

Family based treatment for anorexia

Characteristics of studies

Characteristics of included studies

Ball 2004

Methods	Study design: Randomized controlled trial Study grouping: Parallel group Open Label: Cluster RCT:
Participants	Baseline Characteristics Intervention <ul style="list-style-type: none"> ● Age: 17.58 (3.37) ● Sex (% female): 100 ● BMI: 16.45 (0.85) ● Restrictive Anorexia (% of AN sample): 75 ● Duration of illness (months): n/a ● Comorbidity (% of sample): n/a ● Psychotropic medication (% of sample): 0 Control <ul style="list-style-type: none"> ● Age: 18.45 (2.57) ● Sex (% female): 100 ● BMI: 16.06 (1.58) ● Restrictive Anorexia (% of AN sample): 53.8 ● Duration of illness (months): n/a ● Comorbidity (% of sample): n/a ● Psychotropic medication (% of sample): 0 Included criteria: DSM-IV criteria for anorexia nervosa, including subclinical anorexia if weight was between 85-90 % of normal weight. Excluded criteria: BMI below 13.5; currently receiving other psychological or pharmacological treatments; a comorbid physical or psychiatric disorder, with the exception of depression or anxiety secondary to the anorexia nervosa; current drug or alcohol abuse; self-harming behavior over the past 12 months; other indications for hospitalization such as severe physical complications or suicidal ideation; or a recent history of untreated physical or psychological trauma or sexual abuse. Pretreatment: None.
Interventions	Intervention Characteristics Intervention <ul style="list-style-type: none"> ● <i>Description:</i> Behavioral Family Therapy (BFT). Both treatment programs share several features including the number of sessions, length of therapy, contact time with therapists, use of the same therapists, emphasis on normalizing eating behaviors, and relapse prevention. Four nutritional counseling sessions were conducted by a dietitian at the commencement of therapy, and two optional sessions were available at the completion of treatment. ● <i>Manual-based:</i> No. Based on behavioral interventions described by Robin and Foster (1989) ● <i>Duration (weeks):</i> 52 ● <i>Number of sessions:</i> 25 Control <ul style="list-style-type: none"> ● <i>Description:</i> Individual CBT. Both treatment programs share several features including the number of sessions, length of therapy, contact time with therapists, use of the same therapists, emphasis on normalizing eating behaviors, and relapse prevention. Four nutritional counseling sessions were conducted by a dietitian at the commencement of therapy, and two optional sessions were available at the completion of treatment. ● <i>Manual-based:</i> The individual CBT program was based on the treatment manual developed by Garner and Bemis (1982) and modified in the present study to address maladaptive core beliefs often associated with feelings of failure and inadequacy (Young, 1994). ● <i>Duration (weeks):</i> 52 ● <i>Number of sessions:</i> 25
Outcomes	<i>ED behavior (end of treatment)</i> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome ● Reporting: Not reported ● Direction: Lower is better ● Data value: Endpoint <i>ED behavior (longest FU (min. 1 yr))</i> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome ● Reporting: Not reported ● Direction: Lower is better ● Data value: Endpoint <i>Body weight (end of treatment)</i> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome ● Reporting: Fully reported ● Scale: BMI ● Direction: Higher is better ● Data value: Endpoint

	<ul style="list-style-type: none"> ● Notes: 9 subjects in analysis in both groups. Intervention group started with 12 and control group started with 13 subjects. <p><i>Body weight (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome ● Reporting: Fully reported ● Scale: BMI ● Direction: Higher is better ● Data value: Endpoint ● Notes: Longest FU is after 6 months.9 subjects in analysis in both groups. Intervention group started with 12 and control group started with 13 subjects. <p><i>Psychological symptoms (end of treatment)</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome ● Reporting: Fully reported ● Scale: EDE global ● Range: 0-6 ● Direction: Lower is better ● Data value: Endpoint ● Notes: 9 subjects in analysis in both groups. Intervention group started with 12 and control group started with 13 subjects. <p><i>Psychological symptoms (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome ● Reporting: Fully reported ● Scale: EDE global ● Range: 0-6 ● Direction: Lower is better ● Data value: Endpoint ● Notes: Longest FU is after 6 months.9 subjects in analysis in both groups. Intervention group started with 12 and control group started with 13 subjects. <p><i>Recovery rate (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: DichotomousOutcome ● Reporting: Fully reported ● Scale: Morgan-Russell ● Direction: Higher is better ● Data value: Endpoint ● Notes: Longest FU is after 6 months. <p><i>Dropout (end of treatment)</i></p> <ul style="list-style-type: none"> ● Outcome type: DichotomousOutcome ● Reporting: Fully reported ● Direction: Lower is better ● Data value: Endpoint <p><i>Quality of life (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome ● Reporting: Not reported ● Notes: Not reported. <p><i>Family function (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome ● Reporting: Partially reported ● Scale: IBC ● Notes: They do not report family function but only mention that there were no differences between groups. <p><i>Body weight (end of treatment)</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome <p><i>Psychological symptoms (end of treatment)</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome
Identification	<p>Sponsorship source: the Prince Henry Hospital Coast Centenary Grant for partially supporting the research</p> <p>Country: Australia</p> <p>Setting: Outpatient treatment</p> <p>Comments: n/a</p> <p>Authors name: Jillian Ball</p> <p>Institution: School of Psychiatry, University of New South Wales</p> <p>Email: jillian@unsw.edu.au</p> <p>Address: University of New South Wales, 6th Floor, Parkes East, Prince of Wales Hospital, High Street, Randwick, NSW 2031, Australia.</p>
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Sequence Generation	Unclear risk	Judgement Comment: Cochrane
Allocation concealment	Unclear risk	Judgement Comment: Cochrane
Blinding of participants and personnel	Unclear risk	Judgement Comment: Cochrane
Blinding of outcome assessors	Unclear risk	Judgement Comment: Cochrane
Incomplete outcome data	High risk	Judgement Comment: Cochrane: 1. There is not a full description of why people left the intervention in each group. 2. There are three hospitalisations but it is unclear from which groups. 3. No intention-to-treat (ITT) analysis. 4. On the main outcome they do compare ITT to complete analysis.
Selective outcome reporting	High risk	Judgement Comment: Cochrane: 1. Do not report outcomes from the Eating Conflicts subscale of the Interaction Behaviour Code. 2. Authors report that they collect data on both general and family functioning, but the data are not reported in a format that is usable for analysis.
Other sources of bias	High risk	Judgement Comment: Cochrane: 1. Small sample size. 2. Baseline imbalance - for sub-type of AN. 3. Inaccurate with conflict in reporting (state 60% in "good" category but then report N=7 in each group for "good", which is less than 60%)

