APPENDIX 15E: CLINICAL STUDY CHARACTERISTICS

PSYCHOLOGICAL AND PSYCHOSOCIAL INTERVENTIONS

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1.1 CHARACTERISTICS OF STUDIES INCLUDED IN THE META-ANALYSIS

ALLARD1992

Bibliographic reference	Allard, R., Marshall, M. & Plante, M. C. (1992) Intensive follow-up does not decrease the risk of repeat suicide attempts. *Suicide and Life-Threatening Behavior*, *22*, 303–314.
Methods	Allocation: subjects were randomly assigned using sealed and numbered envelopes Follow-up period: 24 months after trial entry N lost to follow-up: 24 out of 150 (16%) for repetition data
Participants/ demographic/ diagnosis	Total N: 150 N used in analysis: experimental 76, control 74 Setting: Montreal, Canada Inclusion criteria: (i) resident in catchment area of hospital; (ii) able to speak French or English; (iii) no physical handicap preventing attendance; (iv) not already in institutional care; (v) capacity to give informed consent; (vi) not sociopathic; (vii) attempt within 1 week previous to entry. Gender: female 55% (n = 83) Profile: repeaters 50% (n = 75); diagnosis of depression 87% (n = 131); substance-abuse diagnosis 53% (n = 80); personality disorder 45% (n = 68) Source of participants: patients presenting to hospital for a suicide attempt
Interventions	Experimental: intensive intervention: a schedule of visits was arranged including at least one home visit; therapy provided where needed; reminders (telephone or written) and home visits were made in case of missed appointments. Control: treatment by the regular personnel in the same hospital. Therapist: one social worker Type of therapy offered: experimental – various interventions (such as psychoanalytic psychotherapy, psychosocial, drug or behavioural therapy); control – usual care Length of treatment: 12 months
Outcomes	Included: (i) repetition of self-harm; (ii) suicide; (iii) compliance (encounters with therapist) Excluded: none
Notes	Repetition data from: hospital records, coroners' office records plus interview with participants and interview with other informants, such as relatives or friends of patient.

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	'Subjects were randomly assigned either to the intensive intervention group or to the comparison group, using sealed and numbered envelopes' (p. 306). No mention of how the sequence was generated/envelopes were numbered, so it is unclear whether the allocation sequence was adequately generated.

Allocation concealment?	Yes	'Subjects were randomly assigned either to the intensive intervention group or to the comparison group, using sealed and numbered envelopes' (p. 306). No mention of whether the envelopes were opaque or not, but this was probably done.
Blinding?	No	Participants: it is not known whether the subjects were aware that they were being treated by a different team or not. Personnel: personnel were aware of which team they were in – intervention or control. Outcome assessors: if personnel were doing the job of the assessors, they were not blinded – for the above reason.
Incomplete outcome data addressed?	Yes	There is a section on 'Losses to follow up', which states that follow-up information was not available for 24 participants, but there are no reasons given for dropouts; however, the study's authors assert these losses were unlikely to introduce bias and 'unlikely to affect the comparisons between the two groups' (pp. 308-9) as dropouts (who shared a similar demographic profile) were 'equally distributed between groups'. 'All comparisons between groups were made on an intention-to-treat basis' (p. 307).
Free of selective reporting?	Unclear	No reason to suspect that all outcomes were not reported; however, in the absence of the trial protocol, cannot be certain.
Free of other bias?	Yes	No apparent other sources of bias.

BEAUTRAIS2010

Bibliographic reference	Beautrais, A. (2010) Postcard intervention for repeat self-harm: randomised controlled trial. *British Journal of Psychiatry*, *197*, 55–60.
Methods	Allocation: randomised using predetermined computer-generated random numbers. Clinicians were masked to treatment allocation Follow-up period: 12 months N lost to follow-up: none (100% followed up)
Participants/ demographic/ diagnosis	Total N: 327 N used in analysis: experimental 153, control 174 Setting: Christchurch, New Zealand Inclusion criteria: (i) presented to the psychiatric emergency service following self-harm or attempted suicide; (ii) residents of New Zealand; (iii) able to speak English sufficiently well to understand the study. Gender: female 84% (n = 215) Profile: mean age 34 years Source of participants: individuals aged 16+ years who presented to psychiatric emergency services at Christchurch Hospital following self-harm or attempted suicide during the period 1 August 2006 to 6 April 2007.
Interventions	Experimental: consisted of a series of six postcards sent by mail during the 12 months following the participant's index presentation for suicide attempt or self-

	harm. Postcards were posted at the following times after the index presentation: 2 and 6 weeks; 3, 6, 9 and 12 months. Control: treatment as usual consisted of crisis assessment and referral to in-patient community-based mental health services Therapist: none Type of therapy offered: experimental – postcard intervention; control – usual care Length of treatment: 12 months
Outcomes	Repetition: (i) psychiatric emergency services; (ii) hospital medical record
Notes	Baseline difference in number of prior attendances for self-harm in the previous 12 months. Control group higher than intervention group (but has been adjusted); early stopping of the trial (but final results contrasted with interim data).

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	-
Allocation concealment?	Unclear	-
Blinding?	Unclear	Participants: no Personnel and outcome assessors: yes
Incomplete outcome data addressed?	Yes	-
Free of selective reporting?	Yes	-
Free of other bias?	Yes	-

BENNEWITH2002

Bibliographic reference	Bennewith, O., Stocks, N., Gunnell, D., *et al.* (2002) General practice based intervention to prevent repeat episodes of deliberate self-harm: cluster randomised controlled trial. *British Medical Journal*, *324*, 1254–1257.
Methods	Allocation: primary care practices were stratified into four groups according to rate of self-harm; divided again into two groups (eight groups total) according to practice size; then allocated using random numbers tables by individuals blind to identity of practices. Follow-up period: 12 months N lost to follow-up: 0 out of 1932 (0%) for repetition data
Participants/ demographic/ diagnosis	Total N: 1932 participants (from 98 practices) N used in analysis: experimental 964 (from 49 experimental practices), control 968 (from 49 control practices) Setting: Avon, Wiltshire and Somerset Health Authorities, UK Inclusion criteria: practices: (i) based in geographical area whose patients lived in catchment area of four general hospitals. Participants: (i) found in general hospital case register for self-harm; (ii) recruitment data collected weekly from hospitals' A&E sites; (iii) not an alcohol (taken alone) or illicit drug overdose, except where casualty officer felt purpose was self-harm or suicide; (iv) aged 16 years and older; (v) of fixed abode; (vi) not imprisoned; (vii) did not request that no one be informed of episode; (viii) did not harm self-deliberately in response to hallucination/ delusion; (ix) self-harm episode not managed entirely in primary care. Gender: female 59% (n = 1140) Profile: aged 16 to 95 years; repeaters 13% (n = 251) (based on case register

	information) Source of participants: patients presenting to hospital who belonged to participating practices
Interventions	Experimental: letter from GP inviting patient for a consultation with GP (provided with management guideline) Control: usual care: GP, psychiatric or other referral Therapist: participants GPs Type of therapy offered: experimental – consultation in surgery; control –usual care Length of treatment: n/a
Outcomes	Included: (i) repetition; (ii) contact with services Excluded: (i) initiation of contact from GP; (ii) days to first repeat self-harm episode
Notes	Repetition data from hospital case register. Additional information obtained through correspondence with the author

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'98 general practices were assigned in equal numbers to an intervention or a control group' (p. 1254). Authors clarified that a random numbers table was used.
Allocation concealment?	Yes	No information in published paper; trialists clarified that primary care practices were stratified into four groups according to rate of self-harm; divided again into two groups (eight groups total) according to practice size; then allocated using random numbers tables by individuals blind to identity of practices.
Blinding?	No	Participants: participants aware of intervention. Personnel: GP aware of intervention. Outcome assessors: No information given in published paper.
Incomplete outcome data addressed?	Yes	Trialists report that clustering was accounted for by their analysis and also that intention-to-treat (ITT) analysis was performed.
Free of selective reporting?	Unclear	No reason to suspect that all outcomes were not measured; however, in the absence of the trial protocol, cannot be certain.
Free of other bias?	Yes	No apparent other sources of bias.

BROWN2005

Bibliographic reference	Brown, G. K., Ten Have, T., Henriques, G. R., *et al.* (2005) Cognitive therapy for the prevention of suicide attempts: a randomized controlled trial. *Journal of the American Medical Association*, *294*, 563–570.
Methods	Allocation: computer randomisation sequence programmed to prohibit more than seven consecutive assignments in the same treatment group

	Follow-up period: 18 months N lost to follow-up: 35 out of 120 (29%) for repetition data
Participants/ demographic/ diagnosis	Total N: 120 participants N used in analysis: experimental, 60 control 60 Setting: Pennsylvania, US Inclusion criteria: (i) attempted suicide and received medical/psychiatric evaluation within 48 hours of attempt; (ii) able to provide at least two verifiable contacts; (iii) 16 years or older; (iv) able to speak English; (v) able to complete baseline assessment; (vi) able to provide informed consent; (vii) no medical disorder that would prevent participation in outpatient clinical trial. Gender: female 61% (n = 73) Profile: participants aged 18 to 66 years; repeaters 74% (n = 89); diagnosis of substance abuse 68% (n = 82); MDD 77% (n = 92) Source of participants: patients presenting to hospital after suicide attempt
Interventions	Experimental: cognitive therapy (ten sessions) plus usual care Control: usual care Therapist: outpatient sessions given by study therapists Type of therapy offered: experimental – cognitive therapy; control – usual care Length of treatment: 10 to 20 weeks.
Outcomes	Included: (i) repetition; (ii) suicide; (iii) suicidal ideation; (iv) depression; (v) hopelessness Excluded: (i) compliance
Notes	Repetition data from participant report. 352 out of 612 (57.5%) participants in experimental group received intervention. Compliance outcome excluded due to type of data reported.

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'A computerized randomization sequence programmed to prohibit more than 7 consecutive assignments in either treatment group was used' (p. 564).
Allocation concealment?	Unclear	No details given
Blinding?	No	Participants: due to the nature of the interventions, it is doubtful that the participants would have been blinded to which treatment they were given. Personnel: therapists would have known which treatment (CBT or treatment as usual) they were giving their patients. Outcome assessors: not blinded.
Incomplete outcome data addressed?	Yes	Of the 120 randomised participants, two dropped out during the intervention and 35 were lost to follow-up at 18 months. Reasons were given for dropouts. ITT analysis attempted: 'All effectiveness analyses were conducted using the intent-to-treat (ITT) principle' (p. 565). 'Tests and estimates of ITT differences for both continuous and binary outcomes were based on

		longitudinal models with random effects' (p. 566).
Free of selective reporting?	Yes	No reason to suspect that all outcomes were not reported.
Free of other bias?	Yes	No apparent other sources of bias; extra care was taken to test for significant differences between groups with respect to other care, including psychotropic medications and treatments for substance misuse, but none were found.

