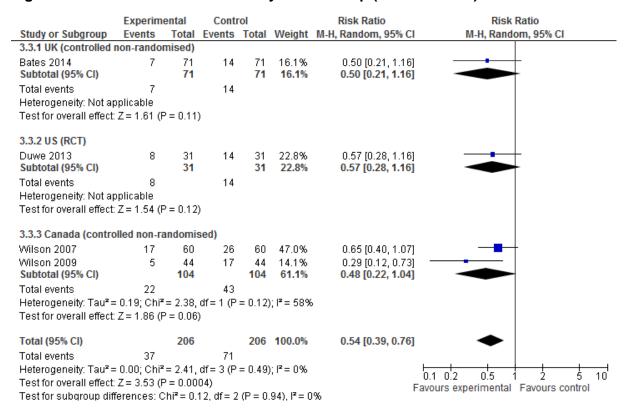


Figure 213: Sex offence reconviction at 3- or 4-year follow-up (CJS database)

	Experime	ental	Contr	ol		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
3.5.1 UK							
Bates 2014 Subtotal (95% CI)	4	71 71	5	71 71	41.0% 41.0%	0.80 [0.22, 2.86] 0.80 [0.22, 2.86]	
Total events Heterogeneity: Not ap	4 plicable		5			,,	
Test for overall effect:	Z = 0.34 (P	= 0.73)				
3.5.2 Canada							
Wilson 2007	3	60	10	60	43.2%	0.30 [0.09, 1.04]	
Wilson 2009 Subtotal (95% CI)	1	44 104	6	44 104	15.8% 59.0 %	0.17 [0.02, 1.33] 0.26 [0.09, 0.75]	
Total events	4		16				
Heterogeneity: Tau² = Test for overall effect:				= 0.63)	; I² = 0%		
Total (95% CI)		175		175	100.0%	0.41 [0.18, 0.94]	
Total events Heterogeneity: Tau² = Test for overall effect: Test for subgroup diffi	Z = 2.11 (P	= 0.03)			4.4%	0.1 0.2 0.5 1 2 5 10 Favours experimental Favours control

Figure 214: Violent reconviction at 3 to 4 years follow-up (CJS database)

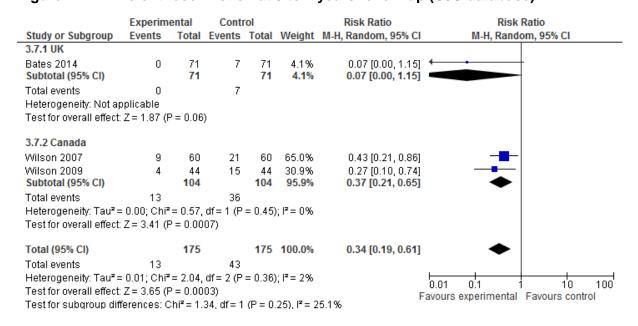
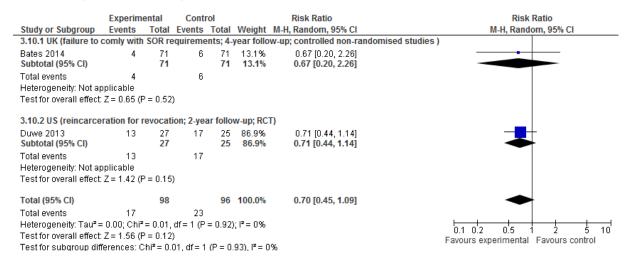


Figure 215: Reincarceration for a technical violation revocation or failure to comply with Sex Offender's Register (SOR) requirements at 2- or 4-year follow-up (CJS database)



O.6.5 Imaginal desensitization plus MPA versus MPA for paraphilic disorders

Figure 216: Anomalous desire

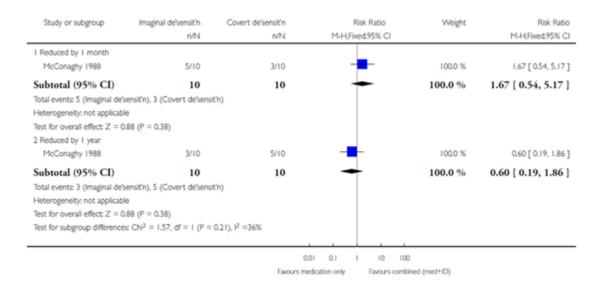
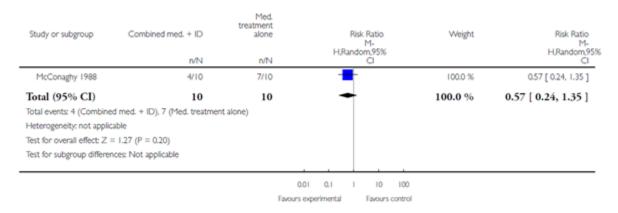


Figure 217: Adverse events



O.6.6 Imaginal desensitization versus covert sensitization for paraphilic disorders

Figure 218: Anomalous desire

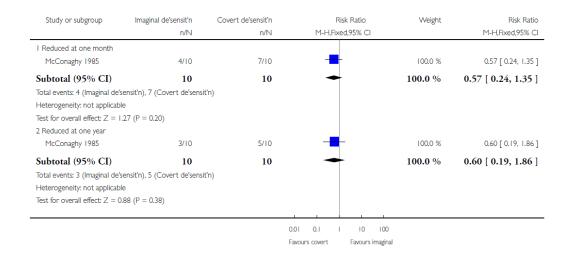
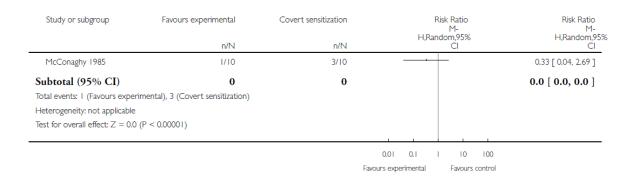


Figure 219: Loss to follow up



O.7 Service delivery models

O.7.1 Street Triage (Before versus After)

Figure 220: Total s136 detentions per 100,000

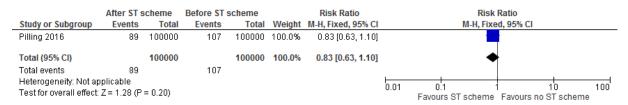


Figure 221: Number of s136 detentions in custody



Figure 222: Number of s136 detentions in hospital

	After ST so	cheme	Before ST scheme			Risk Ratio	Risk Ratio			
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI			
Hywel Dda 2015	141	198	127	227	0.7%	1.27 [1.10, 1.47]				
Pilling 2016	18461	24489	16000	25000	99.2%	1.18 [1.16, 1.19]				
Powys 2015	11	16	12	23	0.1%	1.32 [0.79, 2.20]				
Total (95% CI)		24703		25250	100.0%	1.18 [1.16, 1.19]	•			
Total events	18613		16139							
Heterogeneity: Chi²=	1.27, $df = 2$ ((P = 0.53)); I² = 0%			-	07 085 1 12 15			
Test for overall effect:	Z= 27.56 (P	< 0.0000	01)				0.7 0.85 1 1.2 1.5 Favours no ST scheme Favours ST scheme			

