Appendix 16d: Computerised cognitive behavioural therapy for panic disorder forest plots

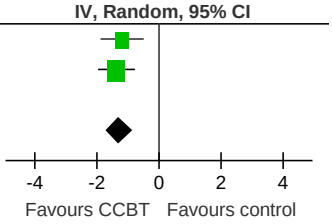
1 Computerised cognitive behavioural therapy (CCBT) for panic disorder

1.1 CCBT for panic disorder

Comparator: Waitlist control (WLC)
Outcome: Anxiety (self-rated)

	Treatment (CCBT)			Wait-list Control				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Carlbring 2001	9.8	8.4	21	21.2	10.4	20	41.7%	-1.19 [-1.86, -0.52]
Carlbring 2006	8.5	5.5	30	19.6	9.9	30	58.3%	-1.37 [-1.93, -0.80]
Total (95% CI)			**51**			**50**	**100.0%**	**-1.29 [-1.72, -0.86]**

Heterogeneity: Tau² = 0.00; Chi² = 0.17, df = 1 (P = 0.68); I² = 0%
Test for overall effect: Z = 5.86 (P < 0.00001)

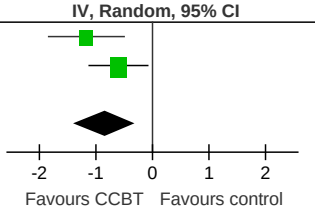


1.2 CCBT for panic disorder

Comparator: Waitlist control (WLC)
Outcome: Depression (self-rated)

	Treatment (CCBT)			Wait-list Control				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Carlbring 2001	5	3.6	21	12.1	7.7	20	42.8%	-1.17 [-1.84, -0.50]
Carlbring 2006	9.1	8.4	30	14.4	9	30	57.2%	-0.60 [-1.12, -0.08]
Total (95% CI)			**51**			**50**	**100.0%**	**-0.84 [-1.39, -0.29]**

Heterogeneity: Tau² = 0.07; Chi² = 1.73, df = 1 (P = 0.19); I² = 42%
Test for overall effect: Z = 3.01 (P = 0.003)

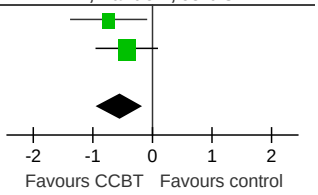


1.3 CCBT for panic disorder

Comparator: Waitlist control (WLC)
Outcome: Quality of life (psychological)

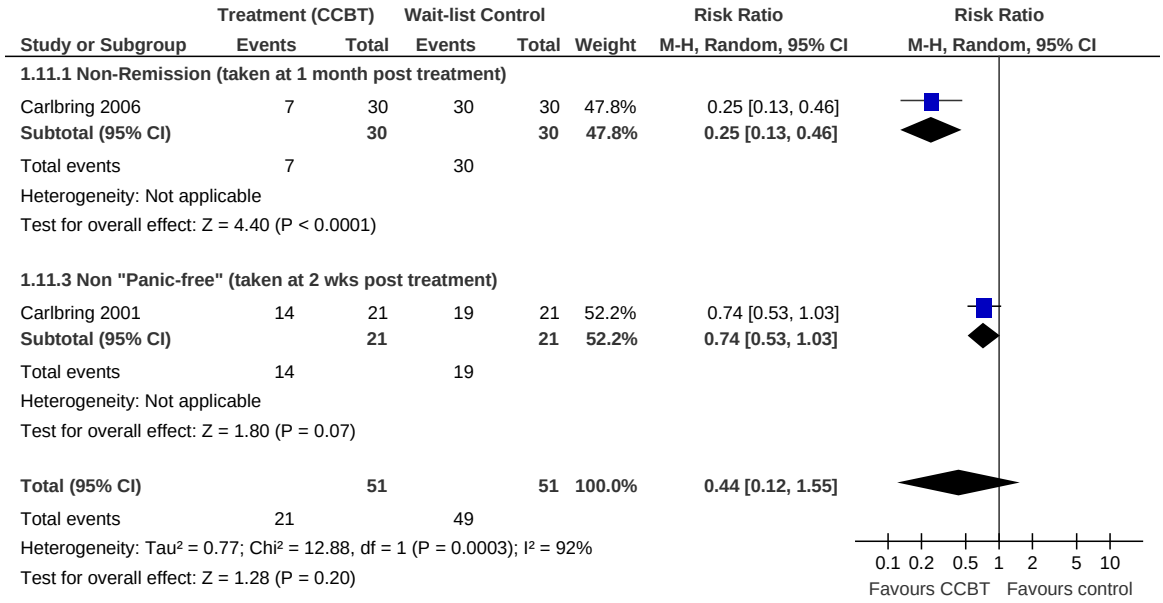
	Treatment (CCBT)			Wait-list Control				Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI
Carlbring 2001	-2.2	1.2	21	-1.3	1.2	20	39.4%	-0.74 [-1.37, -0.10]
Carlbring 2006	-1.8	1.6	30	-1.1	1.6	30	60.6%	-0.43 [-0.94, 0.08]
Total (95% CI)			**51**			**50**	**100.0%**	**-0.55 [-0.95, -0.15]**

