# NKR23 - PICO7 - Bulimia Nervosa: Motivational intervention

# **Characteristics of studies**

# **Characteristics of included studies**

# Allen 2012

Methods	Study design: Randomized controlled trial Study grouping: Open Label: Cluster RCT:
Participants	Baseline Characteristics         MFT+CBT-E         BM/ (SD): 19.18 (3.78)         BN/BN-like (% of sample (N)): 38.5 (20)         Sex: no info         Age (SD): 26.52 (8.98)         CBT-E         BM/ (SD): 20.38 (5.52)         BN/BN-like (% of sample (N)): 39.5 (17)         Sex: no info         Age (SD): 26.44 (8.98)         Included criteria: Participants were adult outpatients (≥ 16 years) attending a statewide, government-funded eating disorder service in Western Australia. Details regarding the service and the patient population have been described
	previously (Byrne et al., 2011; Raykos, Byrne,& Watson, 2009). <b>Excluded criteria:</b> 52 patients commenced treatment in the MFT + CBT-Econdition. An additional seven patients commenced treatmentover this 20-month time frame but were not offered MFT becauseof prior commencement of behaviour change. These individualswere excluded from the current study.
Interventions	<ul> <li>Intervention Characteristics MFT+CBT-E         <ul> <li>Frequency: MFT: 1/week for 4 weeks + CBT-E: Fairburn (2008) recommends 20 treatment sessions for individuals in the healthy weight range and 40 treatment sessions for individuals who are underweight. This was treated as standardprocedure in the current study. However, as the study wasconducted under routine clinical conditions, treatment durationwas adapted if clinical need required this. Treatment completerswho were underweight at pretreatment received an average of 39sessions (SD 24.83), with a range of 10 to 51 sessions. There were not underweight received an average of 22 sessions(SD 10.88), with a range of 10 to 51 sessions. There were nosignificant differences in the number of sessions received acrossthe MFT + CBT-E and CBT-E as-usual groups (details areprovided in Table 3).</li> <li>Content: MFT: Sessions were based on motivational interviewing principles, andtherapists were instructed to maintain a style that was collaborative, calm and caring, whilst showing genuine concern, avoidingconfrontation and being guided by patients' responses. CBT-E: same as in comparison group.</li> <li>CBT-E</li> <li>Frequency: Fairburn (2008) recommends 20 treatment sessions forindividuals in the healthy weight range and 40 treatment sessionsfor individuals who are underweight. This was treated as standardprocedure in the current study. However, as the study wasconducted under routine clinical conditions, treatment durationwas adapted if clinical need required this. Treatment completerswho were underweight at pretreatment received an average of 39sessions (SD 24.83), with a range of 15 to 100 sessions, and thosewho were not underweight received an average of 22 sessions(SD 10.88), with a range of 10 to 51 sessions. There were nosignificant differences in the number of sessions received acrossthe MFT + CBT-E and CBT-E as-usual groups (details areprovided in Table 3).</li> <li>Content: CBT-E: Sessionscovered the follo</li></ul></li></ul>
Outcomes	Continuous: • Spiseforstyrrelsesadfærd (SE) • Somatiske komplikationer • Psykologiske symptomer • Remission af SF • Funktionsevne • Livskvalitet • Psykologiske symptomer • Binge per week • Purge per week • Dichotomous: • Dropout
Identification	Sponsorship source: Country: Setting: Comments:

# NKR23 - PICO7 - Bulimia Nervosa: Motivational intervention

	Authors name: Institution: Email: Address:
Notes	Identification: Participants: Study design: Baseline characteristics: Intervention characteristics: Pretreatment: Continuous outcomes: <i>Tine Pedersen</i> Psykologiske symptomer: EDE-Q global score Dichotomous outcomes: Adverse outcomes:

### Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	High risk	
Allocation concealment (selection bias)	High risk	
Blinding of participants and personnel (performance bias)	High risk	
Blinding of outcome assessment (detection bias)	High risk	
Incomplete outcome data (attrition bias)	High risk	
Selective reporting (reporting bias)	Low risk	
Other bias	Low risk	