0.7.2 Diversion Services

0.7.2.1 Before and After Diversion Services

Figure 223: Duration between remand assessment (days)

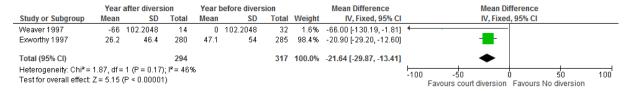
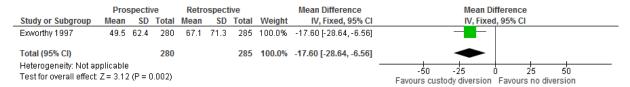


Figure 224: Days of total time on remand



0.7.2.2 Assessment versus No assessment at court

Figure 214: Proportions of prisoners on bail

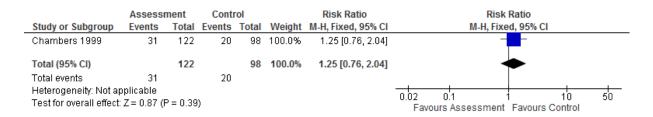


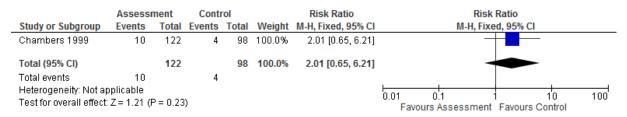
Figure 215: Attendance at alcohol and drug treatment programmes



Figure 216: OPD attendance rates for those release on bail

	Assessment		Conti	rol		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	M-H, Fixed, 95% CI
Chambers 1999	11	23	7	13	100.0%	0.89 [0.46, 1.72]	-
Total (95% CI)		23		13	100.0%	0.89 [0.46, 1.72]	•
Total events	11		7				
Heterogeneity: Not ap Test for overall effect		P = 0.72)				0.01 0.1 1 10 100 Favours Assessment Favours Control

Figure 217: Registration of care programmes (CPA) and supervision registration (SR)



0.7.2.3 Court Diversion vs Community Diversion

Figure 225: Rate of re-incarceration in two years after index discharge

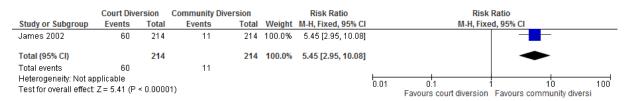


Figure 226: 100% attendance rate of appointments

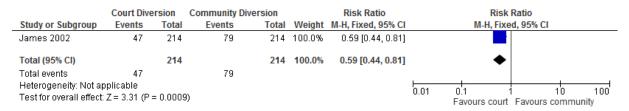


Figure 227: Number of days in hospital

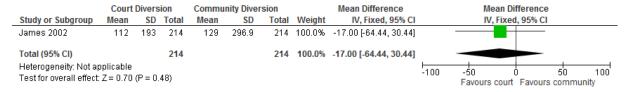


Figure 228: Number of diverted participants with no mental health disorders

	Court Dive	ersion	Community Di	version		Risk Ratio	Risk Ratio			
Study or Subgroup	Events	Total	Events Total		Weight	M-H, Fixed, 95% CI		M-H, Fixed, 95% CI		
James 2002	6	214	0	214	100.0%	13.00 [0.74, 229.33]		-		
Total (95% CI)		214		214	100.0%	13.00 [0.74, 229.33]				
Total events	6		0							
	Heterogeneity: Not applicable Test for overall effect: Z = 1.75 (P = 0.08)						0.002	0.1 Favours court	10 Favours com	500 munity

O.7.3 Patient Navigation Intervention versus facilitated enrolment (at 26-weeks follow-up)

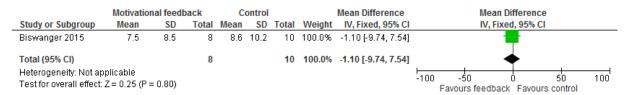
Figure 229: Number of participants who used drugs



Figure 230: Number of participants who used alcohol to intoxication



Figure 231: Average days when mental health was not good in the last 30 days



O.7.4 Neighbourhood outreach (Before versus After)

Figure 232: Proportion of crime contacts with policing team escalated to court



O.7.5 Drug Rehabilitation Program versus TAU

Figure 233: MAP total scores

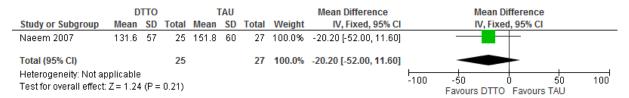


Figure 234: HoNOS total scores

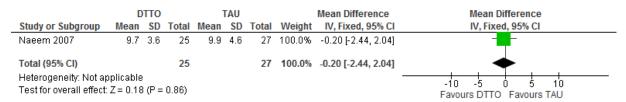
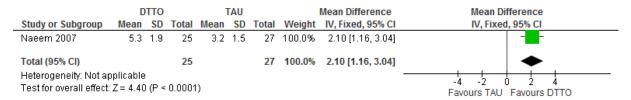


Figure 235: Overall satisfaction



O.7.6 Case management

0.7.6.1 Case management vs TAU for substance misuse disorders

Figure 236: Re-arrest at post-treatment and 3-months follow-up

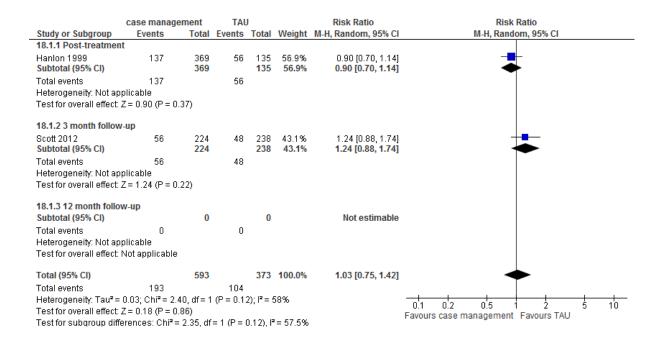
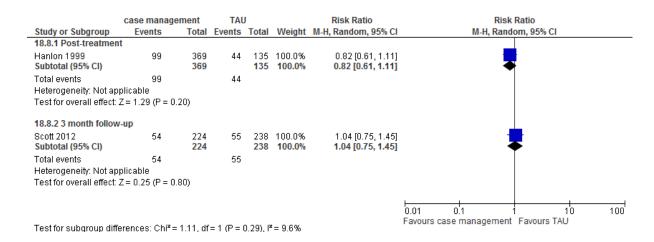