Lock 2010

Methods	<p>Study design: Randomized controlled trial</p> <p>Study grouping: Parallel group</p> <p>Open Label:</p> <p>Cluster RCT:</p>
Participants	<p>Baseline Characteristics</p> <p>Intervention</p> <ul style="list-style-type: none"> ● Age: 14.1 (1.7) ● Sex (% female): 89 ● BMI/BMI percentile: 7.2 (7.6) ● Restrictive Anorexia (% of AN sample): n/a ● Duration of illness (months): 12.3 (8.5) ● Comorbidity (% of sample): 20 ● Psychotropic medication (% of sample): 15 <p>Control</p> <ul style="list-style-type: none"> ● Age: 14.7 (1.5) ● Sex (% female): 93 ● BMI/BMI percentile: 5.2 (7.55) ● Restrictive Anorexia (% of AN sample): n/a ● Duration of illness (months): 10.3 (8.7) ● Comorbidity (% of sample): 32 ● Psychotropic medication (% of sample): 18 <p>Included criteria: Participants were eligible if they were between the ages of 12 and 18 years, living with their parents, or legal guardians, and met the DSM-IV criteria for AN excluding the amenorrhea criterion. Weight thresholds (IBW < 86%) for study entry were calculated using the CDC weight charts, growth curve trajectories and Metropolitan Life charts. Participants meeting the binge eating and purging subtype and adolescents on a stable dose of antidepressant or anxiolytic medications for a period of two months who still met entry criteria were eligible. Both adolescent participants and their families were required to be available for the one year treatment duration.</p> <p>Excluded criteria: Participants were excluded from the study if there was a current psychotic disorder, dependence on drugs or alcohol, physical condition known to influence eating or weight (e.g. diabetes mellitus, pregnancy), or previous treatment with FBT or AFT.</p> <p>Pretreatment: The subjects in the control group are significantly older than the intervention group. The global EDE score is significantly lower at baseline in the intervention group.</p>
Interventions	<p>Intervention Characteristics</p> <p>Intervention</p> <ul style="list-style-type: none"> ● Description: Family-Based Treatment (FBT) is a 3 phase treatment. In the first phase therapy is characterized by attempts to absolve the parents from the responsibility of causing the disorder, and by complimenting them on the positive aspects of their parenting. Families are encouraged to work out for themselves how best to help restore the weight of their child with AN. In Phase 2, parents are helped to transition eating and weight control back to the adolescent in an age appropriate manner. The third phase focuses on establishing of a healthy adolescent relationship with the parents. were provided over the one year period. ● Manual-based: Yes ● Duration (weeks): 52 ● Number of sessions: 24 one-hour sessions <p>Control</p> <ul style="list-style-type: none"> ● Description: AFT (originally described by Robin et al., as Ego-Oriented Individual Therapy) posits that individuals with AN manifest ego deficits and confuse self-control with biological needs. Patients learn to identify and define their emotions, and later, to tolerate affective states rather than numbing themselves with starvation. ● Manual-based: Yes ● Duration (weeks): 52 ● Number of sessions: 32 forty-five-minute sessions (same numbers of contact hours as FBT). Up to eight sessions in parallel with parents alone.