## Dunn 2006

Methods	Study design: Randomized controlled trial Study grouping: Open Label: Cluster RCT:
Participants	Baseline Characteristics         MET+TAU         Age (SD):         Sex (% of sample female):         BMI (SD):         BN/BN-like (% of sample (N)):         TAU         Age (SD):         Sex (% of sample female):         BMI (SD):         BMI (SD):
	Included criteria: Excluded criteria:
Interventions	Intervention Characteristics MET+TAU
Outcomes	Continuous:         • Overspisninger         • Somatiske komplikationer         • Psyk. SF-symptomer         • Livskvalitet         • Funktionsevne         • Remission af SF         • Opkastninger         • Brug af laksantia         • Faste         • Tvangsmotion         Dichotomous:         • Dropout

Identification	Sponsorship source: Partial support for this research was provided by National Institute onAlcohol Abuse and Alcoholism Grant NIAAA R01AA12547-04, awardedto Mary E. Larimer. Country: Setting: Comments: Authors name: Erin C. Dunn Institution: Department of Psychology, University of Washington Email: Address:
Notes	Identification:         Participants:         Study design:         Baseline characteristics: <i>Tine Pedersen</i> baseline characteristics are described for the group as a whole. There were no intergroup differences at baseline.         Louise Klokker Madsen Not reported for each group - but the authors state: "No significant differences were found among those randomized to the MET andSH conditions for any measured variable."Participants included 90 undergraduate college students, 79women (87.8%) and 11 men (12.2%). Participants ranged from 17to 42 years old, with a mean age of 19 (SD 2.64). Participantswere primarily Caucasian (59.6%), with the rest of the sample comprising Asian/Pacific Islander (29.2%), Hispanic/Latino(4.5%), and other (6.7%). No participants indicated that they wereof African American or Native American descent. Calculation ofbody mass index (BMI) indicated that, on average, participantswere of typically developing weight (M 23.80, SD 4.05). However, 95% of participants reported a desired weight that wasless than their current weight. On average, participants desired toweigh approximately 19 pounds less (SD 11.2). Of the 90 participants who completed the baseline assessment.21 (23.3%) participants met full DSM-IV criteria for BN and 25(27.8%) participants (6.9%) met criteria for subthreshold BED. The remaining 30participants (33.3%) met partial criteria for either BN or BED andwere considered to have an Eating Disorder Not Otherwise Specified(EDNOS).         Intervention characteristics:         Pretreatment:         Continuous outcomes:         Louise Klokker Madsen Finally, 34% of participants were lost to follow-up (N=90 at baseline, distribution in groups not reported).         Adverse outcomes: </td

## Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	no info
Allocation concealment (selection bias)	Unclear risk	no info
Blinding of participants and personnel (performance bias)	High risk	
Blinding of outcome assessment (detection bias)	High risk	
Incomplete outcome data (attrition bias)	Low risk	
Selective reporting (reporting bias)	Unclear risk	no info
Other bias	Low risk	

# Katzman 2010

Methods	Study design: Randomized controlled trial Study grouping: Open Label: Cluster RCT:
Participants	Baseline Characteristics         MET+TAU         • Age (SD): 28.9 (8.1)         • Sex (% of sample female): no info         • BMI (SD): 23.5 (5.9)         • BN/BN-like (% of sample (NJ)): 100         TAU         • Age (SD): 27.8 (6.3)         • Sex (% of sample female): no info         • BMI (SD): 25.5 (8.9)         • BN/BN-like (% of sample (NJ)): 100         Included criteria: All patients fulfilling the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition criteria for BN or EDNOS were eligible for the study. We defined EDNOS as subthreshold BN—a clinically relevant eating disorder (i.e., significant impairment of physical health or psychosocial functioning) where the patient met the criteria for BN except that the binge eating and/or inappropriate compensatory behaviors occurred at a frequency of less than twice a week or for a duration of 3 months.         Excluded criteria: The exclusion criteria were pregnancy, diabetes mellitus, severe mental illness (such as schizophrenia or bipolar illness), severe learning disability, inability to commit to treatment from the outset, or referral for assessment only