Figure 237: Reconviction at post-treatment



Figure 238: Re-incarceration

i) At post-treatment and 3-months follow-up



ii) At 12-months follow-up

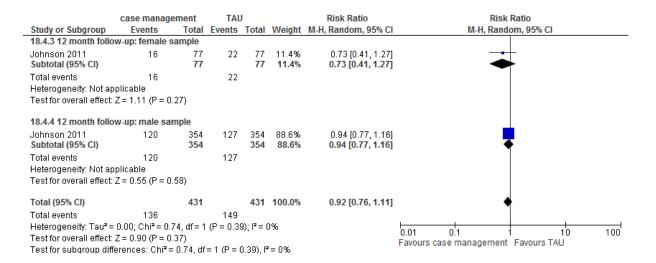


Figure 239: Number of days jailed in past 6 months (12-months follow-up)

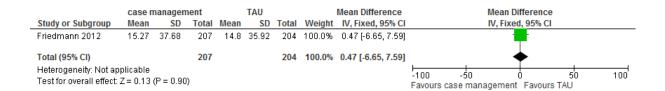
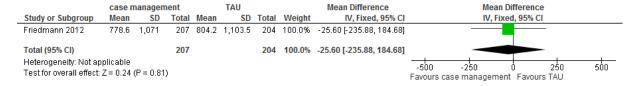


Figure 240: Drug related crimes in past 6 months (12-months follow-up)

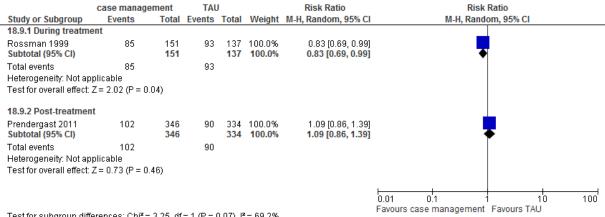


Drug related crime activity during treatment (12-months follow-up) Figure 241:



Figure 242: Self-reported alcohol use

i) During treatment and post-treatment



Test for subgroup differences: $Chi^2 = 3.25$, df = 1 (P = 0.07), $I^2 = 69.2\%$

ii) 12-months follow-up

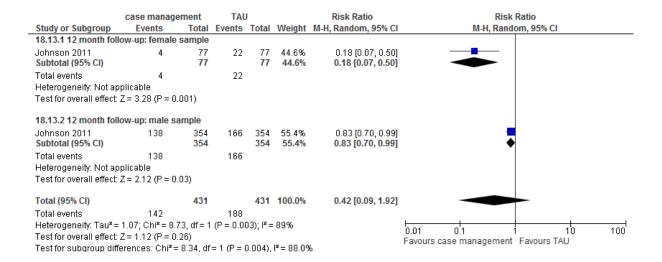
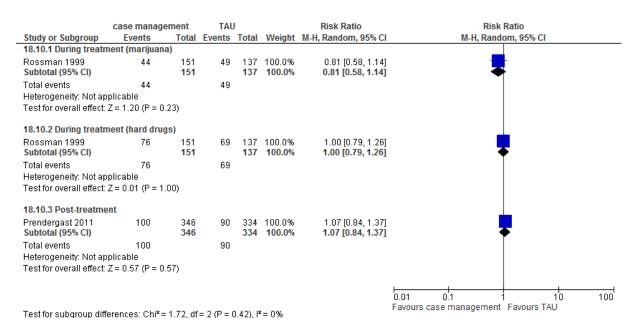


Figure 243: Self-reported drug use

i) During treatment (marijuana or hard drugs) or post-treatment



ii) 12-months follow-up

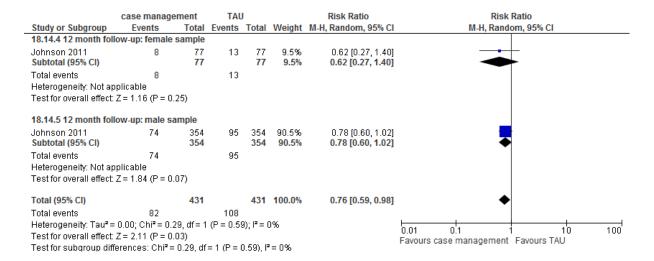
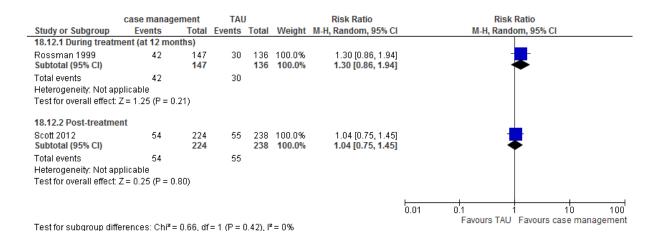


Figure 244: Injection drug use (post-treatment)



Figure 245: Abstinence



0.7.6.2 Case management vs active intervention for substance misuse disorders

Figure 246: Remained in treatment for 6 months

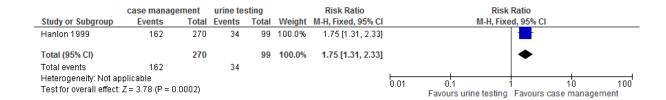


Figure 247: Re-arrest at post-treatment and 3-months follow-up

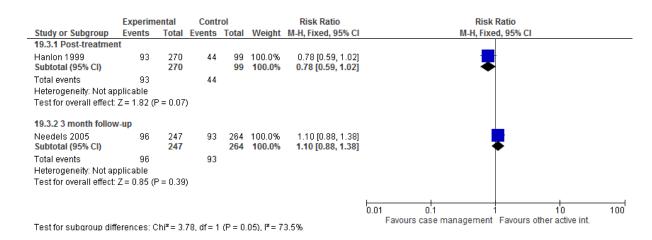


Figure 248: Rearrest for drug crime (3 months follow-up)

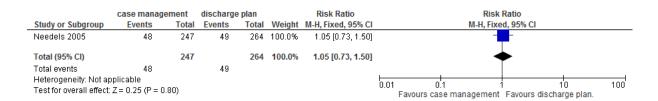


Figure 249: Reconviction at post-treatment and 3-months follow-up

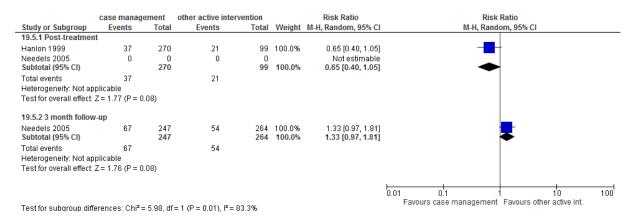


Figure 250: Re-incarceration at post-treatment and 3-months follow-up

case management other active intervention Risk Ratio Risk Ratio Total Weight M-H, Random, 95% Cl Study or Subgroup M-H. Random, 95% CI Events Total Events 19.6.1 Post-treatment Hanlon 1999 270 99 100.0% 0.93 [0.64, 1.35] Needels 2005 Λ 0 Not estimable Subtotal (95% CI) 270 100.0% 0.93 [0.64, 1.35] Total events 28 Heterogeneity: Not applicable Test for overall effect: Z = 0.38 (P = 0.70) 19.6.2 3 month follow-up Needels 2005 86 264 100.0% 1.09 [0.86, 1.39] Subtotal (95% CI) 100.0% 1.09 [0.86, 1.39]

0.1

Favours case management Favours other active int.