Heterogeneity: Tau² = 0.00; Chi² = 0.53, df = 1 (P = 0.47); I² = 0%
Test for overall effect: Z = 2.71 (P = 0.007)



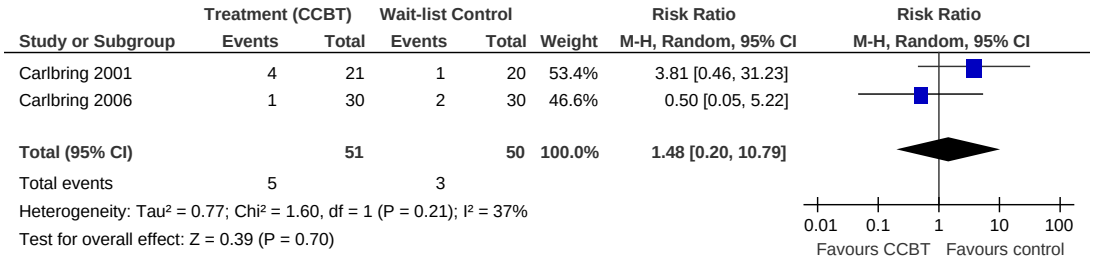
1.4 CCBT for panic disorder

Comparator: Waitlist control (WLC)
Outcome: Non-panic-free status



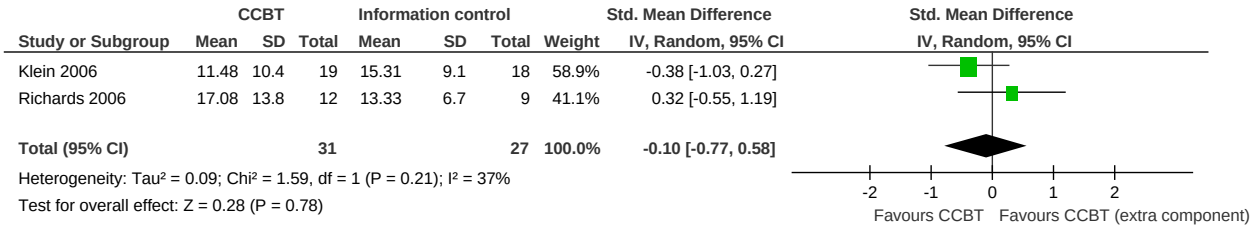
1.5 CCBT for panic disorder

Comparator: Waitlist control (WLC)
Outcome: Discontinuation due to any reason



1.6 CCBT for panic disorder

Comparator: Information control
Outcome: Anxiety (self-rated)