CARTER2005

Bibliographic reference	Carter, G. L., Clover, K., Whyte, I. M., *et al.* (2005) Postcards from the EDge project: randomised controlled trial of an intervention using postcards to reduce repetition of hospital treated deliberate self poisoning. *British Medical Journal*, *331*, 805–809.
Methods	Allocation: randomisation prior to consent based on computer generated randomisation schedule Follow-up period: 24 months N lost to follow-up: 0 out of 772 (0%) for repetition data
Participants/ demographic/ diagnosis	Total N: 772 participants N used in analysis: experimental 378, control 394 Setting: New South Wales, Australia Inclusion criteria: (i) aged over 16 years; (ii) presented to toxicology service with deliberate self-poisoning; (iii) able to provide informed consent; (iv) fixed address; (v) sufficient English; (vi) did not pose a potential threat to interviewer. Gender: female 68% (n = 525) Profile: median age 33 years; repeaters 17% (n = 131); any affective disorder 43% (n = 333); alcohol abuse and/or dependence 13% (n = 104); other substance-related disorders 40% (n = 311); personality disorder (n = 169). Source of participants: patients presenting to hospital toxicology service
Interventions	Experimental: postcards sent 1, 2, 3, 4, 6, 8, 10 and 12 months after discharge plus usual care Control: usual care Therapist: none Type of therapy offered: experimental – outreach plus usual care; control –usual care Length of treatment: 12 months
Outcomes	Included: (i) repetition; (ii) suicide (review authors contacted trialist for this information) Excluded: none
Notes	Repetition data from hospital database. Twenty control-group participants received intervention due to clerical errors but were included in control group for ITT analyses by original authors.

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'Randomisation was by database (HanDBase version 2.0; DDH Software, FL, US) on a

		personal digital assistant (Palm III; Palm, CA, US) that was populated with a pre-generated randomisation schedule (in blocks of ten) and carried by the duty toxicologist' (p. 806). Probably done.
Allocation concealment?	No	Participants were given the option to change the treatment they had been allocated (as Zelen design was used); therefore, no allocation concealment
Blinding?	No	Participants: no, participants gave consent to treatment they were receiving. Plus, some control participants were inadvertently exposed to the intervention (p. 806). Personnel: knew if they had sent a postcard or not; therefore, they were not blinded. Outcome assessors: unclear because no details reported.
Incomplete outcome data addressed?	Yes	'Flow of participants through trial' figure (p. 3) indicates that no participants were lost to follow-up, although 76 of the intervention group refused the intervention and 32 did not receive the full intervention. 'We assessed the outcomes by an intention to treat analysis on the basis of allocation' and 'twenty participants in the control group received the intervention due to clerical errors but were included in the control group for the intention to treat analyses' (p. 806).
Free of selective reporting?	Unclear	Data on repetition and suicide were obtained from trialists, reducing risk of bias.
Free of other bias?	No	Zelen design used, which can produce bias.

CEDEREKE2002

Bibliographic reference	Cedereke, M., Monti, K. & Ojehagen A. (2002) Telephone contact with patients in the year after a suicide attempt: does it affect treatment attendance and outcome? A randomised controlled study. *European Psychiatry*, *17*, 82–91.
Methods	Allocation: randomised in groups of two or four participants using sealed envelopes Follow-up period: 12 months N lost to follow-up: 44 out of 216 (20%) for repetition data
Participants/ demographic/ diagnosis	Total N: 216 N used in analysis: experimental 107, control 109 Setting: Lund, Sweden Inclusion criteria: (i) individuals treated after suicide attempt followed-up after 1 month by psychiatric nurse or a social counsellor to assess their need of professional help. Gender: female 66% (n = 143) Profile: repeaters 52% (n = 112); mood disorder 91% (n = 197) Source of participants: patients treated in hospital after suicide attempt
Interventions	Experimental: telephone contact (20 to 45 minutes) at 4 and 8 months to increase

	motivation plus usual care Control: usual care Therapist: interviewers with at least 10 years' experience working with suicidal individuals Type of therapy offered: experimental – motivation increase; control –usual care Length of treatment: 8 months
Outcomes	Included: (i) repetition; (ii) suicide; (iii) suicidal ideation; (iv) compliance Excluded: (i) global functioning (ii) psychiatric symptoms (SCL-90)
Notes	Repetition data from: interviews checked against patient and admission charts

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	Allocation sequence generated by personnel, but unclear – no details given on how it was generated
Allocation concealment?	Yes	Probably done, provided that the envelopes were opaque
Blinding?	Unclear	Participants: no Personnel: no, telephone interventions were made by interviewers, therefore they weren't blinded. Outcome assessors: unclear if the outcome assessors ran the meetings and if they were blinded or not
Incomplete outcome data addressed?	Yes	'An intent-to-treat analysis was performed on all patients who were followed up (n = 178) and the results were the same as in those 172 patients who got at least one intervention' (p. 86)
Free of selective reporting?	Yes	No reason to suspect that all outcomes were not measured
Free of other bias?	Yes	No apparent other sources of bias

CLARKE2002

Bibliographic reference	Clarke, T., Baker, P., Watts, C. J., *et al.* (2002) Self-harm in adults: a randomised controlled trial of nurse-led case management versus routine care only. *Journal of Mental Health*, *11*, 167–176.
Methods	Allocation: random numbered lists stratified for sex and admitting hospital; constructed independently of research team; administrator provided clinician with allocation by telephone after patient details given Follow-up period: 12 months N lost to follow-up: 0 out of 467 (0%) for repetition data
Participants/ demographic/ diagnosis	Total N: 467 N used in analysis: experimental 220, control 247 Setting: East London/Essex, UK Inclusion criteria: (i) resident in catchment area; (ii) aged 16 years or older; (iii) not aged 16 to 19 years and still in full-time secondary education; (iv) overdoses did not include recreational or problematic alcohol and/or drug usage.

	Gender: female 56% (n = 263) Profile: repeaters 47% (n = 104); psychiatric history 17% (n = 80); alcohol problems 13% (n = 60); schizoaffective disorder 3% (n = 12) Source of participants: patients presenting to hospital for self-harm
Interventions	Experimental: case management consisting of psychosocial assessment, a negotiated care plan and 'open access' to case manager who helped patient identify and access suitable services plus usual care. Control: usual care consisting of triage, medical and psychosocial assessment, and treatment as required Therapists: assessing researchers/case managers Type of therapy offered: experimental – case management; control –usual care Length of treatment: up to 6 months, reviewable
Outcomes	Included: (i) repetition; (ii) suicide (review authors contacted trialist for this information) Excluded: none
Notes	Repetition data from hospital admission records

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'Randomisation was conducted using random numbered lists, stratified for sex and admitting hospital....The researchers were required to telephone an administrator with possible candidates' details and were then informed of the treatment group' (p. 169). Probably done.
Allocation concealment?	Yes	'The random number lists were constructed independently of the research team and they did not have sight of them. ... The researchers were required to telephone an administrator with possible candidates' details and were then informed of the treatment group' (p. 169). Probably done.
Blinding?	Unclear	Participants: no, the nature of the study meant that participants knew if they were receiving the intervention treatment or not. Personnel: no, nature of the study meant that personnel knew if they were administering the intervention treatment or not. Outcome assessors: yes – no details reported; however, with readmission rates being the primary outcome and having been assessed by follow-up via A&E records it does not seem likely that blinding was an issue.
Incomplete outcome data addressed?	Yes	Trial profile (p. 171) does not show any dropouts, because all patients were followed up at 12 months via A&E records. 'Data analysis proceeded on an intention to treat basis using the unpaired *t*-test procedure, Yates' corrected chi-square and univariate and multivariate logistic regression. The analysis

		was carried out with SPSS 9 for Windows' (p. 170).
Free of selective reporting?	Unclear	Suicide data was obtained from trial investigators, reducing risk of bias
Free of other bias?	Yes	No apparent other sources of bias

CRAWFORD2010

Bibliographic reference	Crawford, M. J., Csipke, E., Brown, A., *et al.* (2010) The effect of referral for brief intervention for alcohol misuse on repetition of deliberate self-harm: an exploratory randomized controlled trial. *Psychological Medicine*, *40*, 1821–1828.
Methods	Allocation: adequate allocation concealment and sequence generation; pragmatic RCT by sealed envelopes Follow-up period: 3 and 6 months after trial entry Percentage lost to follow-up: 35% at 3 months and 37% at 6 months
Participants/ demographic/ diagnosis	Total N: 103 N used in analysis: experimental 51, control 51 Setting: UK Inclusion criteria: participants admitted to A&E following self-harm; all misused alcohol according to Paddington Alcohol Test; aged over 18 years Gender: female 49% Profile: aged approximately 37 to 38 years; overdose 72%; self-cut 21%; 67 of 75 assessed for personality disorder met threshold for personality disorder using Standardised Assessment of Personality: Abbreviated Scale. Source of participants: patients presenting to A&E following self-harm
Interventions	Experimental: brief intervention: appointment card for patient to re-attend A&E for appointment with alcohol nurse specialist with health leaflet on alcohol and health. Appointment consisted of 30-minute assessment and discussion of current and past drinking behaviours. Provided advice and options of referrals. It was a patient-centred and non-confrontational approach. Control: treatment as usual: blank piece of card with health info leaflet on alcohol and health Therapist: alcohol nurse specialist Type of therapy offered: experimental – brief intervention; control –usual care Length of treatment: unclear, possibly one 30 minute session
Outcomes	A&E repetitions (hospital based); alcohol-use disorders test; GHQ; assessed for personality disorder
Notes	Repetition data from hospital records

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	-
Allocation concealment?	Yes	-
Blinding?	Unclear	Participants: unclear Personnel: N/A Outcome assessors: yes
Incomplete outcome data addressed?	Yes	-
Free of selective reporting?	Yes	-

Free of other bias?	Unclear	High prevalence of co-existing personality disorders. Also, other approaches to reduce alcohol consumption could have affected outcome