Outcomes	<p><i>ED behavior (end of treatment)</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome <p><i>ED behavior (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome <p><i>Body weight (end of treatment)</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome ● Reporting: Fully reported ● Scale: BMI percentile ● Range: 0-100 ● Direction: Higher is better ● Data value: Endpoint <p><i>Body weight (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome ● Reporting: Fully reported ● Scale: % expected body weight ● Direction: Higher is better ● Data value: Endpoint <p><i>Psychological symptoms (end of treatment)</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome ● Reporting: Fully reported ● Scale: EDE global ● Range: 0-6 ● Direction: Lower is better ● Data value: Endpoint <p><i>Psychological symptoms (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome <p><i>Recovery rate (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: DichotomousOutcome <p><i>Dropout (end of treatment)</i></p> <ul style="list-style-type: none"> ● Outcome type: DichotomousOutcome <p><i>Quality of life (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome <p><i>Family function (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome
Identification	<p>Sponsorship source: Funding support for this study was provided by NIH grant R01-MH-070621 to Dr. Lock and NIH grant R01-MH-070620 to Dr. Le Grange.</p> <p>Country: USA</p> <p>Setting: Outpatient. Stanford University and The University of Chicago</p> <p>Comments: None</p> <p>Authors name: James Lock</p> <p>Institution: Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine</p> <p>Email: jimlock@stanford.edu</p> <p>Address: Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine, 401Quarry Road, Stanford, CA 94305</p>
Notes	<p><i>Louise Linde on 04/02/2016 00:44</i></p> <p>Population FBT er intervention og AFT er kontrol. Restriktiv AN % ikke opgivet.</p> <p><i>Louise Linde on 04/02/2016 03:24</i></p> <p>Outcomes Kropsvægt er ved EOT opgivet som BMI percentil for alder og køn. Kropsvægt ved længste follow-up er angivet i %EBW</p> <p><i>Nkr 46 Anoreksi on 11/02/2016 03:50</i></p> <p>Outcomes EOT er baseline-adjusted scores.</p>

Risk of bias table

Bias	Authors' judgement	Support for judgement
Sequence Generation	Low risk	Judgement Comment: Efron's biased coin design was used to balance treatment within sites.
Allocation concealment	Low risk	Judgement Comment: Randomization was performed separately for each site by a biostatistician in the Data and Coordinating Center (DCC) under independent management from either intervention site.
Blinding of participants and personnel	High risk	
Blinding of outcome assessors	Low risk	Judgement Comment: Independent assessors not involved in treatment delivery conducted all assessments.

Incomplete outcome data	High risk	Judgement Comment: There is not a full description of why people left the intervention in each group. More than 30% of the participants in one group is hospitalized during the trial and only 15 % from the other group. Only intention-to-treat (ITT) analysis on main outcome. There was a significant difference in assessment follow-up rates between the two intervention sites at all time points
Selective outcome reporting	High risk	Judgement Comment: The main article does not report all assessment tools. Smaller articles on the same sample report other measures.
Other sources of bias	High risk	Judgement Comment: Baseline imbalance: younger group in FBT and lower EDE than AFT. Not certain why/when the N's change when reporting % of hospitalizations and remission.

Robin 1999

Methods	<p>Study design: Randomized controlled trial</p> <p>Study grouping: Parallel group</p> <p>Open Label:</p> <p>Cluster RCT:</p>
Participants	<p>Baseline Characteristics</p> <p>Intervention</p> <ul style="list-style-type: none"> ● Age: 14.9 ● Sex (% female): 100 ● BMI: 15.0 (1.4) ● Restrictive Anorexia (% of AN sample): 100 ● Duration of illness (months): <12 ● Comorbidity (% of sample): Total: 54 % mood disorder, 13 % anxiety disorder ● Psychotropic medication (% of sample): no info <p>Control</p> <ul style="list-style-type: none"> ● Age: 13.4 ● Sex (% female): 100 ● BMI: 16.3 (2.8) ● Restrictive Anorexia (% of AN sample): 100 ● Duration of illness (months): <12 ● Comorbidity (% of sample): Total: 54 % mood disorder, 13 % anxiety disorder ● Psychotropic medication (% of sample): no info <p>Included criteria: Female adolescents aged 11 to 20 meeting DSM-III-R criteria for anorexia nervosa and residing at home with one or both parents.</p> <p>Excluded criteria: None stated.</p> <p>Pretreatment: mean age for EOIT group was significantly younger than the mean age for the BFST group.</p>
Interventions	<p>Intervention Characteristics</p> <p>Intervention</p> <ul style="list-style-type: none"> ● Description: Behavioral family systems. Description in the report similar to Family based therapy including all three phases. ● Manual-based: yes ● Duration (weeks): mean 68.4 ● Number of sessions: app. mean 51 <p>Control</p> <ul style="list-style-type: none"> ● Description: Ego oriented individual therapy. Aimed to build ego strength, autonomy and insight. Parents also met with therapists bimonthly. ● Manual-based: yes ● Duration (weeks): mean 68.4 ● Number of sessions: app. mean 51
Outcomes	<p><i>ED behavior (end of treatment)</i></p> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome <p><i>ED behavior (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome <p><i>Body weight (end of treatment)</i></p> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome ● Reporting: Fully reported ● Scale: BMI ● Direction: Higher is better ● Data value: Endpoint <p><i>Body weight (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome <p><i>Psychological symptoms (end of treatment)</i></p> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome ● Reporting: Fully reported ● Scale: EAT-teen ● Direction: Lower is better ● Data value: Endpoint <p><i>Psychological symptoms (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome

	<ul style="list-style-type: none"> ● Reporting: Fully reported ● Scale: EAT-teen ● Direction: Lower is better ● Data value: Endpoint <p><i>Recovery rate (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: DichotomousOutcome <p><i>Dropout (end of treatment)</i></p> <ul style="list-style-type: none"> ● Outcome type: DichotomousOutcome <p><i>Quality of life (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome <p><i>Family function (longest FU (min. 1 yr))</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome ● Reporting: Fully reported ● Scale: Parent Adolescent Relationship Questionnaire ● Direction: Lower is better ● Data value: Endpoint ● Notes: FU after 1 year
Identification	<p>Sponsorship source: Partial support from NIMH grant</p> <p>Country: USA</p> <p>Setting: Outpatient</p> <p>Comments: None</p> <p>Authors name: Arthur L. Robin</p> <p>Institution: Child psychiatry and psychology department, Children's hospital of Michigan</p> <p>Email: arobin@med.wayne.edu</p> <p>Address: Children's Hospital of Michigan, 3901 Beaubien Blvd., Detroit, M1 48201</p>
Notes	<p><i>Louise Klokke Madsen on 05/02/2016 02:11</i></p> <p>Population</p> <p>Co-morbidity, whole sample: 54% mood disorder, 13% anxiety. Weight, I: 86.5 pounds, C: 86.8 pounds Height, I: 63 inches, C: 61 inches</p> <p><i>Louise Klokke Madsen on 05/02/2016 03:20</i></p> <p>Outcomes</p> <p>ED behavior measured by EAT, Teen</p>

Risk of bias table

Bias	Authors' judgement	Support for judgement
Sequence Generation	Low risk	Judgement Comment: Cochrane:Correspondence from author stated 'coin tossing' was used
Allocation concealment	Unclear risk	Judgement Comment: Cochrane:Correspondence from author suggested concealment was not possible, however, this was followed by a description of blinding
Blinding of participants and personnel	High risk	Judgement Comment: Cochrane:Correspondence from author stated that this was no possible except for those coding the family interactions
Blinding of outcome assessors	High risk	Judgement Comment: Cochrane:Correspondence from author stated that this was no possible except for those coding the family interactions
Incomplete outcome data	High risk	Judgement Comment: Cochrane:1. From the text of the paper, data for dropouts not reported or analysed. There appear to be 7 dropouts from the tables but it is unclear from the description of numbers and reasons in the text.2. Correspondence from the author suggested 1 out of 20 dropped out from the family therapy group during intervention and 4 out of 21 dropped out from the individual psychotherapy group. Dropouts by follow-up reported as 5 out of 20 for the family therapy group and 6 out of 21 from the individual psychotherapy group.3. Intention-to-treat data not provided nor analysed in paper.
Selective outcome reporting	High risk	Judgement Comment: Cochrane:1. Measures taken and reported in earlier papers (1995;BSQ and EDI BD) not reported in later paper. Family conflict not reported in 1999 paper. 1994 paper mentions body shape questionnaire, EDI and EAT however not reported in the 1999 paper. Authors do report on every measure described in the methods section in the 1999 paper.2. Report on within group changes for many outcomes.3. Authors report that they collect data on dropouts, but the data are not reported in a format that is usable for analysis
Other sources of bias	High risk	Judgement Comment: Cochrane:1. (1999 paper) Imbalance at the commencement of treatment: 11 pts from BFST and 5 pts from EOIT were hospitalized for refeeding. Duration of stay not specified by group, or for all patients.2. Uneven treatment duration - not standardised and not reported for all groups.3. Uneven/inconsistent N's for most measures with no explanation of why N's vary across measures.4. Baseline imbalances: mean age in EOIT Groups significantly younger; difference in EAT scores and BDI scores with the BFST group in the clinical range on the BDI and the EOIT group not in the clinical range.5. No reporting of between group differences.6. Randomised before final assessment for inclusion

Footnotes

Characteristics of excluded studies***Agras 2014***

Reason for exclusion	Wrong comparator
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Bachar 1999

Reason for exclusion	Wrong intervention
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Brownstone 2012

Reason for exclusion	Wrong outcomes
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Chen 2010

Reason for exclusion	Wrong study design
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Couturier 2010

Reason for exclusion	Wrong study design
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Crisp 1991

Reason for exclusion	Wrong intervention
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Doyle 2010

Reason for exclusion	Wrong study design
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Eisler 2000

Reason for exclusion	Wrong comparator
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Eisler 2000a

Reason for exclusion	Wrong comparator
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Fisher 2010

Reason for exclusion	Wrong study design
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Geist 2000

Reason for exclusion	Wrong comparator
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Godart 2012

Reason for exclusion	Wrong patient population
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Le 1992

Reason for exclusion	Wrong comparator
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LeGrange 2005

Reason for exclusion	Wrong study design
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leGrange 2005

Reason for exclusion	Wrong study design
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LeGrange 2012

Reason for exclusion	Wrong outcomes
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Lock 2005

Reason for exclusion	Wrong outcomes
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Lock 2005a

Reason for exclusion	Wrong comparator
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McIntosh 2005

Reason for exclusion	Wrong intervention
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Rhodes 2008

Reason for exclusion	Wrong comparator
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Russell 1987

Reason for exclusion	Wrong patient population
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Footnotes

Characteristics of studies awaiting classification

Footnotes

Characteristics of ongoing studies

Footnotes

Summary of findings tables**Additional tables****References to studies****Included studies****Ball 2004**

Ball,J.; Mitchell,P.. A randomized controlled study of cognitive behavior therapy and behavioral family therapy for anorexia nervosa patients.. Brunner-Mazel Eating Disorders Monograph Series 2004;12(4):303-314. [DOI: 10.1080/10640260490521389]

Lock 2010

Ciao AC; Accurso EC; Fitzsimmons-Craft EE; Lock J; Le Grange D. Family functioning in two treatments for adolescent anorexia nervosa. International journal of eating disorders 2015;48(1):81-90. [DOI: <http://dx.doi.org/10.1002/eat.22314>]