1.7 CCBT for panic disorder

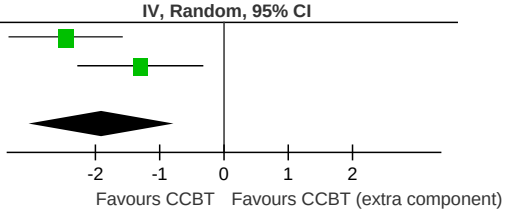
Comparator: Information control

Outcome: Panic severity

Study or Subgroup	CCBT Mean	CCBT SD	CCBT Total	Information control Mean	Information control SD	Information control Total	Weight	Std. Mean Difference IV, Random, 95% CI
Klein 2006	6.18	6.2	19	19.78	4.4	18	51.6%	-2.46 [-3.34, -1.59]
Richards 2006	9.54	5.7	12	16.78	4.8	9	48.4%	-1.30 [-2.27, -0.33]
Total (95% CI)			**31**			**27**	**100.0%**	**-1.90 [-3.04, -0.76]**

Heterogeneity: Tau² = 0.45; Chi² = 3.04, df = 1 (P = 0.08); I² = 67%

Test for overall effect: Z = 3.27 (P = 0.001)



1.8 CCBT for panic disorder

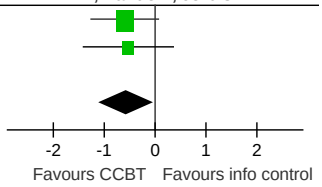
Comparator: Information control

Outcome: Depression (self-rated)

Study or Subgroup	CCBT Mean	CCBT SD	CCBT Total	Information control Mean	Information control SD	Information control Total	Weight	Std. Mean Difference IV, Random, 95% CI
Klein 2006	4.9	6.2	19	9.8	9.6	18	64.1%	-0.60 [-1.26, 0.06]
Richards 2006	-6.04	18.79	12	2.43	9.27	9	35.9%	-0.52 [-1.41, 0.36]
Total (95% CI)			**31**			**27**	**100.0%**	**-0.57 [-1.10, -0.04]**

Heterogeneity: Tau² = 0.00; Chi² = 0.02, df = 1 (P = 0.90); I² = 0%

Test for overall effect: Z = 2.12 (P = 0.03)



1.9 CCBT for panic disorder

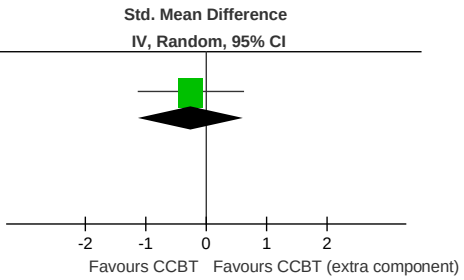
Comparator: Information control

Outcome: Quality of life (psychological)

Study or Subgroup	CCBT Mean	CCBT SD	CCBT Total	Information control Mean	Information control SD	Information control Total	Weight	Std. Mean Difference IV, Random, 95% CI
2.7.1 QOL (Psychological)								
Richards 2006	-7.24	26.66	12	-0.17	26.87	9	100.0%	-0.25 [-1.12, 0.61]
Subtotal (95% CI)			**12**			**9**	**100.0%**	**-0.25 [-1.12, 0.61]**

Heterogeneity: Not applicable

Test for overall effect: Z = 0.57 (P = 0.57)



1.10 CCBT for panic disorder

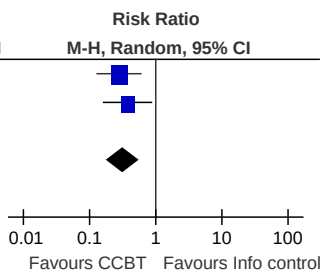
Comparator: Information control

Outcome: Non-panic-free status

Study or Subgroup	CCBT Events	CCBT Total	Information control Events	Information control Total	Weight	Risk Ratio M-H, Random, 95% CI
Klein 2006 (1)	5	19	17	18	54.5%	0.28 [0.13, 0.60]
Richards 2006 (2)	4	12	8	9	45.5%	0.38 [0.16, 0.86]
Total (95% CI)		**31**		**27**	**100.0%**	**0.32 [0.18, 0.56]**
Total events	9		25			