DONALDSON2005

Bibliographic reference	Donaldson, D., Spirito, A. & Esposito-Smythers, C. (2005) Treatment for adolescents following a suicide attempt: results of a pilot trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, *44*, 113–120.
Methods	Allocation: simple randomisation using random numbers table (reviews authors obtained this information from trialists) Follow-up period: 3 and 6 months; follow-up with subsample at 12 months. N lost to follow-up: 8 out of 39 (21%) for repetition data
Participants/ demographic/ diagnosis	Total N: 39 N used in analysis: experimental 21, control 18 Setting: Northeast US. Inclusion criteria: (i) aged 12 to 17 years; (ii) primary language was English; (iii) no psychosis as indicated on mental status examination; (iv) clinician judgment that intellectual functioning did not precluded outpatient psychotherapy; (v) outpatient care indicated; (vi) intent to die indicated. Profile: mean age 15 years; repeaters 48% (N = 31; n = 15); MDD diagnosis 29% (N = 31; n = 9); alcohol-use disorder 19% (N = 31; n = 6) Source of participants: patients presenting to a general paediatric emergency department or inpatient unit of an affiliated child psychiatric hospital after a suicide attempt.
Interventions	Experimental: skills-based treatment focused on problem solving and affect management skills; taught problem solving and cognitive and behavioural strategies and given homework assignments to strengthen skills. Treatment comprised two parts: (i) active treatment (first 3 months) included six individual sessions and one adjunct family session with two additional family sessions and two crisis sessions available at therapist's discretion; (ii) maintenance treatment (last three months) included three sessions. Control: supportive relationship therapy focused on adolescent's mood and behaviour; unstructured sessions which addressed reported symptoms and problems; specific skills not taught, designed to be close to usual care for this population in this community. Therapist: five clinicians and two individuals with master's degrees provided treatment for both study arms Type of therapy offered: experimental – skills-based treatment; control – supportive relationship therapy Length of treatment: 6 months
Outcomes	Included: (i) repetition; (ii) suicide (review authors contacted trialist for this information); (iii) suicidal ideation; (iv) depression; (v) problem solving; (vi) compliance (measured in two ways). Excluded: (i) anger
Notes	Repetition data from: reports from adolescents and parents

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'Randomized to one of two treatment conditions' (p. 114) A random numbers table was used (information from trialists)
Allocation concealment?	Unclear	No information given
Blinding?	Unclear	Participants: No details reported, but both treatments were similar so it is possible that the participants were unaware of which treatment they were receiving. Personnel: Therapists aware of different types of treatment and to whom they were giving it Outcome assessors: No details about blinding given
Incomplete outcome data addressed?	Unclear	Of the 39 randomised participants, 31 completed the 3- and/or 6-month evaluations. 'Follow-up data from all 31 families who completed follow-ups (regardless of number of treatment sessions attended) were included in data analyses consistent with an intent to-treat model' (p. 115). The authors compared study participants at baseline with those who dropped out of treatment and concluded there were 'no significant differences' in the results obtained.
Free of selective reporting?	Unclear	Suicide data was obtained from trial investigators, reducing risk of bias
Free of other bias?	Unclear	Contamination possible given that the *same* seven therapists delivered different treatments to the different groups.

DUBOIS1999

Bibliographic reference	Dubois, L., Walter, M., Bleton, L., *et al.* (1999) Evaluation comparative et prospective d'un protocole de prise en charge specifique de jeunes suicidants: analyse du diagnostic psychiatrique initial, de l'observance therapeutique et du taux de recidive a un an (resultats preliminaires). *Annales Medico-Psychologiques*, *157*, 557–561.
Methods	Allocation: random assignment Follow-up period: 12 months N lost to follow-up: 18 out of 102 (17.6%) for repetition data.
Participants/ demographic/ diagnosis	Total N: 102 N used in analysis: experimental 51, control 51 Setting: Bohars, France Inclusion criteria: (i) attended emergency department after a suicide attempt; (ii) aged 15 to 34 years; (iii) not hospitalised for more than 24 hours; (iv) not currently being treated by a psychiatrist. Profile: female 80% (n = 82)

	Source of participants: patients attending emergency department
Interventions	Experimental: brief psychotherapy: five appointments during first month following the index episode following a specific therapeutic model Control: treatment as usual: attended an assessment by a clinical psychiatrist and upon leaving were followed-up by a psychiatrist or psychologist Therapists: participants continued with the same therapist who initially saw them at hospital Type of therapy offered: brief psychotherapy Length of treatment: 1 month
Outcomes	Included: (i) repetition; (ii) suicide Excluded: (i) compliance
Notes	Repetition data from: unknown Compliance data were not reported for the control group so this outcome was excluded

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	'Two groups, with 51 patients each, [were] distributed by randomisation' (p. 557) The process of randomisation is not described
Allocation concealment?	Unclear	No details reported
Blinding?	No	Participants: no, nature of study suggests that patients were aware of the type of treatment they were receiving. Personnel: no, therapist would have been aware of giving the two different types of treatments Outcome assessors: no – 'Patients were evaluated by a clinician different to their therapist' (p. 558)
Incomplete outcome data addressed?	No	Of the 70 participants, 34 refused to attend follow-up and 12 were lost to follow-up (could not be found). No further reasons given though. It is noted that less than two thirds of patients attended three appointments. No ITT analysis attempted
Free of selective reporting?	Unclear	No reason to suspect that all outcomes were not measured; however, in the absence of the trial protocol, cannot be certain.
Free of other bias?	Yes	No suggestion of other sources of bias

EVANS1999A

Bibliographic reference	Evans, M. O., Morgan, H. G., Hayward, A., *et al.* (1999a) Crisis telephone consultation for deliberate self-harm patients: effects on repetition. *British Journal of Psychiatry*, *175*, 23–27.
Methods	Allocation: sealed envelope containing an emergency 'green' card or a 'dummy card' Follow-up period: 12 months

	N lost to follow-up: 0 out of 827 (0%) for repetition data
Participants/ demographic/ diagnosis	Total N: 827 N used in analysis: experimental 417, control 410 Setting: Bristol, UK Inclusion criteria: (i) referred for routine psychiatric evaluation; (ii) resident in catchment area; (iii) judged likely to use intervention appropriately; (iv) made contact with and used mental health services; (v) acceptable level of aggressive behaviour; (vi) no inappropriate substance abuse leading to repetitive presentation in which participant was aggressive or unable to engage in treatment. Gender: female 55.4% (n = 458) Profile: mean age 33.4 years; previous history of self-harm 42% (n = 349) Source of participants: patients admitted to general hospital following self-harm episode
Interventions	Experimental: emergency card plus treatment as usual: participants were provided with an emergency card offering 24-hour service for crisis telephone consultation with an on-call psychiatrist. Control: treatment as usual Therapist: on-duty trainee psychiatrist Type of therapy offered: experimental – emergency card plus usual care; control – usual care Length of treatment: 6 months
Outcomes	Included: (i) repetition; (ii) suicide Excluded: none
Notes	Repetition data from: A&E and hospital admission data

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'Randomised ... using the sealed envelope technique' (p. 23) Probably done
Allocation concealment?	Yes	'Randomised ... using the sealed envelope technique, ensuring that it was impossible to tell from feeling or looking at the envelopes whether they contained a green card or a 'dummy card' (which was not given out)' (p. 23). Probably done
Blinding?	Unclear	Participants: no Personnel: no Outcome assessors: possibly blinded
Incomplete outcome data addressed?	Yes	No information on drop outs, but 'all analyses were conducted on an intention-to-treat basis' (p. 24). 'The effects on DSH [deliberate self-harm] repetition of provision of a green card were measured in terms of the odds ratio comparing the odds of repeat DSH in those randomised to the intervention arm of the trial with the odds of repetition in the control arm. The significance of

		the difference between the groups was determined using the X^2 statistic. Differences in time to first repeat were tested using the log rank test' (p. 24).
Free of selective reporting?	Unclear	No reason to suspect that all outcomes were not measured; however, in the absence of the trial protocol, cannot be certain.
Free of other bias?	Yes	No suggestion of other sources of bias

EVANS1999B

Bibliographic reference	Evans, K., Tyrer, P., Catalan, J., *et al.* (1999b) Manual-assisted cognitive-behaviour therapy (MACT): a randomized controlled trial of a brief intervention with bibliotherapy in the treatment of recurrent deliberate self-harm. *Psychological Medicine*, *29*, 19–25.
Methods	Allocation: opaque sealed envelopes opened sequentially Follow-up period: 6 months N lost to follow-up: 2 out of 34 (6%) for repetition data
Participants/ demographic/ diagnosis	Total N: 34 N used in analysis: experimental 18, control 16 Setting: London, UK Inclusion criteria: (i) personality disturbance (antisocial, dissocial, impulsive or borderline); (ii) at least one episode of self-harm in 12 months preceding entry to trial; (iii) not diagnosed with alcohol or drug dependence, schizophrenia, or organic psychiatric disorder. Gender: female 62% (n = 21) Profile: age range 16 to 50 years; repeaters 100% (n = 34); personality disorder 100% (n = 34) Source of participants: patients seen after an episode of self-harm in two hospitals in the London area (Paddington and Chelsea, Westminster)
Interventions	Experimental: MACT (two to six sessions): basic cognitive techniques, problem solving, techniques for managing emotions and thoughts, and relapse prevention plans individuals with personality disorders. Control: usual care: five participants had contact with a psychiatrist, three saw a community mental health team, four saw a specialist social worker, and two saw no mental health professional. Therapist: one psychiatrist, two nurses and two social workers Type of therapy offered: experimental – CBT; control – usual care Length of treatment: varied
Outcomes	Included: (i) repetition; (ii) depression; (iii) compliance Excluded: (i) time to repetition; (ii) cost of care; (iii) social functioning; (iv) anxiety
Notes	Repetition data from: interview and hospital records Five participants in experimental group did not see a therapist and received all input from the booklets. One participant in experimental group did not have any intervention.

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'Patients were allocated by opening opaque sealed envelopes sequentially at each centre'

		(p. 20). Probably done
Allocation concealment?	Yes	'Patients were allocated by opening opaque sealed envelopes sequentially at each centre' (p. 20) Probably done
Blinding?	Unclear	Participants: the nature of this study means it was unlikely that participants were blinded to the type of treatment they were receiving. Personnel: The nature of this study means it was unlikely that personnel (a psychiatrist, two nurses and two social workers) were blinded to the type of treatment they were giving. Outcome assessors: probably done 'Baseline assessments, before randomization, and follow-up assessments, at 6 months, were completed by an independent assessor, who had no contact with the clinical teams during the study and made assessments without any knowledge of treatment received' (p. 20).
Incomplete outcome data addressed?	Yes	Of the 34 participants, two dropped out after initial assessment and randomisation and 'prior to knowledge of treatment allocation'. They were then excluded from analysis, which the authors felt was appropriate, as had no service provided to them following the initial assessment.
Free of selective reporting?	Unclear	No reason to suspect that all outcomes were not measured; however, in the absence of the trial protocol, cannot be certain.
Free of other bias?	Yes	No suggestion of other sources of bias

FLEISCHMANN2008

Bibliographic reference	Fleischmann, A., Bertolote, J. M., Wasserman, D., *et al.* (2008) Effectiveness of brief intervention and contact for suicide attempters: a randomized controlled trial in five countries. *Bulletin of the World Health Organisation*, *86*, 703–709.
Methods	Allocation: random number table using opaque sealed envelopes Follow-up period: 18 months N lost to follow-up: 204/1867 (11%) for repetition data
Participants/ demographic/ diagnosis	Total N: 1867 N used in analysis: experimental 922, control 945 Setting: Brazil, India, Sri Lanka, Iran and China Inclusion criteria: (i) diagnosis of self-harm/self-poisoning by medical staff; (ii) did not die in the ward; (iii) no clinical conditions which would disallow interview; (iv) has not left hospital against medical order; (v) is not resident in a different catchment area (vi) has no language difficulties. Gender: female 58% (n = 1086) Profile: mean age: 23 years Source of participants: patients emergency care settings within a defined catchment area with a population of at least 250000