Interventions	Intervention Characteristics
	<ul> <li>MET+TAU</li> <li>Frequency: four sessions of individual MET followed byeight sessions group CBT (MET-G)</li> <li>Content: In MET, the therapist used principles of motivational interviewing andaccompanying worksheets guided by the manual "A Clinician's Guide toGetting Better Bit(e) by Bit(e)" (17). Treatment focused on a consideration of the benefits of changing and the barriers to be overcome to change, movingfrom the here and now by envisioning key values and how these would fit into the whole life story. No unsolicited advice about eating was given. Allparticipants in this condition received a letter providing personalized feedbackon physical symptoms, laboratory tests, and detailed social, family, educational, and vocational problems found at the time of assessment. This feedbackwas reviewed by patient and therapist during the first session. Behaviorchange techniques included: outcome expectancies, personal relevance, descriptivenorms, developing personal and moral norms and if the patientshowed a commitment to change, concrete planning and contracting ofbehavioral goals (17).+ group CBT</li> </ul>
	<ul> <li>Frequency: four sessions of individual CBTfollowed by eight sessions of group CBT (CBT-G).</li> <li>Content: In the CBT condition, therapists followed the instructions of the first fourchapters of "bulimia nervosa" (18) and included active strategies of behaviorchange from session 1, including nutritional/food monitoring sheets, mealplanning, activity lists, and problem-solving activities. At the time of thestudy, this was the only CBT self-help manual available with proven efficacy in the treatment of BN. This manual does not specifically focus on increasingmotivation.+ group CBT</li> </ul>
Outcomes	Continuous:         • Spiseforstyrrelsesadfærd         • Somatiske komplikationer         • Remission af SF         • Psyk. SF-symptomer         • Funktionsevne         • Livskvalitet         Dichotomous:         • Dropout         • Overspisninger         • Opkastninger         • Brug af laksantia
Identification	Sponsorship source: The authors have not disclosed any potential conflicts of interest.         Country: USA         Setting: busy outpatient setting         Comments:         Authors name: MELANIE A. KATZMAN         Institution: Department of Psychiatry (M.A.K.), Weill Cornell Medical Center, New York         Email: mkatzman@katzmanconsulting.com         Address: 10 East 78th Street, Suite 4A, New York, NY 10075
Notes	Identification: Participants: Study design: Baseline characteristics: Louise Klokker Madsen 165 out of 225 met the criteria for BN:"In our sample of 225, 60 were diagnosedwith EDNOS". No reports on gender distribution. Intervention characteristics: Pretreatment: Continuous outcomes: Dichotomous outcomes: Louise Klokker Madsen NB: outcomes for ED behaviour is ABSTINENCE of behavior Adverse outcomes:

# Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	
Allocation concealment (selection bias)	Low risk	
Blinding of participants and personnel (performance bias)	High risk	
Blinding of outcome assessment (detection bias)	High risk	
Incomplete outcome data (attrition bias)	Unclear risk	no info
Selective reporting (reporting bias)	Unclear risk	no info
Other bias	Low risk	