100

10

Test for subgroup differences: $Chi^2 = 0.52$, df = 1 (P = 0.47), $I^2 = 0\%$

88

Total events

Heterogeneity: Not applicable Test for overall effect: Z = 0.73 (P = 0.47)

Figure 251: Any self-reported drug use (3-months follow-up)

86

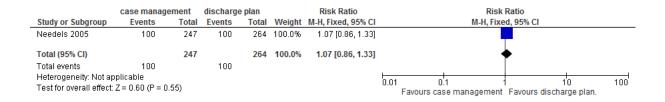
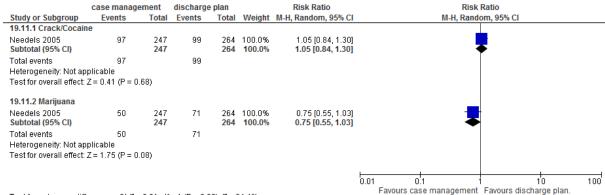


Figure 252: Positive hair test (3-months follow-up)



Test for subgroup differences: Chi² = 2.81, df = 1 (P = 0.09), I² = 64.4%

0.7.6.3 Assertive Community Treatment vs TAU for substance misuse disorders

Figure 253: Urine test positive for drug use during treatment



Figure 254: Self-reported injection drug use during treatment



Figure 255: Self-reported drug use during treatment



Figure 256: Re-incarceration during treatment



0.7.6.4 Case management vs TAU for mental health disorders other than substance misuse

Figure 257: Service utilization at post-treatment

	Case manage	ment	TAU					Risk Ratio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI		M-H, Random, 95% CI	
Jarret 2012	11	15	4	8	33.4%	1.47 [0.69, 3.13]			
Wang 2012	37	98	48	102	66.6%	0.80 [0.58, 1.11]		-	
Total (95% CI)		113		110	100.0%	0.98 [0.56, 1.72]		•	
Total events	48		52						
Heterogeneity: Tau² =	0.09; Chi² = 2.0	7, df = 1	(P = 0.19)	5); P = 6	52%		0.01	0.1 1 10 10	00
Test for overall effect:	Z = 0.07 (P = 0.9)	95)					0.01	Favours TAU Favours Case manageme	

Figure 258: Rate of re-offending at post-treatment

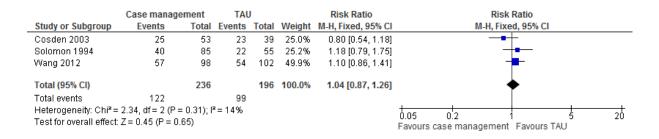


Figure 259: Number of days in jail (up to 24-months follow-up)

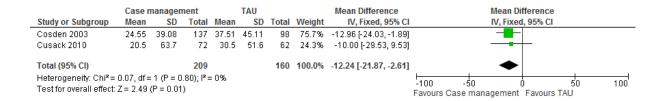
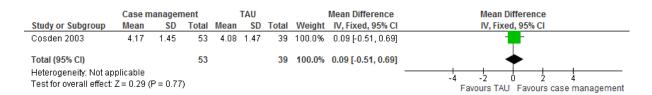


Figure 260: Quality of Life at post-treatment



O.7.7 Drug court

0.7.7.1 Drug court vs TAU

Figure 261: Days of substance misuse (12 months follow-up)

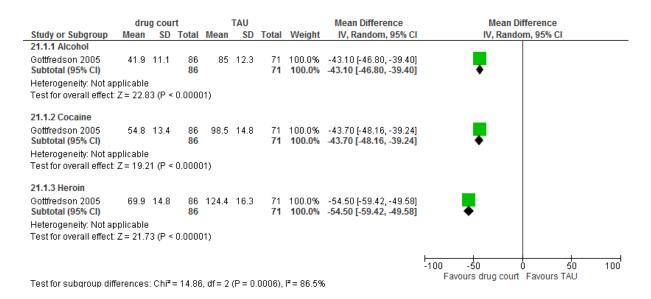
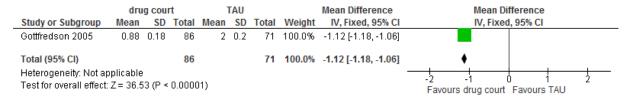


Figure 262: Re-arrest (12-month follow-up)



Figure 263: Maximum Crime Seriousness Scale (12-months follow-up)



0.7.7.2 Drug court vs active intervention

At post-treatment

Figure 264: Removed from treatment due to unsatisfactory progress

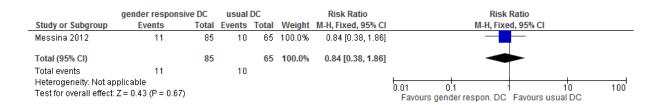


Figure 265: Addiction Severity Index (ASI): alcohol composite scores

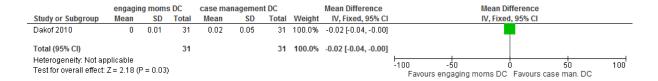


Figure 266: Addiction severity index (ASI): drug composite score

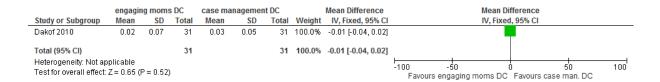


Figure 267: Number of sanctions during treatment

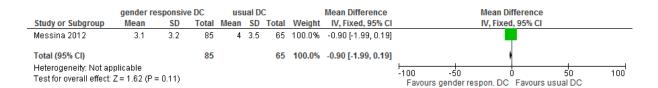


Figure 268: Number of sanctions during treatment resulting in jail detention

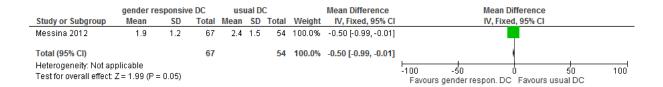


Figure 269: Reincarceration during treatment

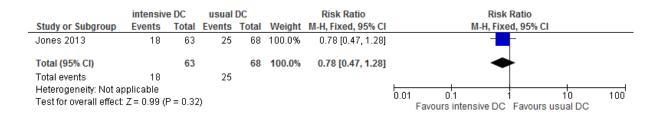
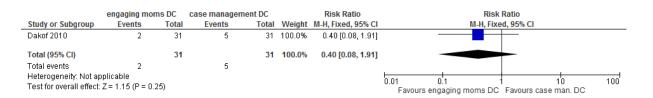


Figure 270: Urine test positive for drugs (post-treatment)