Le Grange,Daniel; Lock,James; Accurso,Erin C.; Agras,W. Stewart; Darcy,Alison; Forsberg,Sarah; Bryson,Susan W.. Relapse from remission at two- to four-year follow-up in two treatments for adolescent anorexia nervosa.. Journal of the American Academy of Child & Adolescent Psychiatry 2014;53(11):1162-1167. [DOI: 10.1016/j.jaac.2014.07.014]

Lock,J.; Le Grange,D.; Agras,W. S.; Moye,A.; Bryson,S. W.; Jo,B.. Randomized clinical trial comparing family-based treatment with adolescent-focused individual therapy for adolescents with anorexia nervosa.. Archives of General Psychiatry 2010;67(10):1025-1032. [DOI: 10.1001/archgenpsychiatry.2010.128]

Robin 1999

Robin, A. L.; Siegel, P. T.; Moye, A. W.; Gilroy, M.; Dennis, A. B.; Sikand, A. A controlled comparison of family versus individual therapy for adolescents with anorexia nervosa. Journal of the American Academy of Child and Adolescent Psychiatry 1999;38(12):1482-9. [DOI: 10.1097/00004583-199912000-00008]

Excluded studies**Agras 2014**

Agras,W. Stewart; Lock,James; Brandt,Harry; Bryson,Susan W.; Dodge,Elizabeth; Halmi,Katherine A.; Jo,Booil; Johnson,Craig; Kaye,Walter; Wifley,Denise; Woodside,Blake. Comparison of 2 family therapies for adolescent anorexia nervosa: A randomized parallel trial.. JAMA Psychiatry 2014;71(11):1279-1286. [DOI: <http://dx.doi.org/10.1001/jamapsychiatry.2014.1025>]

Bachar 1999

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Brownstone 2012

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Chen 2010

Chen,E. Y.; Le Grange,D.; Doyle,A. C.; Zaitsoff,S.; Doyle,P.; Roehrig,J. P.; Washington,B.. A case series of family-based therapy for weight restoration in young adults with anorexia nervosa.. Journal of Contemporary Psychotherapy 2010;40(4):219-224. [DOI:]

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Crisp AH.; Norton K.; Gowers S.; Halek C.; Bowyer C.; Yeldham D.; Levett G.; Bhat A.. A controlled study of the effect of therapies aimed at adolescent and family psychopathology in anorexia nervosa.. The British journal of psychiatry : the journal of mental science 1991;159:325-33. [DOI: 10.1192/bjp.159.3.325]

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Eisler 2000

Eisler, I.; Simic, M.; Russell, G. F.; Dare, C.. A randomised controlled treatment trial of two forms of family therapy in adolescent anorexia nervosa: a five-year follow-up.. *Journal of Child Psychology & Psychiatry & Allied Disciplines* 2007;48(6):552-560. [DOI: 10.1111/j.1469-7610.2007.01726.x]

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Eisler, I.; Dare, C.; Hodes, M.; Russell, G.; Dodge, E.; Grange, D.. Family therapy for adolescent anorexia nervosa: the results of a controlled comparison of two family interventions. *Journal of child psychology and psychiatry, and allied disciplines* 2000;41(6):727-36. [DOI:]

Fisher 2010

Fisher, C. A.; Hetrick, S. E.; Rushford, N.. Family therapy for anorexia nervosa. *The Cochrane database of systematic reviews* 2010;(4):CD004780. doi(4):CD004780. [DOI: 10.1002/14651858.CD004780.pub2 [doi]]

Geist 2000

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Studies awaiting classification**Ongoing studies****Other references****Additional references****Other published versions of this review****Classification pending references**