# Weiss 2013

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Methods	Study design: Randomized controlled trial         Study grouping:         Open Label:         Cluster RCT:
Participants	Baseline Characteristics           MFT/MI+TAU           • BMI (SD): 17.7 (2.9)           • BN/BN-like (% of sample (N)): 25 (4)           • Sex: 94% female           • Age (SD): 28 (9.5)           TAU           • BM/ (SD): 18.4 (4.8)           • BN/BN-like (% of sample (N)): 37.5 (6)           • Sex: 94% female           • Age (SD): 28.4 (7.8)
	Included criteria: All participants in this study were female and met DSMIVcriteria for AN, BN, or Eating Disorder Not OtherwiseSpecified (EDNOS). These assessments were completed bypsychologists, psychiatrists, and Master's level therapists inthe Toronto General Hospital Eating Disorders program.Participants also were required to have a BMI greater thanor equal to 13, as we were concerned that patients with aBMI of less than 13 would be too medically unstable to participate.It was decided that clients who were suicidal (i.e.,those who expressed suicidal intent and plans for how theywould hurt themselves) would be included in the studysince suicidality is so common in eating disordered populations <b>Excluded criteria:</b> onepatient demonstrated severe suicidal ideation,One participant in the MI condition wasexcluded because she attended a different hospital's treatmentprogram after completing her MI sessions.a Twoparticipants in the control condition were excluded; onehad a disruption in her intensive treatment due to unrelatedmedical issues and one had significant missing questionnairedata.
Interventions	Intervention Characteristics         MFT/MI+TAU         • Frequency: The MI condition received weekly 50-minute sessions ofMI over four consecutive weeks.         • Content: Treatment followed theprinciples and techniques outlined in Miller and Rollnick'sMI manual. At the end of each session, participants completeda measure of therapeutic alliance. It should benoted that we considered our MI intervention to be "brief"only in comparison to the typical length of treatment foran eating disorder. MI as an adjunct to other treatments isusually done over 1–2 one hour sessions. However, wewanted our intervention to include all of the key componentsto Miller and Rollnick's MI manual. Participants inthe MI condition were also able to continue to receive"treatment-as-usual," meaning they could carry on as theynormally would (e.g., seeing a family doctor, taking medication,etc.). This treatment most often included regularmedical monitoring by their physician or psychiatrist andthe use of anti-depressant medication. Some participantswere also receiving psychotherapy with psychologists andclinical social workers, and some were seeing dietitians, asis common.
	<ul> <li><i>Frequency</i>: Wait-list. If admitted within the first four weeks:Patients who donot require weight gain are given a maximum admission of eight weeks, whereas those who have weight to gain areadmitted until they reach a BMI of 20. The ambulatory treatment program is comprised entirelyof outpatients. However, the program is intensive, as patientstypically attend the program from 10 am until 6 pm,Monday to Friday, and complete two staff-supervisedmeals and one supervised snack each day in hospital.</li> <li><i>Content</i>: Participants assigned to the control condition did not receiveany MI treatment over the four-week treatmentperiod, but remained on the waiting list and receivedtreatment as usual. Admission to intensive treatmentwas not delayed for any participant as a function ofcondition.</li> </ul>
Outcomes	Continuous:         • Spiseforstyrrelsesadfærd (SE)         • Somatiske komplikationer         • Psykologiske symptomer         • Remission af SF         • Funktionsevne         • Livskvalitet         • Psykologiske symptomer         • Binge per week         • Purge per week         • Dichotomous:         • Dropout
Identification	Sponsorship source: This study was partially funded by the Social Sciences and HumanitiesResearch Council of Canada doctoral fellowship awarded to the first author.         Country: Canada         Setting: waitlist for admission to an intensive, hospital-based treatment program         Comments:         Authors name: Weiss, Carmen V.         Institution: Department of Psychology, York University, Toronto, Ontario, Canada         Email: jsmills@yorku.ca         Address: Department of Psychiatry, St. Joseph's Healthcare, Hamilton, Ontario, Canada.
Notes	Identification: Participants: Study design:

# NKR23 - PICO7 - Bulimia Nervosa: Motivational intervention

Baseline characteristics: Intervention characteristics: Pretreatment: Continuous outcomes: Dichotomous outcomes: Adverse outcomes:

# Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	
Allocation concealment (selection bias)	Unclear risk	no info
Blinding of participants and personnel (performance bias)	Low risk	
Blinding of outcome assessment (detection bias)	High risk	
Incomplete outcome data (attrition bias)	Low risk	
Selective reporting (reporting bias)	Low risk	
Other bias	Unclear risk	no info

Footnotes

# **Characteristics of excluded studies**

Berg 2013		
Reason for exclusion	Wrong study design	
Dean 2007		
Reason for exclusion	Wrong study design	
Dean 2008		
Reason for exclusion	Wrong patient population	
Feld 2001		
Reason for exclusion	Wrong study design	
Golan 2013		
Reason for exclusion	Wrong study design	
Hotzel 2014		
Reason for exclusion	Wrong comparator	
Jakubowska 2013		
Reason for exclusion	Wrong study design	
Leung 2013		
Reason for exclusion	Wrong study design	
Treasure 1999		
Reason for exclusion	Wrong intervention	
vonBrachel 2014		
Reason for exclusion	Wrong study design	
Waller 2012		
Reason for exclusion	Wrong study design	
Willinge 2010		
Reason for exclusion	Wrong intervention	
Factoria		

Footnotes

### Characteristics of studies awaiting classification

Footnotes

#### **Characteristics of ongoing studies**

Footnotes

# **References to studies**

### Included studies

#### Allen 2012

Allen,K. L.; Fursland,A.; Raykos,B.; Steele,A.; Watson,H.; Byrne,S. M.. Motivation-focused treatment for eating disorders: a sequential trial of enhanced cognitive behaviour therapy with and without preceding motivation-focused therapy. European Eating Disorders Review 2012;20(3):232-239. [DOI: ]

#### Dunn 2006

Dunn,E. C.; Neighbors,C.; Larimer,M. E.. Motivational enhancement therapy and self-help treatment for binge eaters. Psychology of Addictive Behaviors 2006;20(1):44-52. [DOI: ]