Heterogeneity: Tau² = 0.00; Chi² = 0.27, df = 1 (P = 0.60); I² = 0%

Test for overall effect: Z = 3.99 (P < 0.0001)



(1) taken at 5th week (1 wk before post assessment)

(2) taken at 7th week (1 wk before post assessment)

1.11 CCBT for panic disorder

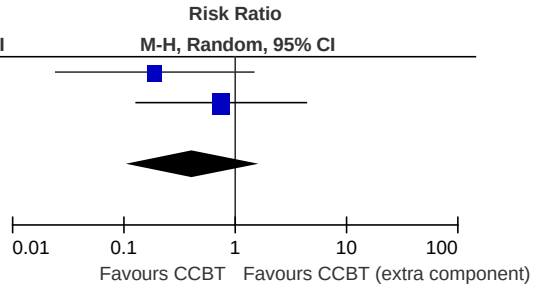
Comparator: Information control

Outcome: Discontinuation due to any reason

Study or Subgroup	CCBT Events	CCBT Total	Information control Events	Information control Total	Weight	Risk Ratio M-H, Random, 95% CI
Klein 2006	1	19	5	18	42.8%	0.19 [0.02, 1.47]
Richards 2006	2	12	2	9	57.2%	0.75 [0.13, 4.36]
Total (95% CI)		**31**		**27**	**100.0%**	**0.42 [0.11, 1.63]**
Total events	3		7			

Heterogeneity: Tau² = 0.04; Chi² = 1.04, df = 1 (P = 0.31); I² = 4%

Test for overall effect: Z = 1.26 (P = 0.21)



1.12 CCBT for panic disorder

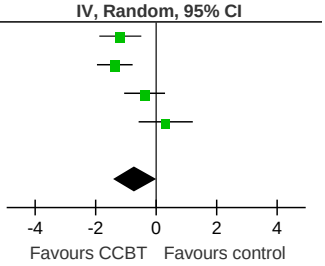
Comparator: Any control (waitlist control or information control)

Outcome: Anxiety (self-rated)

Study or Subgroup	CCBT Mean	CCBT SD	CCBT Total	any control Mean	any control SD	any control Total	Weight	Std. Mean Difference IV, Random, 95% CI
Carlbring 2001	9.8	8.4	21	21.2	10.4	20	25.3%	-1.19 [-1.86, -0.52]
Carlbring 2006	8.5	5.5	30	19.6	9.9	30	27.1%	-1.37 [-1.93, -0.80]
Klein 2006	11.48	10.4	19	15.31	9.1	18	25.7%	-0.38 [-1.03, 0.27]
Richards 2006	17.08	13.8	12	13.33	6.7	9	21.9%	0.32 [-0.55, 1.19]
Total (95% CI)			**82**			**77**	**100.0%**	**-0.70 [-1.41, 0.01]**

Heterogeneity: Tau² = 0.40; Chi² = 13.03, df = 3 (P = 0.005); I² = 77%

Test for overall effect: Z = 1.94 (P = 0.05)



1.13 CCBT for panic disorder

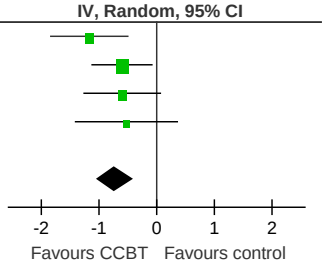
Comparator: Any control (waitlist control or information control)

Outcome: Depression (self-rated)