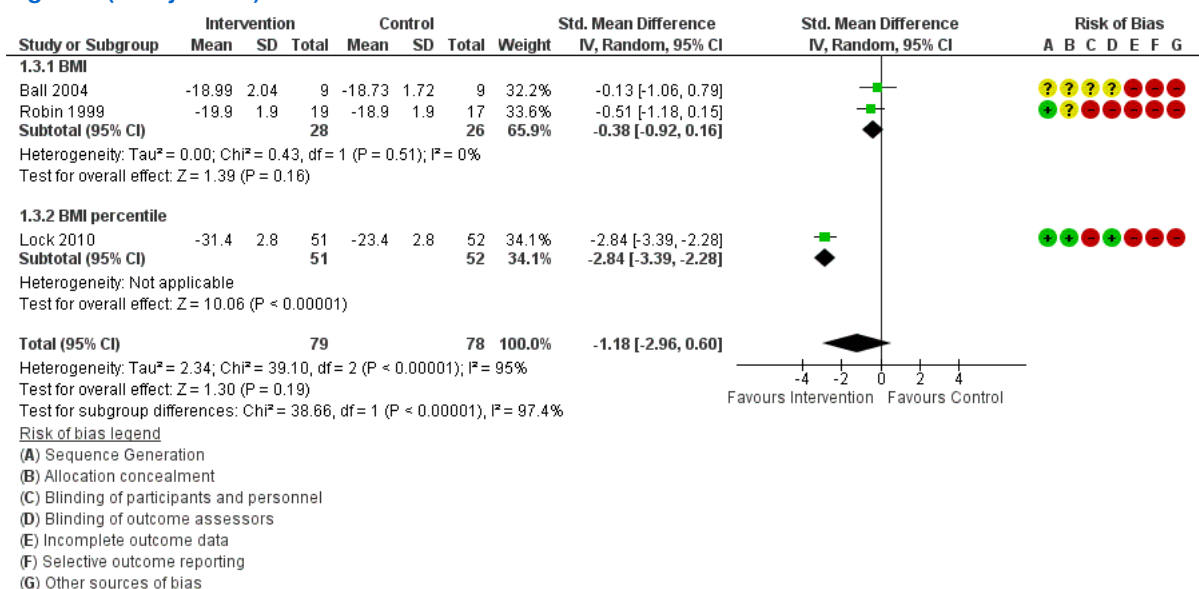
Data and analyses

1 Intervention vs Control

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.1 ED behavior (end of treatment)	0	0	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.2 ED behavior (longest FU (min. 1 yr))	0	0	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.3 Body weight (end of treatment)	3	157	Std. Mean Difference (IV, Random, 95% CI)	-1.18 [-2.96, 0.60]
1.3.1 BMI	2	54	Std. Mean Difference (IV, Random, 95% CI)	-0.38 [-0.92, 0.16]
1.3.2 BMI percentile	1	103	Std. Mean Difference (IV, Random, 95% CI)	-2.84 [-3.39, -2.28]
1.4 Body weight (longest FU (min. 1 yr, Ball 6m))	3	133	Std. Mean Difference (IV, Random, 95% CI)	-0.19 [-0.53, 0.16]
1.4.1 BMI	2	54	Std. Mean Difference (IV, Random, 95% CI)	-0.38 [-0.92, 0.16]
1.4.2 expected BMI	1	79	Std. Mean Difference (IV, Random, 95% CI)	-0.05 [-0.50, 0.39]
1.5 Psychological symptoms (end of treatment)	3	156	Std. Mean Difference (IV, Random, 95% CI)	-1.07 [-3.38, 1.24]
1.5.1 EDE Global	2	121	Std. Mean Difference (IV, Random, 95% CI)	-1.75 [-4.52, 1.02]
1.5.2 EAT-teen	1	35	Std. Mean Difference (IV, Random, 95% CI)	0.27 [-0.40, 0.94]
1.6 Psychological symptoms (longest FU (min. 1 yr))	3	132	Std. Mean Difference (IV, Random, 95% CI)	-0.09 [-0.55, 0.37]
1.6.1 EDE Global	2	97	Std. Mean Difference (IV, Random, 95% CI)	-0.30 [-0.70, 0.11]
1.6.2 EAT-teen	1	35	Std. Mean Difference (IV, Random, 95% CI)	0.39 [-0.28, 1.07]
1.7 Quality of life (longest FU (min. 1 yr))	0	0	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.8 Family function (longest FU (min. 1 yr))	1	30	Mean Difference (IV, Random, 95% CI)	0.50 [-5.19, 6.19]
1.8.1 PARq	1	30	Mean Difference (IV, Random, 95% CI)	0.50 [-5.19, 6.19]
1.9 Recovery rate (longest FU (min. 1 yr))	2		Risk Ratio (IV, Random, 95% CI)	Subtotals only
1.9.1 Time (final)	2	104	Risk Ratio (IV, Random, 95% CI)	0.92 [0.57, 1.49]
1.10 Dropout (end of treatment)	2		Risk Ratio (IV, Random, 95% CI)	Subtotals only
1.10.1 Time (final)	2	146	Risk Ratio (IV, Random, 95% CI)	1.69 [0.44, 6.45]

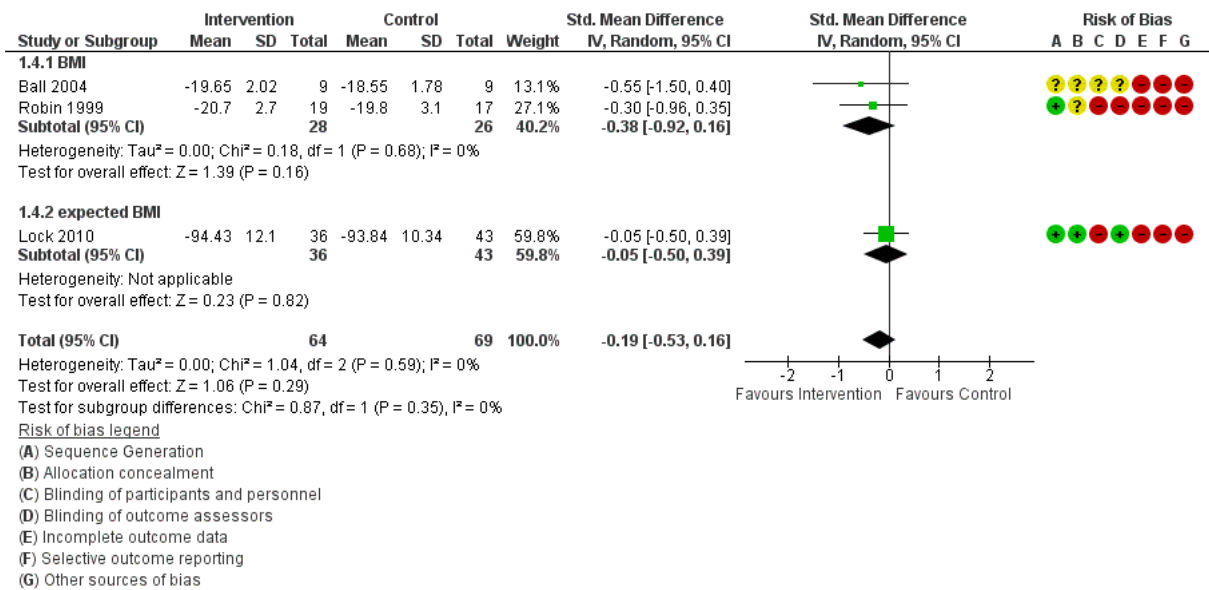
Figures

Figure 1 (Analysis 1.3)