#### Katzman 2010

Katzman,M. A.; Bara-Carril,N.; Rabe-Hesketh,S.; Schmidt,U.; Troop,N.; Treasure,J.. A randomized controlled two-stage trial in the treatment of bulimia nervosa, comparing CBT versus motivational enhancement in Phase 1 followed by group versus individual CBT in Phase 2.. Psychosomatic medicine 2010;72(7):656-663. [DOI: ]

#### Weiss 2013

Weiss, C. V.; Mills, J. S.; Westra, H. A.; Carter, J. C.. A preliminary study of motivational interviewing as a prelude to intensive treatment for an eating disorder.. Journal of Eating Disorders 2013;1(Journal Article):34. [DOI: ]

#### **Excluded studies**

#### Berg 2013

Berg,K. C.; Wonderlich,S. A.: Emerging psychological treatments in the field of eating disorders. Current psychiatry reports 2013;15(11):407. [DOI: ]

#### Dean 2007

Dean,H. Y.. Can motivational enhancement therapy improve a cognitive behaviourally based inpatient program for eating disorders ? Innovations and Advances in Cognitive Behaviour Therapy 2007;(Book, Section):171-183. [DOI: ]

#### Dean 2008

Dean HY.; Touyz SW.; Rieger E.; Thornton CE.. Group motivational enhancement therapy as an adjunct to inpatient treatment for eating disorders: a preliminary study. European eating disorders review : the journal of the Eating Disorders Association 2008;16(4):256-67. [DOI: ]

#### Feld 2001

Feld,R.; Woodside,D. B.; Kaplan,A. S.; Olmsted,M. P.; Carter,J. C.. Pretreatment motivational enhancement therapy for eating disorders: A pilot study. International Journal of Eating Disorders 2001;29(4):393-400. [DOI: ]

#### Golan 2013

Golan, M.. The journey from opposition to recovery from eating disorders: multidisciplinary model integrating narrative counseling and motivational interviewing in traditional approaches. Journal of Eating Disorders 2013;1(Journal Article):19. [DOI: ]

#### Hotzel 2014

Hotzel,K.; von Brachel,R.; Schmidt,U.; Rieger,E.; Kosfelder,J.; Hechler,T.; Schulte,D.; Vocks,S.. An internet-based program to enhance motivation to change in females with symptoms of an eating disorder: A randomized controlled trial.. Psychological medicine 2014;44(9):1947-1963. [DOI: ]

#### Jakubowska 2013

Jakubowska,A.; Woolgar,M. J.; Haselton,P. A.; Jones,A.. Review of staff and client experiences of a motivational group intervention: meeting the needs of contemplators. Brunner-Mazel Eating Disorders Monograph Series 2013;21(1):16-25. [DOI: ]

#### Leung 2013

Leung, S. F.; Ma, J.; Russell, J.. Enhancing motivation to change in eating disorders with an online self-help program.. International Journal of Mental Health Nursing 2013;22(4):329-339. [DOI:]

#### Treasure 1999

Treasure, J. L.; Katzman, M.; Schmidt, U.; Troop, N.; Todd, G.; de Silva, P.. Engagement and outcome in the treatment of bulimia nervosa: first phase of a sequential design comparing motivation enhancement therapy and cognitive behavioural therapy. Behaviour Research & Therapy 1999;37(5):405-18. [DOI: ]

#### vonBrachel 2014

von Brachel,R.; Hotzel,K.; Hirschfeld,G.; Rieger,E.; Schmidt,U.; Kosfelder,J.; Hechler,T.; Schulte,D.; Vocks,S.. Internet-based motivation program for women with eating disorders: eating disorder pathology and depressive mood predict dropout.. Journal of Medical Internet Research 2014;16(3):e92. [DOI: ]

#### Waller 2012

Waller,G.. The myths of motivation: time for a fresh look at some received wisdom in the eating disorders?.. International Journal of Eating Disorders 2012;45(1):1-16. [DOI: ]

### Willinge 2010

Willinge,A. C.; Touyz,S. W.; Thornton,C.. An evaluation of the effectiveness and short-term stability of an innovative Australian day patient programme for eating disorders.. European Eating Disorders Review 2010;18(3):220-233. [DOI: ]