O.7.8 Opioid substitution therapy

0.7.8.1 Opioid substitution therapy + case management vs active intervention

Figure 271: Completed jail treatment

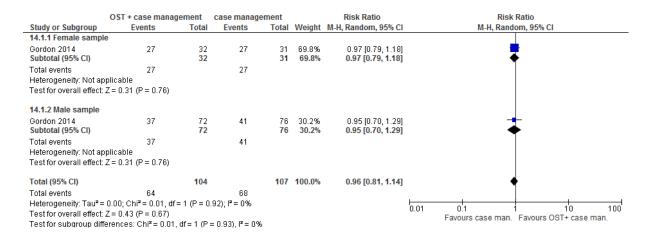


Figure 272: Urine test positive for cocaine

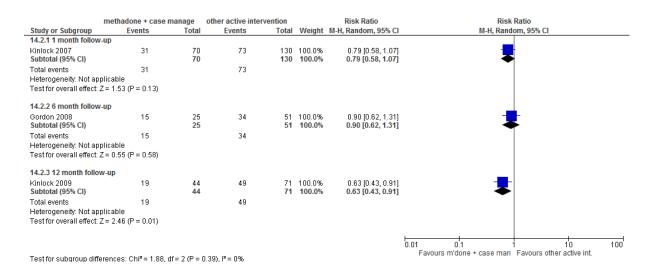


Figure 273: Urine test positive for opioids

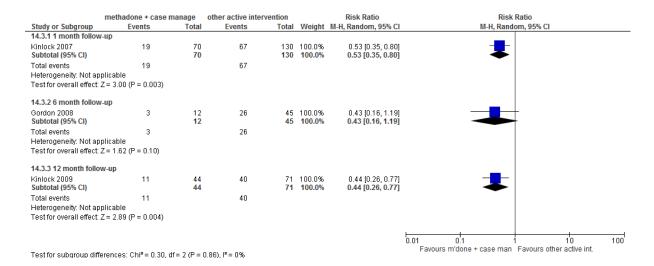


Figure 274: Days of substance use (12-months follow-up)

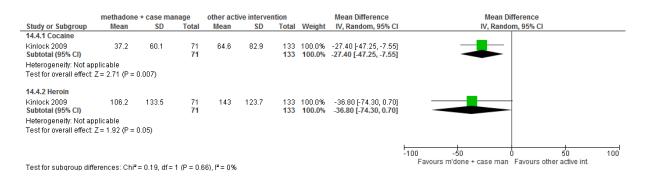


Figure 275: Self-reported drug use in past 30 days (6-months follow-up)

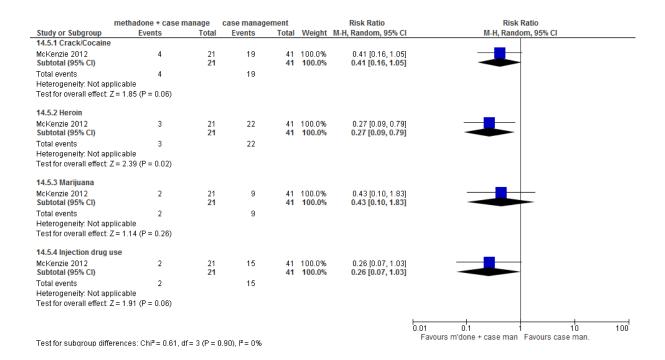


Figure 276: Drug overdose at 6-months and 12-months follow-up

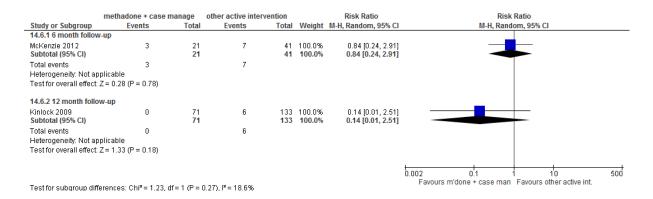


Figure 277: Re-arrest at 6-months and 12-months follow-up

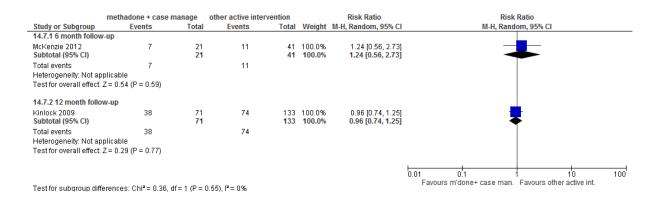
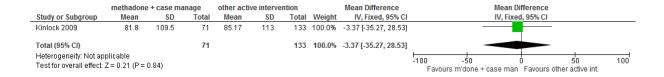


Figure 278: Self-reported days of criminal activity (12 months follow-up)



O.7.9 Automated Telephony (AT) with feedback versus AT alone

Figure 279: Change in Arnetz and Hasson stress questionnaires (AHSS)

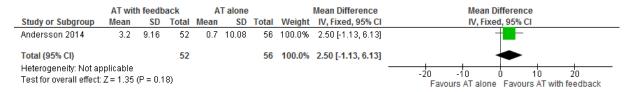


Figure 280: Change in symptom checklist-8D (SCL-8D)

	AT with feedback AT alone						Mean Difference	Mean Difference			
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI		
Andersson 2014	3.3	10.96	52	-1.2	11.76	56	100.0%	4.50 [0.22, 8.78]			
Total (95% CI)			52			56	100.0%	4.50 [0.22, 8.78]	→		
Heterogeneity: Not ap Test for overall effect:			14)						-20 -10 0 10 20 Favours AT alone Favours AT with feedback		

Figure 281: Change in daily stressor assessment

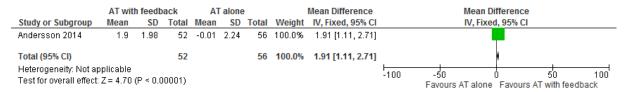


Figure 282: Alcohol urge questionnaires: reduction in alcohol urge

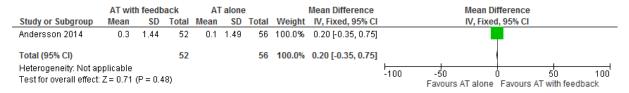


Figure 283: Alcohol urge questionnaires: reduction in alcohol use

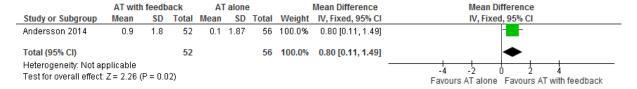


Figure 284: Alcohol urge questionnaires: reduction in drug urge

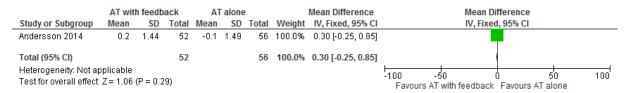
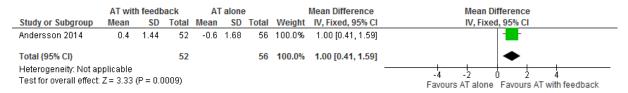


Figure 285: Alcohol urge questionnaires: reduction in drug use



0.7.10 IDDT versus TAU

Figure 286: Number of days in hospital

	ı	IDDT			TAU			Mean Difference		Mean	Differe	ence	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI		IV, Fix	ked, 95	% CI	
Chandler 2006	6.89	7.01	103	12.52	16.88	79	100.0%	-5.63 [-9.59, -1.67]					
Total (95% CI)			103			79	100.0%	-5.63 [-9.59, -1.67]			♦		
Heterogeneity: Not ap Test for overall effect:			0.005)						-100	-50 Favours IDE	OT Fav	50 ours TAU	100