Study or Subgroup	CCBT Mean	CCBT SD	CCBT Total	any control Mean	any control SD	any control Total	Weight	Std. Mean Difference IV, Random, 95% CI
Carlbring 2001	5	3.6	21	12.1	7.7	20	23.5%	-1.17 [-1.84, -0.50]
Carlbring 2006	9.1	8.4	30	14.4	9	30	39.0%	-0.60 [-1.12, -0.08]
Klein 2006	4.9	6.2	19	9.8	9.6	18	24.0%	-0.60 [-1.26, 0.06]
Richards 2006	-6.04	18.79	12	2.43	9.27	9	13.5%	-0.52 [-1.41, 0.36]
Total (95% CI)			**82**			**77**	**100.0%**	**-0.72 [-1.05, -0.40]**

Heterogeneity: Tau² = 0.00; Chi² = 2.26, df = 3 (P = 0.52); I² = 0%

Test for overall effect: Z = 4.38 (P < 0.0001)



1.14 CCBT for panic disorder

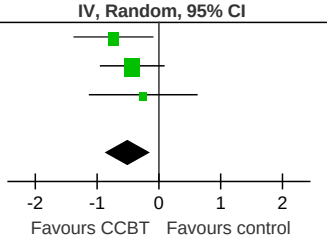
Comparator: Any control (waitlist control or information control)

Outcome: Quality of life (psychological)

Study or Subgroup	CCBT Mean	CCBT SD	CCBT Total	any control Mean	any control SD	any control Total	Weight	Std. Mean Difference IV, Random, 95% CI
Carlbring 2001	-2.2	1.2	21	-1.3	1.2	20	32.6%	-0.74 [-1.37, -0.10]
Carlbring 2006	-1.8	1.6	30	-1.1	1.6	30	50.0%	-0.43 [-0.94, 0.08]
Richards 2006	-7.24	26.66	12	-0.17	26.87	9	17.4%	-0.25 [-1.12, 0.61]
Total (95% CI)			**63**			**59**	**100.0%**	**-0.50 [-0.86, -0.14]**

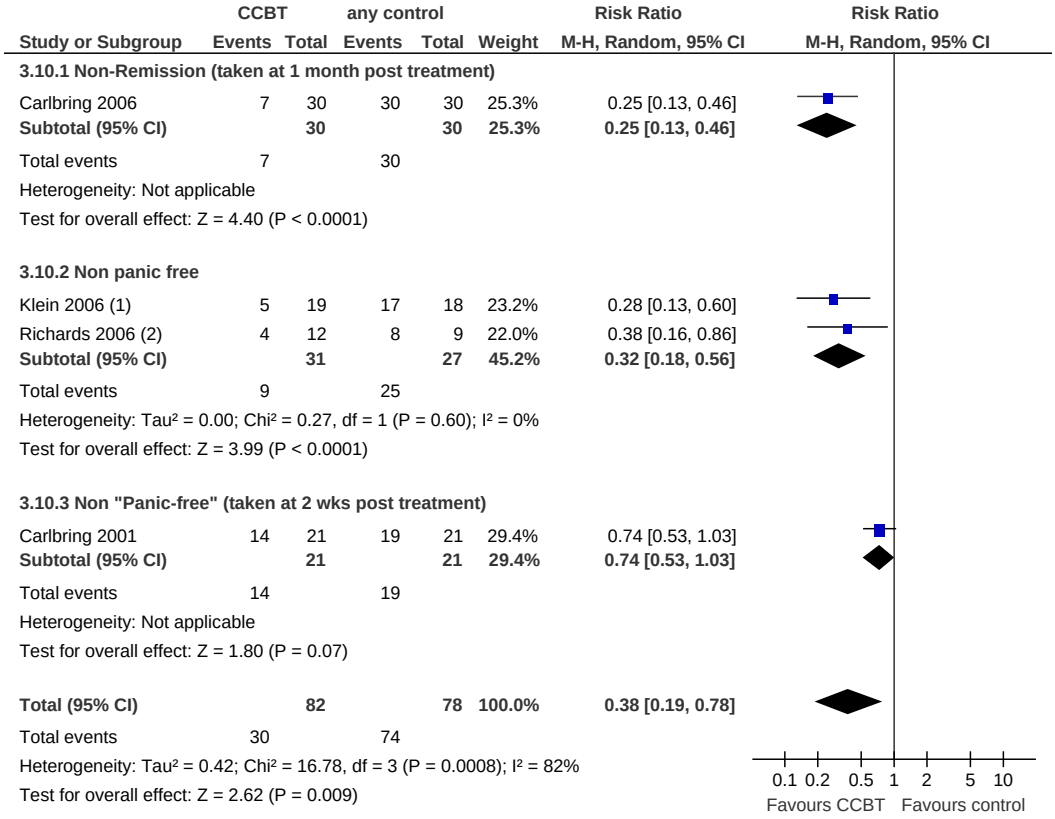
Heterogeneity: Tau² = 0.00; Chi² = 0.91, df = 2 (P = 0.64); I² = 0%