Interventions	Experimental: treatment as usual + brief intervention ('information about suicidal behaviour as a sign of psychological and/or social distress, risk and protective factors, basic epidemiology, repetition, alternatives to suicidal behaviours, and referral options') + contact (via phone or visits; referral support). Control: treatment as usual 'according to the norms prevailing in the respective emergency departments' (typically treatment for somatic problems) Therapist: clinician (such as psychiatrist, nurse, doctor) Type of therapy offered: experimental – CBT; control – usual care Length of treatment: 18 months
Outcomes	Included: (i) repetition; (ii) suicide (information obtained from trialists) Excluded: (i) compliance; (ii) depression; (iii) hopelessness; (iv) impulsiveness; (v) social support; (vi) suicidal intent; (vii) anger; (viii) well-being
Notes	Repetition data obtained from trial investigators Excluded outcomes are found in the study protocol

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'An allocation sequence based on a random-number table was used to randomly assign all enrolled subjects...' (p. 704).
Allocation concealment?	Yes	'[T]he allocation sequence was maintained in a separate location to prevent clinician bias' (p. 704).
Blinding?	Unclear	Participants: yes Personnel: no Outcome assessors: unclear
Incomplete outcome data addressed?	No	
Free of selective reporting?	Unclear	Additional outcome information collected was not reported in the paper. However, it is unclear whether the outcomes are reported in related papers.
Free of other bias?	Unclear	Repetition data was obtained from trial investigators (paper to be submitted), reducing risk of bias.

GIBBONS1978

Bibliographic reference	Gibbons, J. S., Butler, J., Urwin, P., *et al.* (1978) Evaluation of a social work service for self-poisoning patients. *British Journal of Psychiatry*, *133*, 111–118.
Methods	Allocation: participants were randomly assigned using sequentially numbered, sealed, opaque envelopes (review authors obtained this information through correspondence with trial list). Follow-up period: 12 months N lost to follow-up: 0 out of 400 (0%) for repetition data
Participants/ demographic/ diagnosis	Total N: 400 N used in analysis: experimental 200, control 200 Setting: Southampton, UK Inclusion criteria: (i) over 17 years old; (ii) no immediate suicide risk; (iii) no formal psychiatric illness

	Gender: females 71% (n = 284) Profile: self-poisoning patients; repeaters and first-timers. Depressive neurosis 44% (n = 176); phobic neurosis 2% (n = 8); affective psychosis 2% (n = 8); schizophrenia 1% (n = 4) Source of participants: patients who presented to an A&E department after deliberate self-poisoning
Interventions	Experimental: crisis-orientated, time-limited, task-centred social work at home. Problem-solving intervention for personal relationships, emotional distress, practical problems and so on. Control: usual care: GP referral 54% (108); psychiatric referral 33% (n = 66); unspecified referral 13% (n = 26) Therapist: two social workers Type of therapy offered: experimental – task-centred case-work; control – usual care Length of treatment: 3 months
Outcomes	Included: (i) repetition; (ii) depression; (iii) social problems Excluded: (i) satisfaction with service
Notes	Repetition data from: hospital records

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	Participants were randomly assigned using sequentially numbered, sealed, opaque envelopes (review authors obtained this information through correspondence with trialist).
Allocation concealment?	Yes	Participants were randomly assigned using sequentially numbered, sealed, opaque envelopes (review authors obtained this information through correspondence with trialist).
Blinding?	Unclear	Particiapants: no Personnel: no Outcome assessors: unclear, probably done. Reliability was also checked (p. 116)
Incomplete outcome data addressed?	Yes	
Free of selective reporting?	Unclear	No reason to suspect that all outcomes were not measured; however, in the absence of the trial protocol, cannot be certain.
Free of other bias?	Yes	No suggestion of other sources of bias

GREEN2011

Bibliographic reference	Green, J., Wood, A., Kerfoot, M., *et al.* (2011) Group therapy treatment for adolescents with repeated self-harm: a randomised controlled trial with economic evaluation. *British Medical Journal*, *342*, d682.
Methods	Allocation: By minimisation controlling for self-esteem, presence of behavioural disorder or depressive disorder and presence or absence of high psychosocial risk Follow-up period: 12 months

	N lost to follow-up: 4%
Participants/ demographic/ diagnosis	Total N: 366 N used in analysis: experimental 183, control 183 Setting: Manchester, UK Inclusion criteria: (i) between 12 and 17 years old; (ii) presenting with two or more episodes of self-harm during the previous 12 months Profile: adolescents with two or more episodes of SH during previous12 months Source of participants: CAMHS
Interventions	Experimental: Developmental group psychotherapy; manualised developmental group specifically designed for adolescents who harm themselves, with an acute phase over 6 weekly sessions followed by a booster phase of weekly groups as long as needed. Control: usual care: local CAMHS teams provided standard routine care according to clinical judgement. Centres excluded any group intervention or CBT from routine care during the trial. Therapist: clinicians which had a minimum of three years relevant post-qualifying experience Type of therapy offered: experimental – developmental group psychotherapy; control – usual care Length of treatment: six initial sessions, transition up to 12 months
Outcomes	Repetition of self-harm (interview-based assessment), suicide ideation (Suicide Ideation Questionnaire)
Notes	n/a

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	-
Allocation concealment?	Yes	-
Blinding?	Unclear	Participants: no Assessors and personnel: yes
Incomplete outcome data addressed?	Yes	-
Free of selective reporting?	Yes	-
Free of other bias?	Yes	-

GUTHRIE2001

Bibliographic reference	Guthrie, E., Kapur, N., Kway-Jones, K., *et al.* (2001) Randomised controlled trial of brief psychological intervention after deliberate self poisoning. *British Medical Journal*, *323*, 135–138.
Methods	Allocation: after consent, recruiting member of research team referred to an allocation sequence, provided by the trial statistician and based on a computer generated list of random numbers to assign participants in groups of 12 participants (which were stratified according to whether or not participants had a history of self-harm). Follow-up period: 6 months N lost to follow-up: 0 out of 119 (0%) for repetition data
Participants/ demographic/ diagnosis	Total N: 119 N used in analysis: experimental 58, control 61 Setting: Manchester, UK

	Inclusion criteria: (i) aged 18 to 65 years; (ii) presenting with episode of deliberate self-poisoning; (iii) able to read and write English; (iv) living in the catchment area of the hospital; (v) registered with a GP; (vi) not needing psychiatric treatment. Gender: female 55% (n = 65) Profile: mean age 31.2 years; repeaters 60% (n = 71); psychiatric history 55% (n = 65) Source of participants: patients presenting to hospital after deliberate self-poisoning
Interventions	Experimental: psychodynamic interpersonal therapy consisting of identification of personal difficulties; left to resolve interpersonal difficulties causing distress through conversational approach focused on feelings and relating them to problems and relationships to develop shared understanding and approaches to family problems; individual; home-based weekly 50-minute sessions. Control: usual care, in most cases assessment by doctor in ED and referral to psychiatry outpatient, addiction services or GP. Therapists: nurse therapists Type of therapy offered: experimental – psychodynamic interpersonal therapy; control – usual care Length of treatment: 4 weeks
Outcomes	Included: (i) repetition; (ii) suicide; (iii) suicidal ideation; (iv) depression. Excluded: (i) patient satisfaction.
Notes	Repetition data from: self-report and hospital records.

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'Participants [were] randomised' (p. 135) Investigators clarified, 'Allocation: after consent, recruiting member of research team referred to an allocation sequence, provided by the trial statistician and based on a computer generated list of random numbers to assign participants in groups of 12 participants (which were stratified according to whether or not participants had a history of DSH [deliberate self-harm]).'
Allocation concealment?	Yes	'Participants [were] randomised' (p. 135) Investigators clarified, 'Allocation: after consent, recruiting member of research team referred to an allocation sequence, provided by the trial statistician and based on a computer generated list of random numbers to assign participants in groups of 12 participants (which were stratified according to whether or not participants had a history of DSH).'
Blinding?	Unclear	Participants: no Personnel: no Outcome assessors: unclear, probably done
Incomplete outcome data addressed?	Yes	No information on drop outs, but, 'we included in the analysis all patients who completed the assessments at the end of treatment or at six month follow up assessments. Comparisons between groups were made on an intention to treat basis' (p. 136).

		'We compared normally distributed variables using *t* tests and used analysis of covariance in the comparisons at follow up to adjust for baseline differences' (p. 136).
Free of selective reporting?	Unclear	No reason to suspect that all outcomes were not measured; however, in the absence of the trial protocol, cannot be certain.
Free of other bias?	Yes	No suggestion of other sources of bias

HARRINGTON1998

Bibliographic reference	Harrington, R., Kerfoot, M., Dyer, E., *et al.* (1998) Randomized trial of a home-based family intervention for children who have deliberately poisoned themselves. *Journal of the American Academy of Child & Adolescent Psychiatry*, *37*, 512–518.
Methods	Allocation: series of opaque sealed envelopes which contained either a blank sheet or one bearing the letter F (for family therapy) were prepared by a researcher. These were opened by a social worker when participants were assessed. Follow-up period: 6 months. N lost to follow-up: 13 out of 162 (8%) for repetition data
Participants/ demographic/ diagnosis	Total N: 162 N used in analysis: experimental 85, control 77 Setting: Manchester, UK Inclusion criteria: (i) children aged 16 years or younger; (ii) living in a family; (iii) not in social service care; (iv) no current investigation of physical or sexual abuse; (v) not currently in inpatient treatment; (vi) not learning disabled; (vii) not seriously suicidal; (viii) had not self-injured (such as cutting or hanging). Gender: female 89.5 % (n = 145) Profile: age range 10 to 16 years, mean age 14.5 years; major depression 64.5% (n = 104); conduct disorder 10.5% (n = 17); self-poisoned 100% (n = 162) Source of participants: patients referred to mental health teams in four hospitals
Interventions	Experimental: manualised home-based family therapy intervention (one assessment session plus four home visits) plus routine care Control: routine psychiatric aftercare Therapist: 2 psychiatric social workers with a masters degree Type of therapy offered: experimental – family therapy; control – routine psychiatric aftercare Length of treatment: not stated
Outcomes	Included: (i) repetition (data obtained from trialists); (ii) suicide; (iii) suicidal ideation; (iv) compliance; (v) hopelessness; (vi) problem solving; (vii) depression. Excluded: (i) family functioning; (ii) satisfaction with treatment; (iii) cost-effectiveness; (iv) parent GHQ

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'[A] series of opaque and sealed envelopes containing either a blank or the letter F were prepared and randomly assorted by an assistant' (p. 2). Shuffle technique probably done