Figure 287: Rate of crisis visits

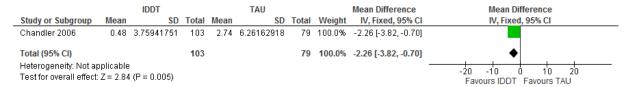
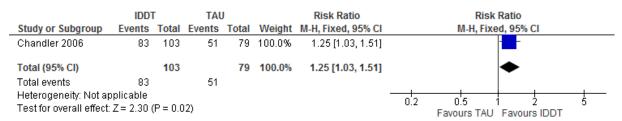
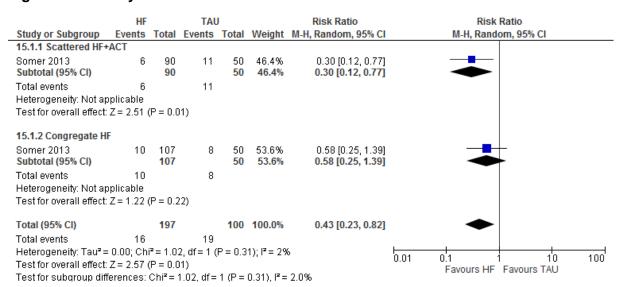


Figure 288: Rate of outpatient medication services



O.7.11 Housing First versus TAU

Figure 289: Any offence



0.7.12 TIMA versus TAU

Figure 290: Bipolar Disorder Symptom Scale (BDSS)

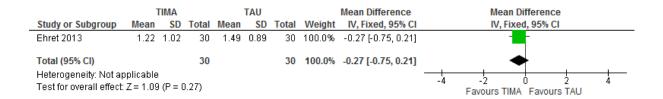
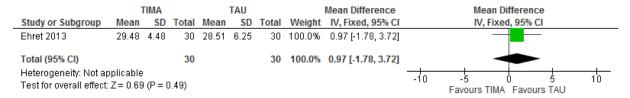


Figure 291: Brief Psychiatric Rating Scale (BPRS)



O.7.13 Service Brokerage Intervention versus TAU

Figure 292: Number of participants in contact with MH services

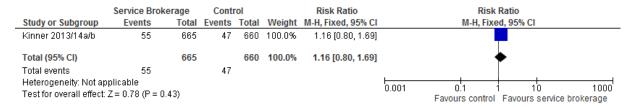
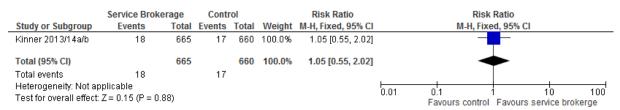


Figure 293: Number of participants who have seen GP



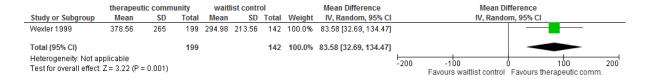
Figure 294: Number of participants who attended alcohol or drug service



O.7.14 Therapeutic communities

0.7.14.1 Therapeutic community versus waitlist control

Figure 295: Days until re-incarceration



0.7.14.2 Therapeutic community versus active intervention

Figure 296: Addiction Severity Index (ASI-6): alcohol composite score

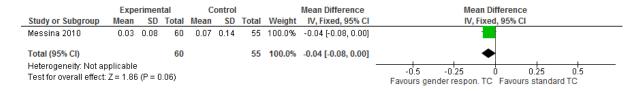


Figure 297: Addiction Severity Index (ASI-6): drug composite score

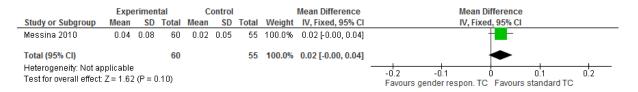


Figure 298: Alcohol use at follow-up

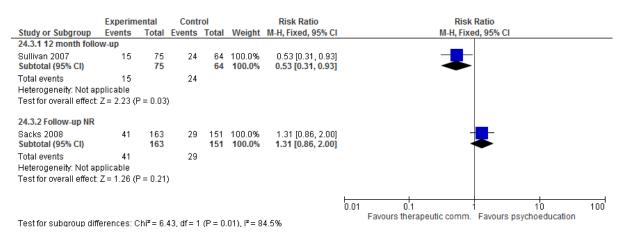


Figure 299: Frequency of alcohol use at follow-up

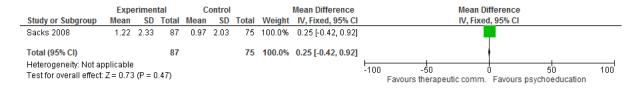


Figure 300: Frequency of drug use at follow-up

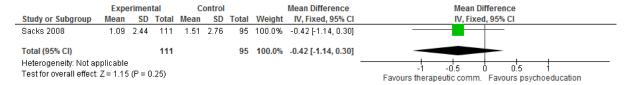
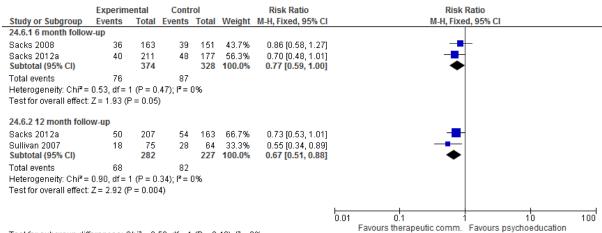


Figure 301: Drug use at follow-up



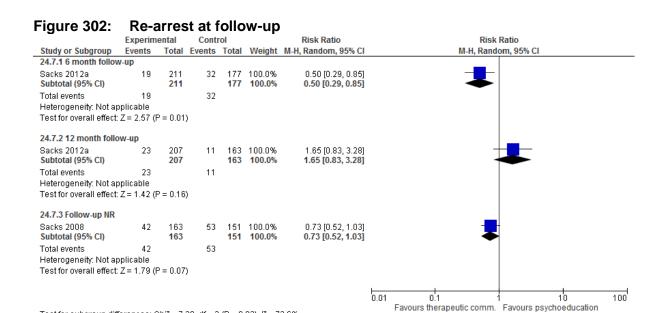


Figure 303: Re-incarceration at follow-up

Test for subgroup differences: $Chi^2 = 7.30$, df = 2 (P = 0.03), $I^2 = 72.6\%$

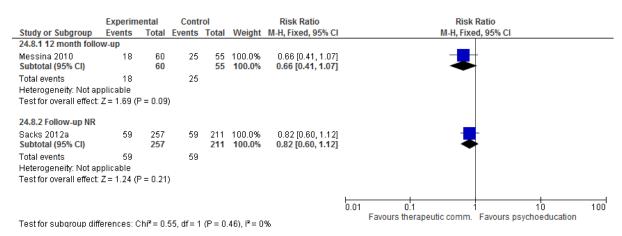
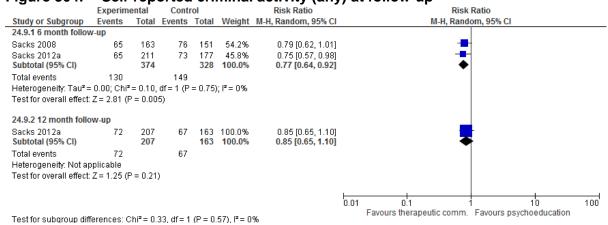
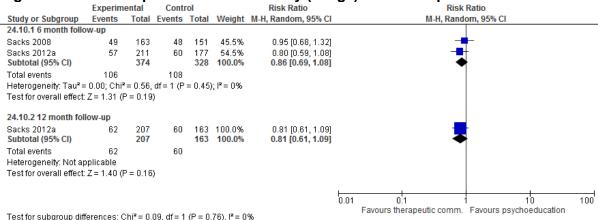