Test for overall effect: Z = 2.70 (P = 0.007)



1.15 CCBT for panic disorder

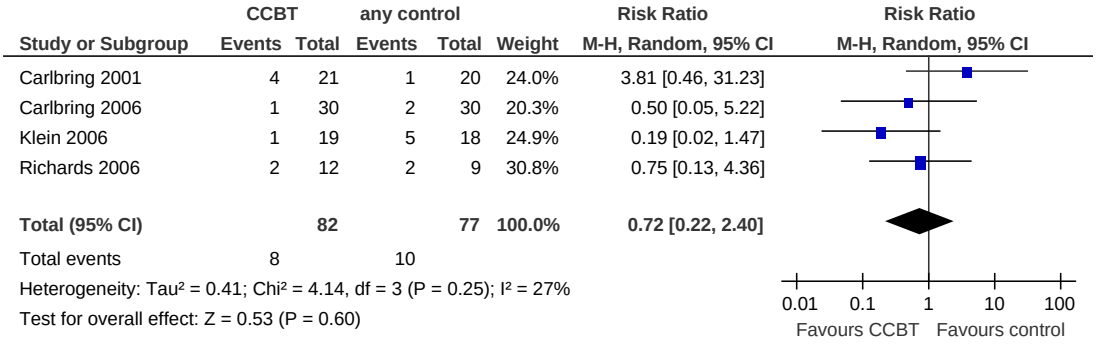
Comparator: Any control (waitlist control or information control)
Outcome: Non-panic-free status



(1) taken at 5th week (1 wk before post assessment)
(2) taken at 7th week (1 wk before post assessment)

1.16 CCBT for panic disorder

Comparator: Any control (waitlist control or information control)
Outcome: Discontinuation due to any reason

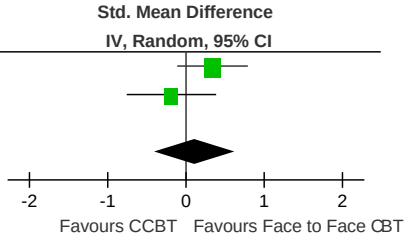


1.17 CCBT for panic disorder

Comparator: Traditional face-to-face CBT
Outcome: Anxiety (self-rated)

Study or Subgroup	CCBT Mean	CCBT SD	CCBT Total	Face to face CBT Mean	Face to face CBT SD	Face to face CBT Total	Weight	Std. Mean Difference IV, Random, 95% CI
Kiropoulos 2008	2.95	1.48	42	2.44	1.5	38	55.6%	0.34 [-0.10, 0.78]
Carlbring 2005	10.9	7.1	25	12.3	7.7	24	44.4%	-0.19 [-0.75, 0.38]
Total (95% CI)			**67**			**62**	**100.0%**	**0.11 [-0.41, 0.62]**