Allocation concealment?	Yes	'[A] series of opaque and sealed envelopes containing either a blank or the letter F were prepared and randomly assorted by an assistant' (p. 2) and later opened by a social worker. Probably done
Blinding?	Unclear	Participants and personnel not blinded. Outcome assessors probably done.
Incomplete outcome data addressed?	Yes	'Outcome assessments were conducted with 154 (96%) of 162 cases at two months and 149 (92%) of 162 cases at six months' (p. 3), but no further details. 'All the analyses were conducted 'intent to treat'' (p. 3), no further information
Free of selective reporting?	Yes	No reason to suspect that all outcomes were not measured
Free of other bias?	Yes	No suggestion of other sources of bias

HAWTON1981

Bibliographic reference	Hawton, K., Bancroft, J., Catalan, J., *et al.* (1981) Domiciliary and out-patient treatment of self-poisoning patients by medical and non-medical staff. *Psychological Medicine*, *11*, 169–177.
Methods	Allocation: 'Random number method' (sealed, opaque envelopes used) Follow-up period: 12 months N lost to follow-up: 0 out of 96 (0%) for repetition data
Participants/ demographic/ diagnosis	Total N: 96 N used in analysis: experimental 48, control 48 Setting: Oxford, UK. Inclusion criteria: (i) aged over 16 years; (ii) not in psychiatric care; (iii) not residing outside of study area; (iv) not requiring treatment for alcohol or drug addiction; (v) not in need of inpatient psychiatric care; (vi) suitable for randomisation, such as not of no fixed abode. Gender: female 70% (n = 67) Profile: aged over 16 years 100% (n = 96); mean age 25.3 years; repeaters 32% (n = 31) Source of participants: patients admitted to a general hospital following deliberate self-poisoning
Interventions	Experimental: domiciliary (home-based) therapy where frequency of treatment sessions was flexible according to therapist's assessment of needs. Open telephone access to the general hospital service. Control: out-patient therapy once a week in an outpatient clinic in a general hospital Therapist: two junior psychiatrists, one psychiatric nurse and one social worker Type of therapy offered: in both groups brief problem-orientated psychological therapy Length of treatment: up to 3 months
Outcomes	Included: (i) repetition; (ii) compliance; (iii) improvement in problems; (iv) suicidal ideation Excluded: (i) mood; (ii) social adjustment; (iii) GP questionnaire
Notes	Repetition data from: hospital records, interview with patient and GP

	questionnaire

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'A random number method was used to select subjects and each patient was then allocated to 1 of the 2 treatment conditions by a randomized procedure' (p. 172). Probably done
Allocation concealment?	Yes	Sealed, opaque envelopes used (information provided by investigators)
Blinding?	Unclear	Participants and personnel not blinded. Outcome assessors remained blind to the treatment offered.
Incomplete outcome data addressed?	Unclear	6% of patients were not available for post-treatment assessment and 15% were not available for 6 month assessment. No further details given.
Free of selective reporting?	Yes	No reason to suspect that all outcomes were not measured
Free of other bias?	Yes	No suggestion of other sources of bias

HAWTON1987

Bibliographic reference	Hawton, K., McKeown, S., Day, A., *et al.* (1987) Evaluation of out-patient counselling compared with general practitioner care following overdoses. *Psychological Medicine*, *17*, 751–761.
Methods	Allocation: random allocation using opaque envelopes according to a random number table in blocks or eight with equal allocation to each treatment condition. Follow-up period: 12 months. N lost to follow-up: 0 out of 80 (0%) for repetition data
Participants/ demographic/ diagnosis	Total N: 80 N used in analysis: experimental 41, control 39 Setting: Oxford, UK Inclusion criteria: (i) over 16 years old; (ii) registered with a general practitioner; (iii) living up to 15 miles away from hospital; (iv) suitable for outpatient counselling; (v) not in need of psychiatric care (day patient or inpatient); (vi) not in current psychiatric care; (vii) willing to accept aftercare offered. Gender: female 66% (n = 53) Profile: repeaters 31% (n = 25) Source of participants: patients admitted to a general hospital for self-poisoning
Interventions	Experimental: outpatient problem-solving therapy by non-medical clinicians. Up to eight sessions, each lasting on average 54 minutes Control: GP care (such as individual support, marital therapy) Therapist: five counsellors from clinical team in the general hospital psychiatric service Type of therapy offered: experimental – problem-solving therapy; control – various support, GP counselling, psychiatric referral Length of treatment: not stated

Outcomes	Included: (i) repetition; (ii) suicide; (iii) depression; (iv) improvement in problems Excluded: (i) social adjustment; (ii) attitudes to treatment; (iii) GHQ; (iv) GP interview; (v) compliance
Notes	Repetition data from: hospital records plus interview with patient and interview with GP of patient. Compliance data were only reported for the intervention group, so this outcome was not included.

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'Patients were allocated by a randomized procedure' (p. 752). Investigators clarified that sequence was generated using a random number table in blocks or eight with equal allocation to each treatment condition. No further details given
Allocation concealment?	Yes	Opaque envelopes were used (information supplied by investigators)
Blinding?	Unclear	Participants and personnel not blinded. Outcome assessors remained blind to the treatment offered.
Incomplete outcome data addressed?	Yes	Available case was used for each outcome assessment point, and participants who had dropped out of treatment were included in follow-up assessments. There were no differences in dropout between experimental and control groups.
Free of selective reporting?	Yes	No reason to suspect that all outcomes were not measured
Free of other bias?	Yes	No suggestion of other sources of bias

HAZELL2009

Bibliographic reference	Hazell, P. L., Martin, G., McGill, K., *et al.* (2009) Group therapy for repeated deliberate self-harming adolescents: failure of replication of a randomized trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, *48*, 662–670.
Methods	Allocation: random allocation to groups was carried out by a distant site coordinator Follow-up period: 12 months N lost to follow-up: 0 out of 72 for repetition data
Participants/ demographic/ diagnosis	Total N: 72 N used in analysis: experimental 35, control 37 Setting: Adolescent mental health services in Newcastle, Brisbane North and Logan (Australia) Inclusion criteria: (i) aged between 12 and 16 years; (ii) had been referred to a child and adolescent mental health service in Australian sites at Newcastle, Brisbane North, or Logan; (iii) reported at least two episodes of self-harm in the past year, one of which had occurred in the past 3 months Profile: 90% female: 100% repeaters; 4% had alcohol problems; 0% had substance misuse problems; 57% had depression; 7% had a diagnosis of conduct/oppositional defiant disorder.

	Source of participants: patients referred to a child and adolescent mental health services who had reported two episodes of self-harm in the past year, one within the past 3 months.
Interventions	Experimental: group therapy (influenced by CBT, social skills training, interpersonal psychotherapy, group psychotherapy) plus routine care Control: routine care (including individual counselling, family sessions, medication assessment and review, other care coordination) Therapists: clinicians in community-based adolescent mental health services Type of therapy offered: experimental – group therapy; control – routine care Length of treatment: 12 months
Outcomes	Included: (i) repetition; (ii) suicide; (iii) suicidal ideation; (iv) depression Excluded: none
Notes	Repetition data based on self-report (interview)

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	'The distant site coordinator ... assigned a trial number and randomly allocated that adolescent to group therapy or routine care' (p. 664). Comment: remote site so probably done, but not clear
Allocation concealment?	Yes	'The local site coordinator emailed the distant site coordinator, who assigned a trial number and randomly allocated that adolescent to group therapy or routine care' (p. 664). Comment: remote site so probably done
Blinding?	Unclear	Participants and personnel not blinded. Outcome assessors probably remained blind to the treatment offered.
Incomplete outcome data addressed?	Yes	'Continuous outcome data were analyzed on an intent-to-treat basis' (p. 664) Comment: 'last observation carried forward' method used
Free of selective reporting?	Unclear	No reason to suspect that all outcomes were not measured; however in the absence of the trial protocol it is unclear.
Free of other bias?	Yes	No suggestion of other sources of bias

LIBERMAN1981

Bibliographic reference	Liberman, R. P. & Eckman, T. (1981) Behavior therapy versus insight-oriented therapy for repeated suicide attempters. *Archives of General Psychiatry*, *38*, 1126–1130.
Methods	Allocation: 'Assigned randomly' – method not described Follow-up period: 24 months N lost to follow-up: 0 out of 24 (0%) for repetition data
Participants/ demographic/ diagnosis	Total N: 24 N used in analysis: experimental 12, control 12 Setting: Los Angeles, CA, US

	Inclusion criteria: (i) not psychotic; (ii) not addicted to drugs and alcohol; (iii) without organic brain syndrome; (iv) at least one previous suicide attempt Gender: female 67% (n = 16) Profile: mean age of 29.7 years; aged 18 to 47 years; depressive neurosis 100% (n = 24); most met criteria for personality disorder; repeaters 100% (n = 24) Source of participants: patients were referred by the psychiatric emergency service or the hospital A&E department following self-harm
Interventions	Experimental: inpatient treatment with behaviour therapy – treatment consisted of social skills training (17 hours); anxiety management (10 hours) and family work (5 hours). Therapeutic milieu with token economy. Aftercare at community mental health centre or with private therapist. Control: inpatient treatment with insight-orientated therapy – treatment consisted of individual therapy (17 hours); group therapy and psychodrama (10 hours) and family therapy (5 hours). Therapeutic milieu with token economy. Aftercare at community mental health centre or with private therapist. Therapist: (i) behaviour therapy – psychologist assisted by two bachelor-level technicians; (ii) insight therapy – experienced social workers and psychologists (N not specified) Type of therapy offered: experimental – behaviour therapy; control – insight-orientated therapy Length of treatment: 10 days
Outcomes	Included: (i) repetition; (ii) suicidal ideation; (iii) depression Excluded: (i) reinforcement; (ii) assertiveness; (iii) fear
Notes	Repetition data from: interview at 24 month follow-up

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	'Patients were randomly assigned' (p. 1127)
Allocation concealment?	Unclear	No details given.
Blinding?	Unclear	Participants: Treatment was similar so it was possible that participants were blinded, but no details were given. Personnel: Due to the nature of this study, personnel (therapists) would have been aware of which treatment they were giving. Outcome assessors: No details given
Incomplete outcome data addressed?	Yes	Four participants dropped out during the early stages of the trial (two in each arm) and were not included in any analyses, but no further information was given.
Free of selective reporting?	Unclear	No reason to suspect that all outcomes were not measured; however, in the absence of the trial protocol, cannot be certain.
Free of other bias?	Yes	No suggestion of other sources of bias