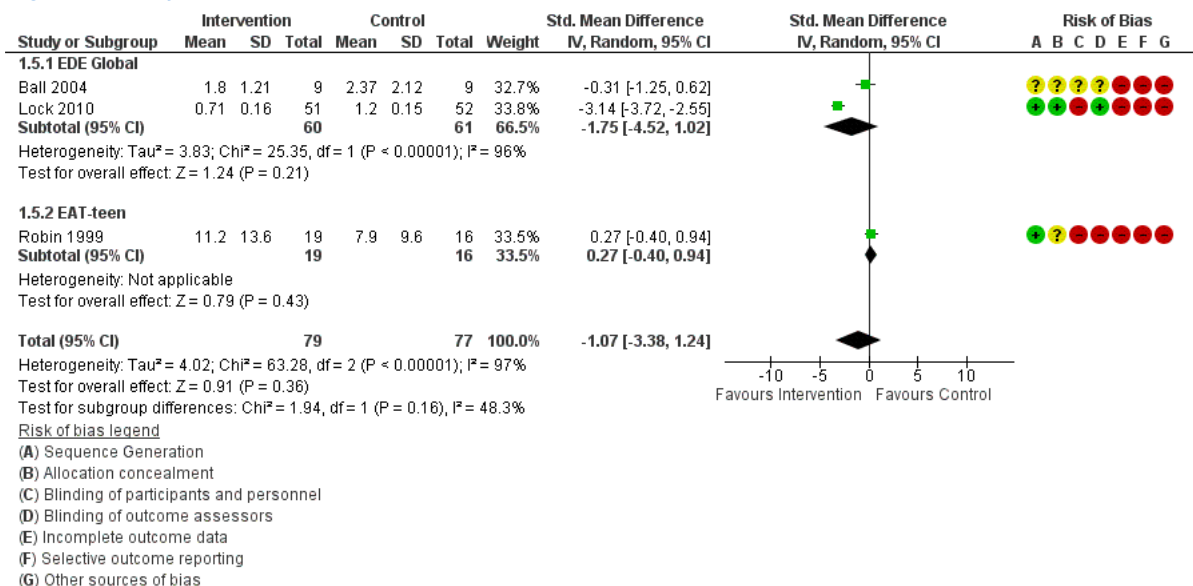
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.3 Body weight (end of treatment).

Figure 2 (Analysis 1.4)



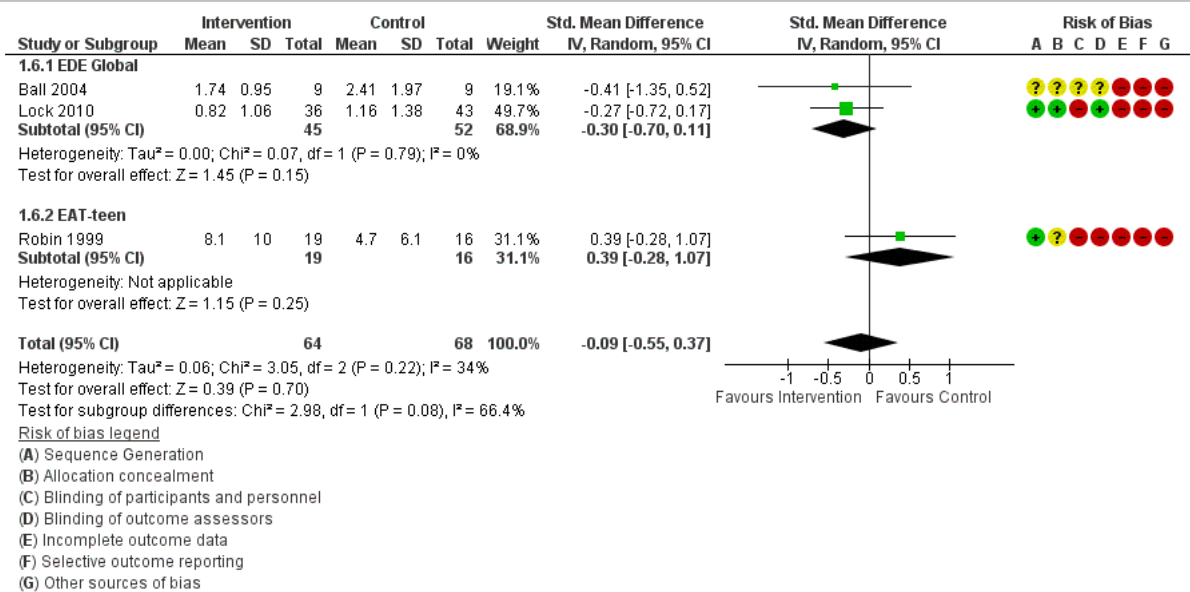
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.4 Body weight (longest FU (min. 1 yr, Ball 6m)).