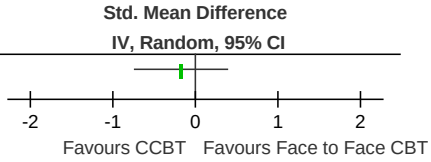
Heterogeneity: Tau² = 0.07; Chi² = 2.08, df = 1 (P = 0.15); I² = 52%
Test for overall effect: Z = 0.41 (P = 0.68)



1.18 CCBT for panic disorder

Comparator: Traditional face to face CBT
Outcome: Anxiety (self-rated) at follow-up

Study or Subgroup	CCBT Mean	CCBT SD	CCBT Total	Face to face CBT Mean	Face to face CBT SD	Face to face CBT Total	Weight	Std. Mean Difference IV, Random, 95% CI
Carlbring 2005	10.7	7.9	25	12.3	10.1	24		-0.17 [-0.74, 0.39]

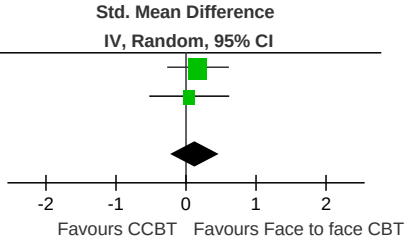


1.19 CCBT for panic disorder

Comparator: Traditional face to face CBT
Outcome: Depression (self-rated)

Study or Subgroup	CCBT Mean	CCBT SD	CCBT Total	Face to face CBT Mean	Face to face CBT SD	Face to face CBT Total	Weight	Std. Mean Difference IV, Random, 95% CI
Kiropoulos 2008	2.18	1.92	45	1.87	1.63	39	63.0%	0.17 [-0.26, 0.60]
Carlbring 2005	-5.2	9.54	25	-5.7	11.4	24	37.0%	0.05 [-0.51, 0.61]
Total (95% CI)			**70**			**63**	**100.0%**	**0.13 [-0.22, 0.47]**

Heterogeneity: Tau² = 0.00; Chi² = 0.12, df = 1 (P = 0.73); I² = 0%
Test for overall effect: Z = 0.72 (P = 0.47)

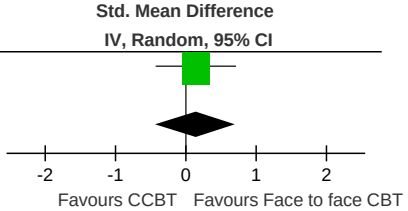


1.20 CCBT for panic disorder

Comparator: Traditional face-to-face CBT
Outcome: Depression (self-rated) at follow-up

Study or Subgroup	CCBT Mean	CCBT SD	CCBT Total	Face to face CBT Mean	Face to face CBT SD	Face to face CBT Total	Weight	Std. Mean Difference IV, Random, 95% CI
Carlbring 2005	-5.6	9.49	25	-7.1	11.22	24	100.0%	0.14 [-0.42, 0.70]
Total (95% CI)			**25**			**24**	**100.0%**	**0.14 [-0.42, 0.70]**

Heterogeneity: Not applicable
Test for overall effect: Z = 0.50 (P = 0.62)



1.21 CCBT for panic disorder

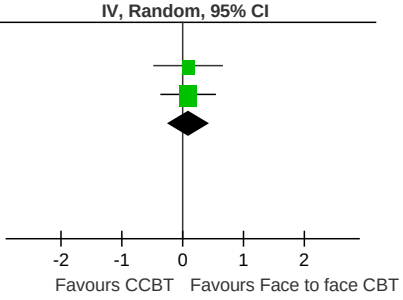
Comparator: Traditional face-to-face CBT

Outcome: Quality of life (psychological)

Study or Subgroup	CCBT Mean	CCBT SD	CCBT Total	Face to face CBT Mean	Face to face CBT SD	Face to face CBT Total	Weight	Std. Mean Difference IV, Random, 95% CI
5.7.1 QOL (Psychological)								
Carlbring 2005	-0.6	2.2	25	-0.8	2.19	24	38.6%	0.09 [-0.47, 0.65]
Kiropoulos 2008	-5.33	20.4	40	-7.35	23.53	38	61.4%	0.09 [-0.35, 0.54]
Subtotal (95% CI)			**65**			**62**	**100.0%**	**0.09 [-0.26, 0.44]**