Figure 304: Self-reported criminal activity (any) at follow-up







0.7.14.3 Modified therapeutic community versus psychoeducation

Figure 306: Substance use (12 month follow-up)

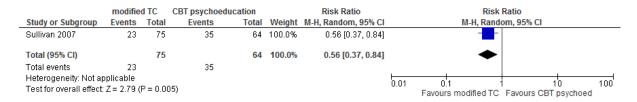


Figure 307: Alcohol use (12 month follow-up)

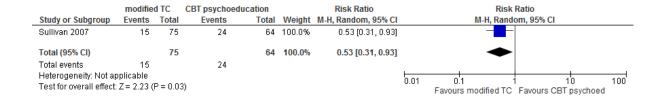
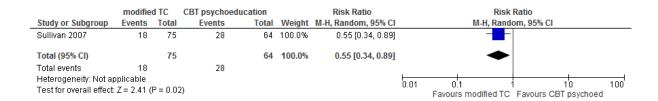


Figure 308: Drug use (12 month follow-up)





	Modified TC. CBT psychoed.					Risk Ratio	Risk Ratio			
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI		M-H, Rand	om, 95% CI	
Sacks 2004	35	75	45	64	100.0%	0.66 [0.50, 0.89]		-		
Total (95% CI)		75		64	100.0%	0.66 [0.50, 0.89]		•		
Total events	35		45							
Heterogeneity: Not a Test for overall effect		P = 0.00	06)				0.01	0.1 Favours modified TC	1 10 Favours CBT psychoed	100

Figure 310: Re-incarceration (12 month follow-up)

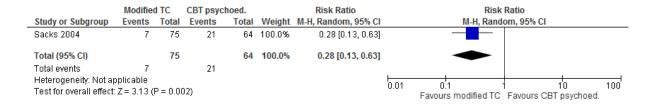
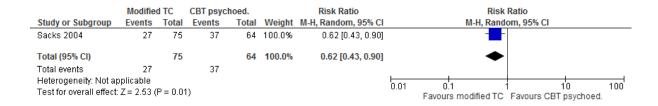


Figure 311: Alcohol or drug offences (12 month follow-up)



0.7.14.4 Enhanced therapeutic community versus standard therapeutic community

At post-treatment

Figure 312: Engagement with treatment

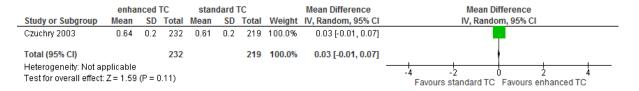
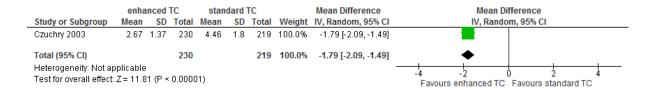


Figure 313: Negative mood (rated by counsellors)



0.7.14.5 Gender-responsive therapeutic community versus standard therapeutic community

Figure 314: Addiction Severity Index (ASI-6): alcohol composite score

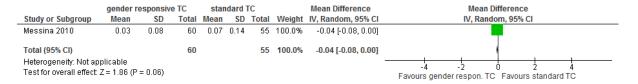


Figure 315: Addiction Severity Index (ASI-6): psychological composite score

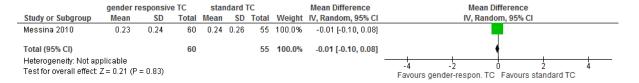


Figure 316: Addiction Severity Index (ASI-6): drug composite score

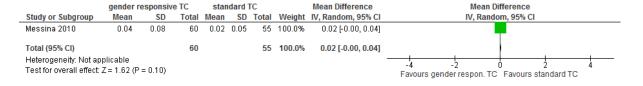


Figure 317: Addiction Severity Index (ASI-6): family composite score

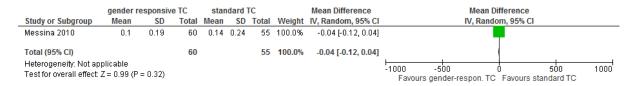


Figure 318: Participated in after-care upon release



Figure 319: Months spent in after-care

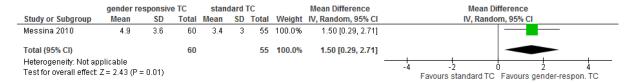


Figure 320: Disciplinary removal from first residential placement post-release

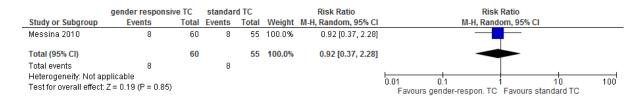


Figure 321: Re-incarceration (12 month follow-up)

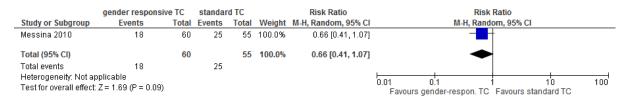


Figure 322: Voluntarily dropped out from first residential placement post-release

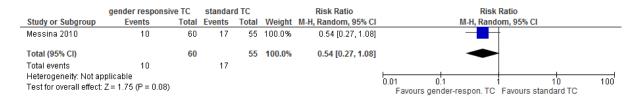
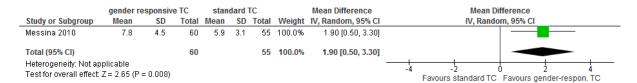


Figure 323: Months until re-incarceration



0.7.14.6 Gender-specific therapeutic community versus psychoeducation

Figure 324: Beck Depression Inventory (BDI) total score at post-treatment

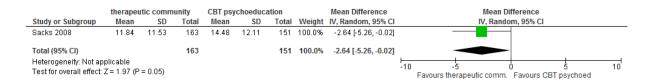


Figure 325: Brief Symptom Inventory (BSI) total score at post-treatment

	therapeutic community			CBT psy	choeduc	ation		Mean Difference Mean Difference				
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Rand	om, 95% CI		
Sacks 2008	53.47	12.64	163	55.1	12.84	151	100.0%	-1.63 [-4.45, 1.19]		\top		
Total (95% CI)			163			151	100.0%	-1.63 [-4.45, 1.19]		-		
Heterogeneity: Not ap Test for overall effect: 2		= 0.26)						⊢ -1	10 -5 Favours therapeutic comm	0 Favours CBT p	5 sychoed.	10

Figure 326: Post-traumatic Symptom Severity Scale (PSS) at post-treatment

therapeutic community			unity	CBT psy	choeduc	ation		Mean Difference Mean Difference			
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI		
Sacks 2008	10.22	11.1	163	13.12	13.81	151	100.0%	-2.90 [-5.68, -0.12]			
Total (95% CI) Heterogeneity: Not ap Test for overall effect:		= 0.04)	163			151	100.0%	· / ·	10 -5 0 5 10 Favours therapeutic comm. Favours CBT psychoed.		