Figure 3 (Analysis 1.5)



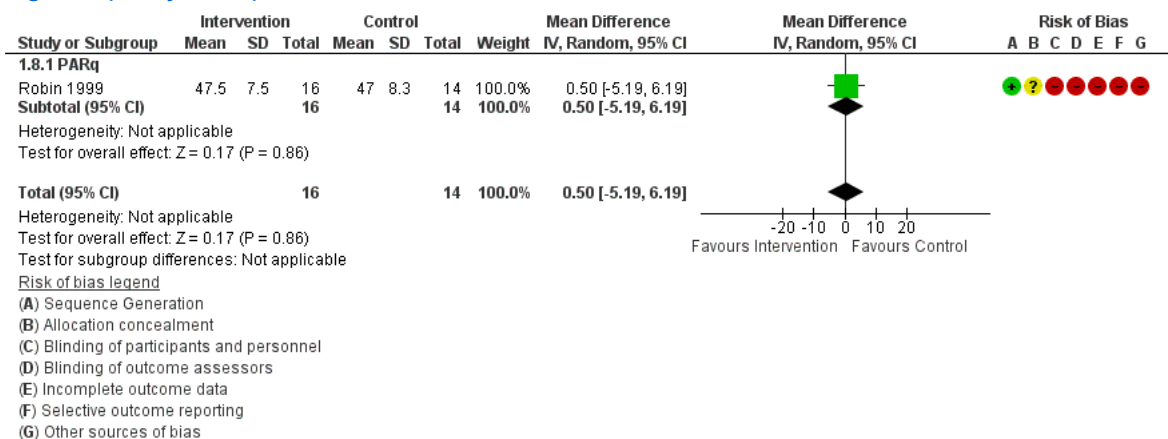
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.5 Psychological symptoms (end of treatment).

Figure 4 (Analysis 1.6)



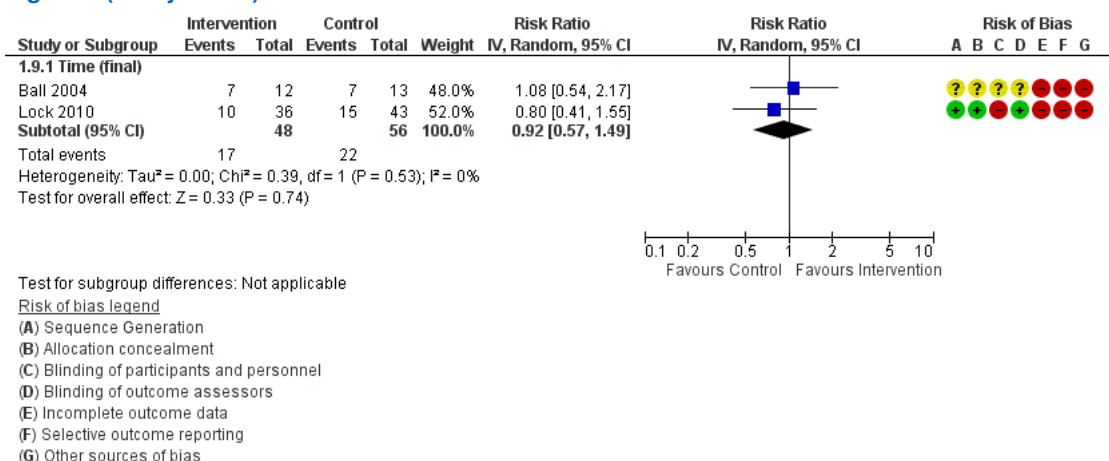
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.6 Psychological symptoms (longest FU (min. 1 yr)).

Figure 5 (Analysis 1.8)



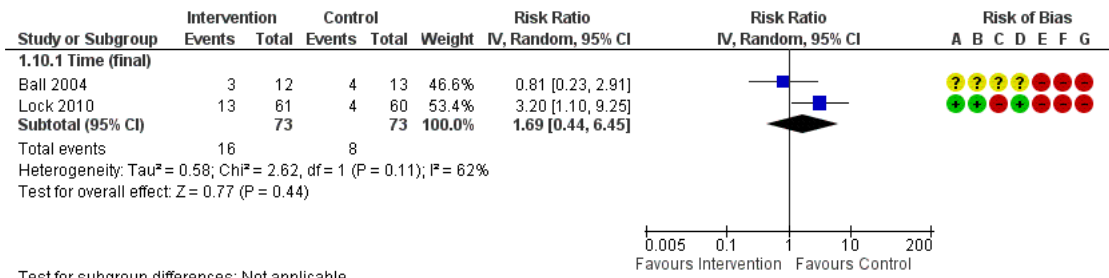
Forest plot of comparison: 1 Intervention vs Control, outcome: 1.8 Family function (longest FU (min. 1 yr)).

Figure 6 (Analysis 1.9)



Forest plot of comparison: 1 Intervention vs Control, outcome: 1.9 Recovery rate (longest FU (min. 1 yr)).

Figure 7 (Analysis 1.10)



Test for subgroup differences: Not applicable

Risk of bias legend

- (A) Sequence Generation
- (B) Allocation concealment
- (C) Blinding of participants and personnel
- (D) Blinding of outcome assessors
- (E) Incomplete outcome data
- (F) Selective outcome reporting
- (G) Other sources of bias

Forest plot of comparison: 1 Intervention vs Control, outcome: 1.10 Dropout (end of treatment).