Heterogeneity: Tau² = 0.00; Chi² = 0.00, df = 1 (P = 1.00); I² = 0%

Test for overall effect: Z = 0.51 (P = 0.61)



1.22 CCBT for panic disorder

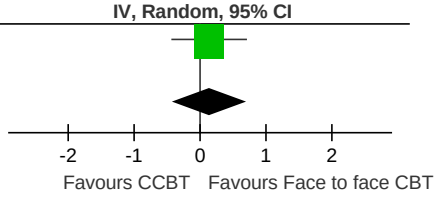
Comparator: Traditional face-to-face CBT

Outcome: Quality of life (psychological) at follow-up

Study or Subgroup	CCBT Mean	CCBT SD	CCBT Total	Face to face CBT Mean	Face to face CBT SD	Face to face CBT Total	Weight	Std. Mean Difference IV, Random, 95% CI
Carlbring 2005	-0.5	2.2	25	-0.8	2.06	24	100.0%	0.14 [-0.42, 0.70]
Total (95% CI)			**25**			**24**	**100.0%**	**0.14 [-0.42, 0.70]**

Heterogeneity: Not applicable

Test for overall effect: Z = 0.48 (P = 0.63)



1.23 CCBT for panic disorder

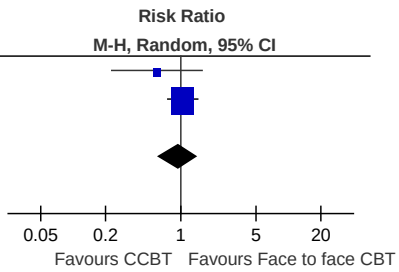
Comparator: Traditional face to face CBT

Outcome: Non-panic-free status

Study or Subgroup	CCBT Events	CCBT Total	Face to face CBT Events	Face to face CBT Total	Weight	Risk Ratio M-H, Random, 95% CI
Carlbring 2005 (1)	5	25	8	24	17.6%	0.60 [0.23, 1.58]
Kiropoulos 2008 (2)	30	46	25	40	82.4%	1.04 [0.76, 1.44]
Total (95% CI)		**71**		**64**	**100.0%**	**0.95 [0.61, 1.46]**
Total events	35		33			

Heterogeneity: Tau² = 0.03; Chi² = 1.24, df = 1 (P = 0.27); I² = 19%

Test for overall effect: Z = 0.25 (P = 0.80)



(1) taken at 1 month after treatment ended

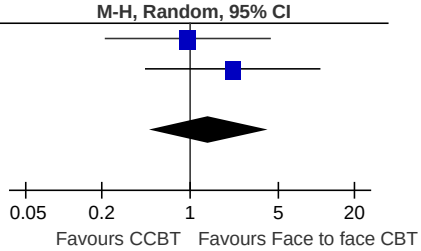
(2) taken at post treatment assessment

1.24 CCBT for panic disorder

Comparator: Traditional face-to-face CBT

Outcome: Discontinuation due to any reason

	CCBT		Face to face CBT			Risk Ratio	Risk Ratio
Study or Subgroup	**Events**	**Total**	**Events**	**Total**	**Weight**	**M-H, Random, 95% CI**	**M-H, Random, 95% CI**
Carlbring 2005	3	25	3	24	52.8%	0.96 [0.21, 4.30]	
Kiropoulos 2008	5	46	2	40	47.2%	2.17 [0.45, 10.60]	
Total (95% CI)		**71**		**64**	**100.0%**	**1.41 [0.48, 4.20]**	
Total events	8		5				

Heterogeneity: Tau² = 0.00; Chi² = 0.54, df = 1 (P = 0.46); I² = 0%

Test for overall effect: Z = 0.62 (P = 0.53)