# **Data and analyses**

# 1 MFT/MI+TAU versus TAU

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.1 Eating Disorder Behavior (cont. data), end of treatment	2		Mean Difference (IV, Random, 95% CI)	Subtotals only
1.1.1 Binge per week	2	185	Mean Difference (IV, Random, 95% CI)	-0.07 [-0.74, 0.60]
1.1.2 Purge per week	2	185	Mean Difference (IV, Random, 95% CI)	-1.03 [-1.57, -0.49]
1.2 Eating Disorder Behavior (dichotomous data), end of treatment	1		Risk Ratio (M-H, Random, 95% CI)	Subtotals only
1.2.1 Binge eating	1	53	Risk Ratio (M-H, Random, 95% CI)	1.26 [0.84, 1.90]
1.2.2 Purging	1	53	Risk Ratio (M-H, Random, 95% CI)	1.26 [0.84, 1.90]
1.3 Remission of ED, longest FU	1		Risk Ratio (M-H, Random, 95% CI)	Subtotals only
1.3.2 Binge eating abstinence	1	34	Risk Ratio (M-H, Random, 95% CI)	0.67 [0.31, 1.47]
1.4 Dropout, end of treatment	3	280	Risk Ratio (IV, Random, 95% CI)	1.19 [0.93, 1.51]
1.5 Psychological ED-symptoms (EDE global), end of treatment	2	185	Std. Mean Difference (IV, Random, 95% CI)	-0.09 [-0.38, 0.20]
1.6 Psychological ED-symptoms, end of treatment	1		Std. Mean Difference (IV, Random, 95% CI)	Subtotals only
1.6.1 EDE weight concern	1	90	Std. Mean Difference (IV, Random, 95% CI)	-0.17 [-0.58, 0.25]
1.6.2 EDE eating concern	1	90	Std. Mean Difference (IV, Random, 95% CI)	-0.24 [-0.66, 0.17]
1.6.3 EDE shape concern	1	90	Std. Mean Difference (IV, Random, 95% CI)	-0.18 [-0.59, 0.23]
1.6.4 EDE restraint	1	90	Std. Mean Difference (IV, Random, 95% CI)	0.01 [-0.41, 0.42]
1.7 Somatic complications, end of treatment	0	0	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.8 Level of Functioning, longest FU	0	0	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.9 Quality of Life, longest FU	0	0	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.10 Remission of ED, longest FU	0		Risk Ratio (M-H, Random, 95% CI)	Subtotals only

# **Figures**

# Figure 1 (Analysis 1.1)

	MFT	/MI+T/	AU		TAU			Mean Difference		Mean Difference	Risk of Bias
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% Cl	Year	IV, Random, 95% Cl	ABCDEFG
1.1.1 Binge per week	(										
Dunn 2006	1.89	1.87	45	2.11	1.68	45	82.2%	-0.22 [-0.95, 0.51]	2006		?? 🔴 🔴 ? 🖲
Allen 2012	2.1	3.89	52	1.48	3.93	43	17.8%	0.62 [-0.96, 2.20]	2012	_ <b>+=</b>	<b>00000<del>0</del>0</b>
Subtotal (95% CI)			97			88	100.0%	-0.07 [-0.74, 0.60]		<b>•</b>	
Heterogeneity: Tau <sup>2</sup> =	: 0.00; C	hi² = 0	.89, df=	= 1 (P =	0.34);	I <sup>2</sup> = 0%					
Test for overall effect:	Z = 0.21	1 (P = I	0.83)								
1.1.2 Purge per weel	k										
Dunn 2006	0.62	0.59	45	1.71	1.8	45	93.9%	-1.09 [-1.64, -0.54]	2006		??
Allen 2012	2.6	5.26	52	2.69	5.51	43	6.1%	-0.09 [-2.27, 2.09]	2012		
Subtotal (95% CI)			97			88	100.0%			◆	
Heterogeneity: Tau <sup>2</sup> =	: 0.00; C	:hi² = 0	.76, df=	= 1 (P =	0.38);	I² = 0%					
Test for overall effect:											
		·									
										-4 -2 0 2 4	_
									Four	-4 -2 U Z 4 rs MFT/MI+TAU Favours TAU	
Test for subgroup dif	ferences	s: Chi²	= 4.83,	df = 1 (8	P = 0.0	I3), I <b>≃</b> =	79.3%		Favou	IS METAMITIAO FAVOUIS TAO	
Risk of bias legend											
(A) Random sequent	ce genei	ration (	(selecti	on bias)	)						
(B) Allocation concea											
(C) Blinding of partici					nance	bias)					
(D) Blinding of outcor						,					

(D) Blinding of outcome assessment (detection bias)
 (E) Incomplete outcome data (attrition bias)

(F) Selective reporting (reporting bias)

(G) Other bias

Forest plot of comparison: 1 MFT/MI+TAU versus TAU, outcome: 1.1 Eating Disorder Behavior (cont. data), end of treatment.