MCLEAVEY1994

Bibliographic reference	McLeavey, B., Daly, R., Ludgate, J., *et al.* (1994) Interpersonal problem-solving skills training in the treatment of self-poisoning patients. *Suicide and Life-Threatening Behavior*, *24*, 382–394.
Methods	Allocation: participants were assigned on a random basis to the two treatment groups using an open random number table Follow-up period: 12 months N lost to follow-up: 0 out of 39 (0%) for repetition data
Participants/ demographic/ diagnosis	Total N: 39 N used in analysis: experimental 19, control 20 Setting: Cork, Ireland Inclusion criteria: (i) aged 15 to 45 years; (ii) no history of psychosis, mental retardation, or organic cognitive impairment; (iii) not requiring psychiatric treatment (day care or inpatient). Gender: female 74% (n = 29) Profile: mean age 24.4 years; repeaters 35.6% (n = 14); dysthymia 23% (n = 9); dependent personality disorder 15% (n = 6); alcohol abuse 13% (n = 5) Source of participants: patients admitted to A&E department following self-poisoning
Interventions	Experimental: interpersonal problem-solving skills training (five 60-minute sessions): manualised training consisting of instruction, active discussion, reflective listening, modelling, coping strategy, role playing, sentence completion, and prompting. Control: brief problem-solving therapy – therapy-focused on patient's current problems and prevention by helping patient gain insight into problems; no specific skills training. Therapist: clinical psychologists and registrars in psychiatry Type of therapy offered: experimental – interpersonal problem-solving therapy; control – brief problem-solving therapy Length of treatment: 5 weeks
Outcomes	Included: (i) repetition; (ii) suicide; (iii) compliance; (iv) hopelessness; (v) problem solving skills; (vi) number of problems Excluded: (i) self-perception; (ii) Optional Thinking Test; (iii) awareness of consequences
Notes	Repetition data from: hospital records and GP questionnaire Numerical data on number of problems were not available, so this outcome was not reported

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	No	'[P]articipants were assigned on a random basis to the two treatment groups using an open random number table.' (p. 384)
Allocation concealment?	Unclear	No details provided
Blinding?	Unclear	Participants and personnel not blinded. Outcome assessors remained blind to the treatment offered.
Incomplete outcome data addressed?	Unclear	20% of those originally randomised did not complete. Of the 50 randomised participants, five dropped out of treatment before completion

		and six were lost to follow-up – no reasons given. The 39 that completed the trial were the only ones included in the analyses.
Free of selective reporting?	Unclear	Numerical data on number of problems were not available, so this outcome was not reported
Free of other bias?	Yes	No suggestion of other sources of bias

MORGAN1993

Bibliographic reference	Morgan, H. G., Jones, E. M. & Owen, J. H. (1993) Secondary prevention of non-fatal deliberate self-harm. The green card study. *British Journal of Psychiatry*, *163*, 111–112.
Methods	Allocation: random selection from a supply of closed envelopes, half of which contained an emergency green card Follow-up period: 12 months N lost to follow-up: 0 out of 212 (0%) for repetition data
Participants/ demographic/ diagnosis	Total N: 212 N used in analysis: experimental 101, control 111 Setting: Bristol, UK Inclusion criteria: (i) no previous episode of self-harm; (ii) resident within healthcare trust catchment area Profile: mean age 30 years; no repeaters Source of participants: patients admitted to hospital following first episode of self-harm
Interventions	Experimental: standard care plus emergency green card (emergency card indicating that a doctor was available by telephone and how to contact them). Control: standard care, such as referral back to the primary healthcare team, psychiatric inpatient admission. Therapist: telephone contact/face-to-face interviews conducted by doctor on-call Type of therapy offered: experimental – green card plus usual care; control – usual care Length of treatment: 12 months
Outcomes	Included: (i) repetition Excluded: (i) use of green card; (ii) admission to psychiatric hospital; (iii) use of psychiatric services
Notes	Repetition data from: hospital, psychiatric and GP records

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'Allocation to experimental or control group was carried out by random selection from a supply of closed envelopes, half of which contained the green card' (p. 111). Selecting randomly from envelopes ensures adequate sequence generation
Allocation concealment?	Yes	'Closed envelopes' (p. 111) Not reported if envelopes were opaque or not, but probably done
Blinding?	Unclear	Participants: no, personnel and outcome

		assessors: unclear
Incomplete outcome data addressed?	Yes	'Data concerning outcome were obtained for all patients included in the study' (p. 111)
Free of selective reporting?	Yes	No reason to suspect that all outcomes were not reported
Free of other bias?	Yes	No suggestion of other sources of bias

PATSIOKAS1985

Bibliographic reference	Patsiokas, A. T. & Clum, G. A. (1985) Effects of psychotherapeutic strategies in the treatment of suicide attempters. *Psychotherapy: Theory, Research and Practice*, 22, 281–290.
Methods	Allocation: randomly assigned Follow-up period: 3 weeks (end of treatment) N lost to follow-up: unknown for repetition data because data was not reported in this study
Participants/ demographic/ diagnosis	Total N: 15 N used in analysis: experimental 10 (5 cognitive restructuring, 5 problem solving), 5 control Setting: Charleston, SC, US Inclusion criteria: (i) admitted to psychiatric ward for suicide attempt; (ii) not psychotic; (iii) no substance abuse Profile: n/a Source of participants: patients admitted to psychiatric ward for suicide attempt
Interventions	Experimental: two arms of cognitive restructuring with a focus on suicidal ideation or problem solving. Ten 1-hour sessions Control: non-directive therapy – open discussion about suicidal behaviour, problems, and daily life Therapist: one therapist conducted therapy sessions for all three arms Type of therapy offered: experimental – cognitive therapy (arm one) or problem-solving therapy (arm two); control – non-directive Length of treatment: 3 weeks
Outcomes	Included: (i) suicidal ideation (measured in two ways); (ii) hopelessness; (iii) problem solving; (iv) problem solving skills Excluded: (i) flexibility of thinking
Notes	Repetition data from: unknown

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	'Subjects were randomly assigned' (p. 282) No further details provided
Allocation concealment?	Unclear	No details given
Blinding?	Unclear	No details given
Incomplete outcome data addressed?	Unclear	No details given
Free of selective reporting?	Unclear	No reason to suspect that all outcomes were not reported; however, in the absence of the trial protocol, cannot be certain.
Free of other bias?	Unclear	No suggestion of other sources of bias

SALKOVSKIS1990

Bibliographic reference	Salkovskis, P. M., Atha, C. & Storer, D. (1990) Cognitive-behavioural problem solving in the treatment of patients who repeatedly attempt suicide. A controlled trial. *British Journal of Psychiatry*, *157*, 871–876.
Methods	Allocation: predetermined random allocation (sampling without replacement using envelopes) Follow-up period: 12 months N lost to follow-up: 0 out of 20 (0%) for repetition data
Participants/ demographic/ diagnosis	Total N: 20 N used in analysis: experimental 12, control 8 Setting: Leeds, UK Inclusion criteria: (i) age 16 to 65 years; (ii) of fixed abode and living within Health Authority boundary; (iii) not requiring immediate psychiatric treatment; (iv) non-psychotic; (v) no serious organic illness; (vi) antidepressants taken as part of the overdose; (vii) two or more previous attempts; (viii) Buglass and Horton Risk of Repetition Scale score of at least 4. Participants had to fulfil at least two of criteria vi–viii to be included. Gender: female 50% (n = 10) Profile: mean age 27.5 years; repeaters with a high risk of further repetition 100% (n = 20) Source of participants: patients who were referred by duty psychiatrist following antidepressant self-poisoning and assessed in an A&E department
Interventions	Experimental: domiciliary (home-based) cognitive-behavioural problem-solving treatment. Five 1-hour sessions Control: usual care Therapist: community psychiatric nurse Type of therapy offered: experimental – problem-solving therapy; control – usual care Length of treatment: 1 month
Outcomes	Included: (i) repetition; (ii) depression; (iii) hopelessness; (iv) suicide (review authors contacted trialist for this information); (v) suicidal ideation (measured in two ways); (vi) severity of three main problems; (vii) problem solving. Excluded: (i) mood
Notes	Repetition data from: hospital records

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'Predetermined random allocation' (p. 872) Investigators clarified that this was a method known as 'sampling without replacement using envelopes'.
Allocation concealment?	Yes	Sealed envelopes used
Blinding?	Unclear	No details provided
Incomplete outcome data addressed?	Yes	-
Free of selective reporting?	Unclear	Suicide data was obtained from trial investigators, reducing risk of bias
Free of other bias?	Yes	No reason to suspect additional biases

SLEE2008

Bibliographic reference	Slee, N., Garnefski, N., van der Leeden, R., *et al.* (2008) Cognitive-behavioural intervention for self-harm: randomised controlled trial. *British Journal of Psychiatry, 192*, 202–211.
Methods	Allocation: randomisation by computer and random number generator provided by an independent investigator Follow-up period: 3 months, 6 months and 9 months after baseline N lost to follow-up: 8 out of 90 (21%) for repetition data
Participants/ demographic/ diagnosis	Total N: 90 N used in analysis: experimental 48, control 42 Setting: Leiden, Netherlands Inclusion criteria: (i) recently engaged in self-harm; (ii) no severe psychiatric disorder requiring intensive inpatient treatment; (iii) Dutch speaking; (iv) no cognitive impairments; (v) live in region of Leiden. Gender: 86% (n = 77) female Profile: aged 15 to 35 years Source of participants: patients presenting to hospital/mental health centre following a self-harm episode
Interventions	Experimental: twelve sessions of CBT plus treatment as usual Control: treatment as usual (such as psychotropic medication, psychotherapy, hospitalisation) Therapist: experienced CBT practitioners Type of therapy offered: experimental – CBT + treatment as usual; control – treatment as usual Length of treatment: 5.5 months
Outcomes	Included: (i) repetition; (ii) suicide; (iii) depression; (iv) compliance; (iv) problem-solving Excluded: (i) anxiety; (ii) self-esteem; (iii) suicidal cognition; (iv) use of psychological and psychiatric services
Notes	Repetition data from: self-report Repetition data provided by participants was subjected to reliability analysis by comparing self-reports to hospital records and information from treatment sessions.