Figure 327: Self-reported criminal activity (Any)

	therapeutic com	munity	CBT psychoedu	cation		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
30.9.1 6 month follow	v-up						
Sacks 2008	65	163	76	151	54.2%	0.79 [0.62, 1.01]	-
Sacks 2012a Subtotal (95% CI)	65	211 374	73	177 328	45.8% 100.0%	0.75 [0.57, 0.98] 0.77 [0.64, 0.92]	•
Total events Heterogeneity: Tau² = Test for overall effect:			149 : 0.75); I² = 0%				
30.9.2 12 month follo	ow-up						
Sacks 2012a Subtotal (95% CI)	72	207 207	67	163 163	100.0% 100.0 %	0.85 [0.65, 1.10] 0.85 [0.65, 1.10]	
Total events Heterogeneity: Not ap Test for overall effect:	•)	67				
Test for subgroup diff	ferences: Chi² = 0.3	33. df = 1 i	(P = 0.57), F = 0%				0.01 0.1 100 100 Favours therapeutic comm. Favours CBT psychoed.

Figure 328: Self-reported criminal activity (Drug)

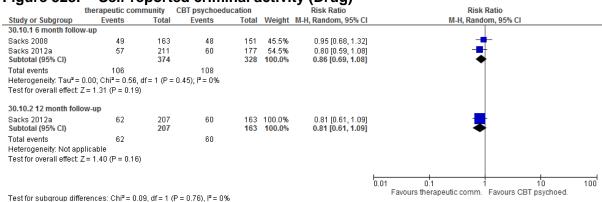


Figure 329: Self-reported criminal activity (Sexual)



Figure 330: Receiving substance abuse treatment at follow-up

	therapeutic community		CBT psychoed	ucation	Risk Ratio			Risk Ratio			
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI		M-H, Fixe	d, 95% CI		
Sacks 2008	109	163	118	151	100.0%	0.86 [0.75, 0.98]					
Total (95% CI)		163		151	100.0%	0.86 [0.75, 0.98]		*			
Total events	109		118								
Heterogeneity: Not ap Test for overall effect:							0.01	0.1 Favours CBT psychoed.		10 eutic comm	100

Figure 331: Receiving mental health treatment at follow-up

	therapeutic community		CBT psychoed	ucation				Risk Ratio			
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI		M-H, Ran	dom, 95% CI		
Sacks 2008	65	163	63	151	100.0%	0.96 [0.73, 1.25]			•		
Total (95% CI)		163		151	100.0%	0.96 [0.73, 1.25]			•		
Total events	65		63								
Heterogeneity: Not ap Test for overall effect:	•						0.01	0.1 Favours CBT psychoed		0 eutic comm	100

Figure 332: Alcohol use at follow-up

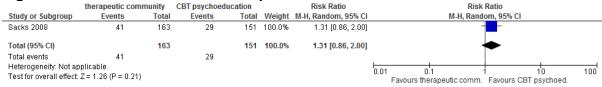
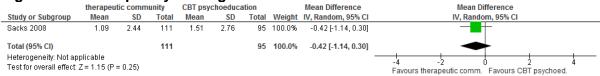


Figure 333: Frequency of drug use





•	therapeutic com	munity	CBT psychoedu	cation		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random, 95% CI
30.6.1 6 month follow						,	
Sacks 2008	36	163	39	151	46.6%	0.86 [0.58, 1.27]	—
Sacks 2012a Subtotal (95% CI)	40	211 374	48	177 328	53.4% 100.0%	0.70 [0.48, 1.01] 0.77 [0.59, 1.01]	-
Total events Heterogeneity: Tau² = Test for overall effect:			87 : 0.47); I² = 0%				
30.6.2 12 month folio	ow-up						
Sacks 2012a Subtotal (95% CI)	50	207 207	54	163 163	100.0% 100.0 %	0.73 [0.53, 1.01] 0.73 [0.53, 1.01]	.
Total events Heterogeneity: Not ap	50 oplicable		54				
Test for overall effect:	Z = 1.90 (P = 0.06))					
							0.01 0.1 1 10 100
Test for subgroup diff	ferences: Chi² = 0.0	06, df = 1	(P = 0.81), I ² = 0%				Favours therapeutic comm. Favours CBT psychoed.

Figure 335: Re-arrest at follow-up

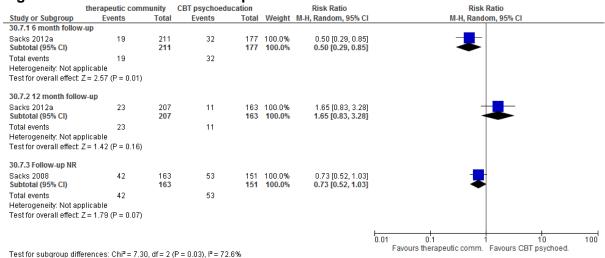


Figure 336: Re-incarceration at follow-up

	therapeutic com	munity	CBT psychoed	ucation		Risk Ratio	Risk Rat	tio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	M-H, Random	, 95% CI	
Sacks 2012a	59	257	59	211	100.0%	0.82 [0.60, 1.12]	-		
Total (95% CI)		257		211	100.0%	0.82 [0.60, 1.12]	•		
Total events	59		59						
Heterogeneity: Not as	pplicable						b.04	40	400
Test for overall effect	Z = 1.24 (P = 0.21)						0.01 0.1 1 Favours therapeutic comm Fa	10 avours CBT psychoed	100

0.7.14.7 Re-entry modified therapeutic community versus treatment as usual

Figure 337: Re-incarceration at 12-month follow-up

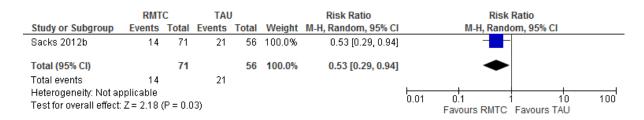


Figure 338: Criminal activity

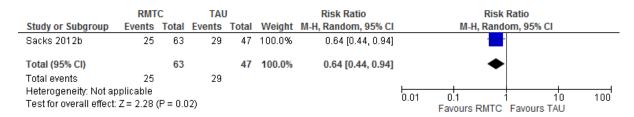


Figure 339: Alcohol/drug offences