#### Figure 2 (Analysis 1.2) MFT/MI+TAU TAU Risk Ratio Risk Ratio Risk of Bias Study or Subgroup Events Total Events Total Weight M-H, Random, 95% Cl Year M-H, Random, 95% Cl ABCDEFG 1.2.1 Binge eating Katzman 2010 Subtotal (95% CI) 25 33 12 20 100.0% **100.0**% 1.26 [0.84, 1.90] 2010 1.26 [0.84, 1.90] 33 20 Total events 25 12 Heterogeneity: Not applicable Test for overall effect: Z = 1.12 (P = 0.26) 1.2.2 Purging Katzman 2010 Subtotal (95% CI) 25 33 12 20 100.0% 1.26 [0.84, 1.90] 2010 1.26 [0.84, 1.90] 33 100.0% 20 Total events 12 25 Heterogeneity: Not applicable Test for overall effect: Z = 1.12 (P = 0.26) 0.005 0.1 10 200 Favours MFT/MI Favours TAU

Test for subgroup differences: Chi<sup>2</sup> = 0.00, df = 1 (P = 1.00), l<sup>2</sup> = 0%

Risk of bias legend

(A) Random sequence generation (selection bias) (B) Allocation concealment (selection bias)

(C) Blinding of participants and personnel (performance bias)

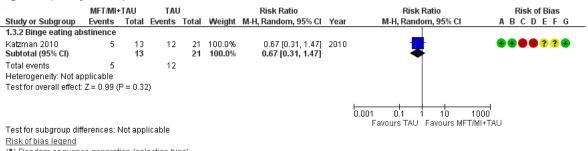
(D) Blinding of outcome assessment (detection bias)

(E) Incomplete outcome data (attrition bias) (F) Selective reporting (reporting bias)

(G) Other bias

Forest plot of comparison: 1 MFT/MI+TAU versus TAU, outcome: 1.2 Eating Disorder Behavior (dichotomous data), end of treatment.

# Figure 3 (Analysis 1.3)



(A) Random sequence generation (selection bias)

(B) Allocation concealment (selection bias)

(C) Blinding of participants and personnel (performance bias)

(D) Blinding of outcome assessment (detection bias)

(E) Incomplete outcome data (attrition bias)

(F) Selective reporting (reporting bias) (G) Other bias

Forest plot of comparison: 1 MFT/MI+TAU versus TAU, outcome: 1.3 Remission of ED, longest FU.

### Figure 4 (Analysis 1.4)

Total         Events           73         32           52         23           21         2	73 43	Weight 54.2% 43.2% 2.6%	V, Random, 95% Cl 1.28 [0.92, 1.78] 1.04 [0.72, 1.51] 2.14 [0.47, 9.74]	2010 2012	IV, Random, 95% Cl	A B C D E F G
52 23	43	43.2%	1.04 [0.72, 1.51]	2012	* 	0000000
					+	
21 2	18	2.6%	2.14 [0.47, 9.74]	2013		• ? • • • ?
146	134	100.0%	1.19 [0.93, 1.51]		•	
57					-	
1.27, df = 2 (F	P = 0.53	3); I <sup>z</sup> = 0%		+		±
= 0.16)				0.0		20
	57 1.27, df = 2 (l	57 1.27, df = 2 (P = 0.53	57 1.27, df = 2 (P = 0.53); i² = 0%	57 1.27, df = 2 (P = 0.53); I² = 0%	57 1.27, df = 2 (P = 0.53); I <sup>a</sup> = 0% - 0.48) 0.0	57 1.27, df = 2 (P = 0.53); l² = 0% - 0.48) - 0.5 0.2 1 5

<u>Risk of bias legend</u>

(A) Random sequence generation (selection bias)

(B) Allocation concealment (selection bias)

(C) Blinding of participants and personnel (performance bias)

(D) Blinding of outcome assessment (detection bias)

(E) Incomplete outcome data (attrition bias) (F) Selective reporting (reporting bias)

(G) Other bias

Forest plot of comparison: 1 MFT/MI+TAU versus TAU, outcome: 1.4 Dropout, end of treatment.