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'Randomisation to treatment was accomplished using a computer program and a random-number generator provided by an independent investigator' (p. 203). Probably done
Allocation concealment?	Yes	Computerised, central allocation used
Blinding?	No	
Incomplete outcome data addressed?	Yes	Of the 90 participants randomised, eight did not receive their allocated intervention and nine were lost to follow-up – reasons given. 'Last observation carried forward' method used for missing data.
Free of selective reporting?	Unclear	No reason to suspect that all outcomes were not reported; however, in the absence of the trial

		protocol, cannot be certain.
Free of other bias?	Unclear	No reason to expect additional biases

SPIRITO2002

Bibliographic reference	Spirito, A., Boergers, J., Donaldson, D., *et al.* (2002) An intervention trial to improve adherence to community treatment by adolescents after a suicide attempt. *Journal of Child and Adolescent Psychiatry*, *41*, 435–442.
Methods	Allocation: simple randomisation using random numbers table Follow-up period: 3 months N lost to follow-up: 13 out of 76 (17%) for repetition data
Participants/ demographic/ diagnosis	Total N: 76 N used in analysis: experimental 36, control 40 Setting: Northeast US Inclusion criteria: (i) adolescents aged 12 to 18 years; (ii) receiving medical care in either the emergency department or paediatrics wards of a children's hospital due to a suicide attempt. Gender: female 90% (n = 63) Profile: n/a Source of participants: patients presenting to hospital after suicide attempt
Interventions	Experimental: compliance enhancement intervention plus standard disposition planning – single 1-hour session that reviewed expectations for outpatient treatment and factors likely to impede attendance. Addressed treatment misconceptions and encouraged adolescent and parent to make a verbal contract to attend treatment. Participants were also contacted by telephone at 1, 2, 4, and 8 weeks after discharge regarding their compliance to treatment. Control: standard disposition planning – treatment based on the judgment of psychiatric clinician who conducted the evaluation. Some attempters in both groups had a brief inpatient psychiatric stay prior to receiving outpatient care. Remainder received outpatient care at local mental health centre. Therapist: three post-doctoral fellows in psychology Type of therapy offered: experimental – compliance enhancement plus standard disposition planning; control – standard disposition planning Length of treatment: 8 weeks
Outcomes	Included: (i) repetition; (ii) suicide (review authors contacted trialist for this information); (iii) compliance Excluded: (i) problems concerning therapy sessions
Notes	Repetition data from: reports by adolescents Repetition data was collected from both parents and young people but only young peoples' responses were used; two cases existed where parents reported repetition of self-harm but young person denied repetition.

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'Randomly assigned' (p. 436) Investigators clarified that a random numbers table was used
Allocation concealment?	Unclear	No details given
Blinding?	Unclear	No details given

Incomplete outcome data addressed?	Unclear	-
Free of selective reporting?	Unclear	Suicide data was obtained from trial investigators, reducing risk of bias
Free of other bias?	Yes	No suggestion of other sources of bias

STEWART2009

Bibliographic reference	Stewart, C. D., Quinn, A, Plever, S., *et al.* (2009) Comparing cognitive behavior therapy, problem solving therapy, and treatment as usual in a high risk population. *Suicide and Life-Threatening Behavior*, *39*, 538–547.
Methods	Allocation: no details. Follow-up period: 2 months. N lost to follow-up: 66% CBT; 62% problem-solving therapy; 34% treatment as usual
Participants/ demographic/ diagnosis	Total N: 32 N used in analysis: CBT 11, problem-solving therapy 12, control 9 Setting: Australia Inclusion criteria: (i) recent suicide attempt with reported suicide intent; (ii) residence within either The Prince Charles Hospital or Royal Brisbane and Women's Hospital Gender: female 53% (n = 17) Profile: n/a Source of participants: patients presenting to a hospital after a suicide attempt, either discharged with referral for community follow-up
Interventions	Experimental: two arms of treatment – (i) problem-solving therapy: developing a problem list, choosing a problem to work through, examining past coping strategies and their usefulness, brainstorming alternative solutions, choosing one solution and setting goals to achieve resolution, four 1-hour sessions; (ii) CBT: behavioural interventions, case conceptualisation, cognitive restructuring, seven 1-hour sessions Control: treatment as usual – telephone calls, home visits, appointments with the psychiatrist, liaison with the client's general practitioner, or networking with social supports. Therapist: manualised treatments administered by the researcher, did not report training Length of treatment: four and seven sessions (1 hour each)
Outcomes	(i) repetition; (ii) hopelessness (BHS); (iii) problem-solving (social problem-solving inventory); (iv) suicidal ideation (Beck Scale for Suicidal Ideation); (v) treatment satisfaction.
Notes	Repetition data from: hospital chart

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	-
Allocation concealment?	Unclear	-
Blinding?	Unclear	-
Incomplete outcome data addressed?	Unclear	-
Free of selective reporting?	Unclear	-

Free of other bias?	Yes	-

TORHORST1987

Bibliographic reference	Torhorst, A., Möller, H. J., Bürk, F., *et al.* (1987) The psychiatric management of parasuicide patients: a controlled clinical study comparing different strategies of outpatient treatment. *Crisis*, *8*, 53–61.
Methods	Allocation: participants were randomly offered treatments Follow-up period: 12 months N lost to follow-up: 11 out of 141 (5.7%) for repetition data
Participants/ demographic/ diagnosis	Total N: 141 N used in analysis: experimental 68, control 73 Setting: Munich, Germany Inclusion criteria: (i) non-psychotic Gender: female 63% (n = 89) Profile: repeaters 48% (n = 68); self-poisoned 100% (n = 141) Source of participants: patients hospitalised after a suicide attempt
Interventions	Experimental: short crisis intervention during hospital stay, fixed outpatient appointment with same therapist as was seen in hospital. Motivational interview, letter and assessment of motivation towards therapy. Control: short crisis intervention during hospital stay, fixed outpatient appointment with a different therapist than was seen in hospital. Motivational interview, letter and assessment of motivation towards therapy. Therapist: three therapists trained in psychotherapy and one therapist trained in behaviour therapy Type of therapy offered: experimental – compliance enhancement plus therapy from same therapist as was seen in hospital; control – compliance enhancement plus therapy from different therapist than was seen in hospital. Length of treatment: 3 months
Outcomes	Included: (i) repetition; (ii) suicide (review authors contacted trialist for this information); (iii) compliance (review authors contacted trialist for this information); (iv) depression (review authors contacted trialist for this information). Excluded: none
Notes	Repetition data from: patient interview In the first phase of this study the efficacy of standard care was assessed in terms of compliance. Eighty-five participants were not randomly assigned to this group

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	'Patients were randomly offered [intervention or control treatment]' (p. 54) Randomisation method unclear
Allocation concealment?	Unclear	No details given
Blinding?	Unclear	No details given
Incomplete outcome data addressed?	Unclear	Eleven lost to follow-up. There were more dropouts for the control group than the intervention group, although the intervention group appears more severe at baseline. No information provided on intention to treat.

Free of selective reporting?	No	Suicide, depression and compliance data were obtained through correspondence with trialists, reducing the risk of bias.
Free of other bias?	Unclear	Some indications of differences in baseline characteristics between groups

TORHORST1988

Bibliographic reference	Torhorst, A., Möller, H. J., Kurz, A., *et al.* (1988) Comparing a 3-month and a 12-month-outpatient aftercare program for parasuicide repeaters. In *Current Issues of Suicidology* (eds H. J. Möller, A. Schmidtke & R. Welz), pp. 419–424. Berlin, Germany: Springer-Verlag.
Methods	Allocation: randomisation to treatment (method not specified) Follow-up period: 12 months N lost to follow-up: 0 out of 80 (0%) for repetition data
Participants/ demographic/ diagnosis	Total N: 80 N used in analysis: experimental 40, control 40 Setting: Munich, Germany Inclusion criteria: (i) no endogenous psychosis; (ii) not already in psychotherapeutic treatment; (iii) not in inpatient psychiatric treatment; (iv) not illicit-drug overdose; (v) able to understand German; (vi) living within travelling distance of research centre; (vii) previous episodes of self-harm. Gender: - Profile: repeaters 100% (n = 80) Source of participants: patients who had deliberately self-poisoned referred to liaison service of toxicological ward
Interventions	Experimental: following hospitalisation for self-poisoning (duration approximately 3 days), long-term therapy: one therapy session per month over a period of 12 months. Control: following hospitalisation for self-poisoning (duration approximately 3 days), short-term therapy: 12 weekly therapy sessions over a period of 3 months Therapist: three psychiatric attendants Type of therapy offered: not specified Length of treatment: experimental – 12 month; control – 3 months
Outcomes	Included: (i) repetition; (ii) compliance; (iii) depression Excluded: (i) complaints; (ii) psychopathology
Notes	Repetition data from: not specified All participants in both groups had brief crisis intervention (3 days) in hospital

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	'Randomly assigned' (p. 419) No further information
Allocation concealment?	Unclear	No details given
Blinding?	Unclear	No details given
Incomplete outcome data addressed?	Unclear	Of the 80 participants, at 3 months 50 to 67% were followed-up and at 12 months the study obtained data for 97.5%. Self- and experts' ratings data from personal follow-up were

		available for 85% of participants.
Free of selective reporting?	Unclear	No reason to suspect that all outcomes were not reported; however, in the absence of the trial protocol, cannot be certain.
Free of other bias?	Yes	No suggestion of other sources of bias

TURNER2000

Bibliographic reference	Turner, R. M. (2000) Naturalistic evaluation of dialectical behavior therapy-oriented treatment for borderline personality disorder. *Cognitive and Behavioral Practice*, *7*, 413–419.
Methods	Allocation: randomisation to treatment (method not specified) Follow-up period: 12 months N lost to follow-up: 11 out of 26 (42%)
Participants/ demographic/ diagnosis	Total N: 24 N used in analysis: experimental 12, control 12 Setting: unclear Inclusion criteria: (i) meet criteria for BPD diagnosis; (ii) not meet criteria for an exclusionary diagnosis; (iii) give written informed consent to participate in the study; (iv) accepted random assignment. Gender: female 79% (n = 19) Profile: mean age 22 years, range 18 to 27 years Source of participants: participants treated in local emergency services for suicide attempts
Interventions	Experimental: DBT – based on Linehan approach with two major modifications (incorporation of psychodynamic techniques and skills were provided during the course of individual therapy instead of a separate DBT skills training group). Control: client-centred therapy: based on Carkhuff's models of client-centred therapy. Provided patients with a safe therapeutic environment and accurate empathic reflection only. Therapist: trained clinicians Length of treatment: patients received a minimum of 49 sessions and a maximum of 84 sessions of treatment during the study period
Outcomes	Included: (i) repetition; (ii) anxiety; (iii) depression; (iv) suicidal ideation

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	-
Allocation concealment?	Unclear	-
Blinding?	Unclear	-
Incomplete outcome data addressed?	Unclear	-
Free of selective reporting?	Unclear	-
Free of other bias?	Unclear	-