### Figure 5 (Analysis 1.5)

Church and Carbon	MFT/MI+TAU TAU							Std. Mean Difference	Std. Mean Difference	Risk of Bias	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% Cl	IV, Random, 95% Cl	ABCDEFG	
Allen 2012	3.26	1.95	52	3.33	2.16	43	51.2%	-0.03 [-0.44, 0.37]		$\bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet$	
Dunn 2006	2.68	1.09	45	2.85	1.23	45	48.8%	-0.15 [-0.56, 0.27]		?? 🔴 🖨 ? 🕤	
Total (95% CI)			97			88	100.0%	-0.09 [-0.38, 0.20]	•		
Heterogeneity: Tau <sup>2</sup> : Test for overall effect	•			= 1 (P =	0.71);	I <sup>2</sup> = 0%		Fai	-2 -1 0 1 2 vours MFT/MI+TAU Favours TAU	_	
Risk of higs legend											

(A) Random sequence generation (selection bias) (B) Allocation concealment (selection bias)

(C) Blinding of participants and personnel (performance bias)
 (D) Blinding of outcome assessment (detection bias)
 (E) Incomplete outcome data (attrition bias)

(F) Selective reporting (reporting bias)

(G) Other bias

Forest plot of comparison: 1 MFT/MI+TAU versus TAU, outcome: 1.5 Psychological ED-symptoms (EDE global), end of treatment.

# Figure 6 (Analysis 1.6)

• • •	·									
	MFT	/MI+T/			TAU			Std. Mean Difference	Std. Mean Difference	Risk of Bias
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% Cl	IV, Random, 95% Cl	ABCDEFG
1.6.1 EDE weight cor	ncern									
Dunn 2006	3.02	1.22	45	3.23	1.3		100.0%	-0.17 [-0.58, 0.25]		?? 🕈 🖨 🗣 ? 🗣
Subtotal (95% CI)			45			45	100.0%	-0.17 [-0.58, 0.25]	•	
Heterogeneity: Not a										
Test for overall effect	: Z = 0.78	3 (P = 0	0.43)							
1.6.2 EDE eating con									_	
Dunn 2006 Subtotal (95% CI)	1.78	1.12	45 45	2.06	1.17	45 45	100.0% <b>100.0</b> %	-0.24 [-0.66, 0.17] - <b>0.24 [-0.66, 0.17]</b>		?? 🕈 🖨 🗣 ? 🗣
. ,	nnlianhla		45			45	100.0%	-0.24 [-0.00, 0.17]		
Heterogeneity: Not a Test for overall effect			0.051							
rest for overall effect	. Z = 1.15	5 (F = (	0.25)							
1.6.3 EDE shape con	cern									
Dunn 2006	3.3	1.29	45	3.54	1.35	45	100.0%	-0.18 [-0.59, 0.23]		?? 🔴 🖨 ? 🕤
Subtotal (95% CI)			45			45	100.0%	-0.18 [-0.59, 0.23]		
Heterogeneity: Not a	pplicable	9								
Test for overall effect	:Z=0.85	5 (P = 0	0.39)							
1.6.4 EDE restraint										
Dunn 2006	2.6	1.25	45	2.59	1.34		100.0%	0.01 [-0.41, 0.42]		?? 🔴 🔁 ? 🕒
Subtotal (95% CI)			45			45	100.0%	0.01 [-0.41, 0.42]	<b>—</b>	
Heterogeneity: Not a										
Test for overall effect	: ∠ = 0.04	4 (P = (	0.97)							
								_		
									-2 -1 0 1 2	
Test for subgroup dif	Toroncoc	· Chiž	- 0 77	df = 2 /0	- n c	- 51 (89	n%	Favo	ours MFT/MI+TAU Favours TAU	
Risk of bias legend	lerencea		- 0.77,	ui – 5 (i	- 0.0	/0/,1 =	0.0			

Risk of bias legend

(A) Random sequence generation (selection bias)

(B) Allocation concealment (selection bias)
 (C) Blinding of participants and personnel (performance bias)
 (D) Blinding of outcome assessment (detection bias)

(E) Incomplete outcome data (attrition bias)

(F) Selective reporting (reporting bias)

(G) Other bias

Forest plot of comparison: 1 MFT/MI+TAU versus TAU, outcome: 1.6 Psychological ED-symptoms, end of treatment.