TYRER2003

Bibliographic reference	Tyrer, P., Thompson, S., Schmidt, U., *et al.* (2003) Randomized controlled trial of brief cognitive behaviour therapy versus treatment as usual in recurrent deliberate self-harm: the POPMACT study. *Psychological Medicine*, *33*, 969–976.
Methods	Allocation: central independent telephone randomisation system (computer allocation using randomly permuted blocks of sizes two, four, and six in a non-systematic sequence); stratified by hospital and parasuicide risk. Follow-up period: 12 months N lost to follow-up: 50 out of 480 (10%) for repetition data
Participants/ demographic/ diagnosis	Total N: 480 N used in analysis: experimental 239, control 241 Setting: Glasgow, Edinburgh, Nottingham, West London, and South London, UK Inclusion criteria: (i) aged 16 to 65 years; (ii) previous history of self-harm; (iii) able to provide informed consent; (iv) sufficient English; (v) lived in catchment area; (vi) were likely to be available to follow-up; (vii) did not have an ICD-10 diagnosis code within the organic, alcohol and drug dependence, schizophrenia or bipolar affective disorder groups; (viii) psychiatric hospitalisation not required. Gender: female 68% (n = 326) Profile: aged 16-65 years, mean age of 31 years; personality disorder 42.1% (n = 202) Source of participants: patients presenting to hospital after self-harm
Interventions	Experimental: manual-assisted cognitive-behavioural therapy (up to five sessions): Consisted of an evaluation of attempt, crisis skills problem solving, cognitive techniques for emotional, and negative thinking management, and relapse prevention strategies. Control: usual care – normally psychiatric assessment, outpatient care, occasional day-patient care or referral back to GP Therapist: therapists from the existing services Type of therapy offered: experimental – cognitive-behavioural therapy; control – usual care Length of treatment: 3 to 6 months
Outcomes	Included: (i) repetition; (ii) suicide; (iii) depression (measured in two ways). Excluded: (i) anxiety (measured in two ways); (ii) social functioning; (iii) quality of life; (iv) global functioning; (v) future thinking.
Notes	Repetition data from: self-report substantiated by GP notes and hospital records

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	‘After initial research assessments, participants were randomised to either MACT or TAU treatment as usual] using a central independent telephone randomising system so that patients could be allocated to treatment immediately. The Stata software was used to generate allocation using randomly permuted blocks of sizes two, four and six in a non-systematic sequence. Random allocation was stratified by participating hospital and parasuicide risk status (high versus low)’ (p. 60). The use of a computer random number generator means the allocation sequence was

		adequately generated.
Allocation concealment?	Yes	'After initial research assessments, participants were randomised to either MACT or TAU using a central independent telephone randomising system so that patients could be allocated to treatment immediately. The Stata software was used to generate allocation using randomly permuted blocks of sizes two, four and six in a non-systematic sequence. Random allocation was stratified by participating hospital and parasuicide risk status (high versus low)' (p. 60). Central allocation means that allocation was probably concealed
Blinding?	Unclear	No details given
Incomplete outcome data addressed?	Unclear	Of the 480 participants randomised, 12-month assessment data could not be obtained for 78 (reasons given).
Free of selective reporting?	Unclear	No reason to suspect that all outcomes were not reported; however, in the absence of the trial protocol, cannot be certain.
Free of other bias?	Yes	No suggestion of other sources of bias

VAIVA2006

Bibliographic reference	Vaiva, G., Ducrocq, F., Meyer, P., *et al.* (2006) Effect of telephone contact on further suicide attempts in patients discharged from an emergency department: randomised controlled study. *British Medical Journal*, *332*, 1241–1245.
Methods	Allocation: computer-generated list of pseudo-random numbers in opaque sealed envelopes, allocation sequence provided by statistician uninvolved in assessment of participants; two strata – participants attempted suicide fewer than four times in past three years and those attempting more in same time. Follow-up period: 13 months N lost to follow-up: 0 out of 605 (0%) for repetition data
Participants/ demographic/ diagnosis	Total N: 605 N used in analysis: experimental 293, control 312 Setting: Northern France Inclusion criteria: (i) aged 18 to 65 years; (ii) attempted suicide by drug overdose; (iii) examined by a psychiatrist who agreed to their discharge; (iv) could provide name of their GP; (v) could be contacted by phone; (vi) gave written consent; (vii) not homeless; (viii) not addicted to illegal drugs. Gender: female 72.9% (n = 441) Profile: history of more than four suicide attempts in past 3 years 9% (n = 54); stressful life event in past 6 months 49% (n = 296) Source of participants: patients presenting at hospital after drug overdose
Interventions	Experimental: telephone contact at 1 or 3 months after index to go over emergency department recommended treatment plus usual care. If participant found treatment too difficult to follow a new one was suggested, or if participant was considered to be at high risk of suicide an urgent appointment was made at the emergency department where the patient was initially treated. No therapy other than support was provided. Control: usual care (mostly referred back to general practitioner)

	Therapist: psychiatrists with at least 5 years of experience in managing suicidal crises Type of therapy offered: experimental – supportive therapy plus usual care; control – usual care Length of treatment: one telephone call
Outcomes	Included: (i) repetition; (ii) suicide Excluded: none
Notes	Repetition data from: self-report and hospital records.

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'A computer generated list of pseudorandom numbers' (p. 1) Probably done
Allocation concealment?	Yes	'Patients were allocated to a group according to the number in an opaque, sealed envelope. The allocation sequence was provided by a statistician uninvolved in the assessment of patients' (p. 1). The allocation list was stored in tamper proof envelopes in a locked cabinet, accessible only to authorised staff.
Blinding?	Unclear	Outcome assessors were blinded but not participants or personnel
Incomplete outcome data addressed?	Unclear	Of the 605 patients randomised, 89 did not complete the intervention/treatment and 121 were lost to follow-up at 13 months. Reasons given for some of these drop outs, and ITT analysis (no specific method mentioned) attempted
Free of selective reporting?	Unclear	No reason to suspect that all outcomes were not reported; however, in the absence of the trial protocol, cannot be certain.
Free of other bias?	Yes	No suggestion of other sources of bias

VANDERSANDE1997

Bibliographic reference	van der Sande, R., van Rooijen, L., Buskens, E., *et al.* (1997) Intensive in-patient and community intervention versus routine care after attempted suicide. A randomised controlled intervention study. *British Journal of Psychiatry*, *171*, 35–41.
Methods	Allocation: selection from series of opaque, sealed envelopes which contained a number from a list of random numbers generated by a computer Follow-up period: 12 months N lost to follow-up: 0 out of 240 (0%) for repetition data
Participants/ demographic/ diagnosis	Total N: 240 N used in analysis: experimental 140, control 134 Setting: Utrecht, Netherlands Inclusion criteria: (i) able to understand and write Dutch; (ii) living in catchment area of hospital; (iii) not psychiatric inpatient; (iv) not in prison; (v) no drug or

	alcohol addiction; (vi) no recurrent consultations with a liaison psychiatrist during a stay of more than 2 days on a somatic ward. Gender: female 66% (n = 158) Profile: aged over 15 years; repeaters 73% (n = 175); mood disorder 32% (n = 77); adjustment disorder 15% (n = 36) Source of participants: patients admitted to hospital following a suicide attempt
Interventions	Experimental: brief psychiatric unit admission, encouraging participants to contact unit on discharge. Outpatient therapy plus 24-hour emergency access to unit. Control: Usual care: 25% hospitalisation, 65% outpatient referral Therapist: one psychiatrist, two community psychiatric nurses and nine psychiatric nurses Type of therapy offered: experimental – problem-solving treatment; control – usual care Length of treatment: not specified
Outcomes	Included: (i) repetition; (ii) suicide (review authors contacted trialist for this information); (iii) compliance; (iv) depression (as subscale of SCL-90); (v) hopelessness. Excluded: (i) anxiety; (ii) sleep disorder; (iii) psychiatric hospitalisation; (iv) phobic anxiety; (v) somatisation; (vi) obsession-compulsion; (vii) interpersonal sensitivity; (viii) hostility.
Notes	Repetition data from: interview with patient, hospital records

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'Envelope[s] contained a number obtained from a list of random numbers generated by computer' (p. 36). Probably done
Allocation concealment?	Yes	'The nurse on duty in the experimental ward performed the randomisation by opening the next from a series of sealed and opaque envelopes' (p. 36).
Blinding?	Unclear	Participants and personnel were not blinded. It is unclear whether outcome assessors were blinded as there were no details given.
Incomplete outcome data addressed?	Yes	-
Free of selective reporting?	Unclear	Suicide data was obtained from trial investigators, reducing risk of bias
Free of other bias?	Yes	No suggestion of other sources of bias

VANHEERINGEN1997

Bibliographic reference	van Heeringen, C., Jannes, S., Buylaert, W., *et al.* (1995) The management of non-compliance with referral to out-patient after-care among attempted suicide patients: a controlled intervention study. *Psychological Medicine*, *25*, 963–970.
Methods	Allocation: randomisation using an open randomisation list was performed by a data nurse who did not interview participants Follow-up period: 12 months

	N lost to follow-up: 125 out of 516 (24%) for repetition data
Participants/ demographic/ diagnosis	Total N: 516 N used in analysis: experimental 258, control 258 Setting: Ghent, Belgium Inclusion criteria: (i) resident in catchment area; (ii) over 15 years old; (iii) not in in-patient medical treatment Gender: female 43% (n = 222) Profile: repeaters 30% (n = 155); mood disorder 15% (n = 77); anxiety disorder 2.7% (n = 14) Source of participants: patients treated in A&E department after a suicide attempt
Interventions	Experimental: compliance enhancement plus usual care - home visits were made to participants who did not keep outpatient appointments, the reasons for not attending appointments were discussed and the patient was encouraged to attend. Control: outpatient appointments only; non-compliant participants were not visited Therapist: community nurse Type of therapy offered: experimental – compliance enhancement plus usual care; control – usual care Length of treatment: not specified
Outcomes	Included: (i) repetition; (ii) suicide; (iii) compliance Excluded: none
Notes	Repetition data from: interview with patient or with relative/GP if patient could not be contacted

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	No	'Patients were randomly allocated ... using a randomization list' (p. 964) Used open randomisation list
Allocation concealment?	Unclear	No details given
Blinding?	No	No details given
Incomplete outcome data addressed?	No	Of 516 participants randomised, 125 were lost to follow-up (reasons given), but no further information available.
Free of selective reporting?	Unclear	No reason to suspect that all outcomes were not reported; however, in the absence of the trial protocol, cannot be certain.
Free of other bias?	Yes	No suggestion of other sources of bias

WATERHOUSE1990

Bibliographic reference	Waterhouse, J. & Platt, S. (1990) General hospital admission in the management of parasuicide. A randomised controlled trial. *British Journal of Psychiatry*, *156*, 236–242.
Methods	Allocation: randomisation using sequentially numbered sealed envelopes in the casualty department Follow-up period: 16 weeks N lost to follow-up: 0 out of 77 (0%) for repetition data

Participants/ demographic/ diagnosis	Total N: 77 N used in analysis: experimental 38, control 39 Setting: York, UK Inclusion criteria: (i) no immediate medical or psychiatric treatment needs; (ii) aged over 16 years old Gender: female 62% (n = 48) Profile: mean age of 30 years; repeaters 36% (n = 28) Source of participants: patients admitted to an A&E department for self-harm
Interventions	Experimental: general hospital admission – no additional treatment or counselling Control: discharge from hospital Therapist: none Type of therapy offered: none Length of treatment: median length of admission was 17 hours
Outcomes	Included: (i) repetition; (ii) suicidal ideation; (iii) hopelessness Excluded: (i) depression; (ii) psychiatric admission; (iii) time off work; (iv) social isolation; (v) somatic concerns; (vi) daily routine; (vii) social behaviour assessment schedule; (viii) GP questionnaire.
Notes	Repetition data from: GP interview, hospital records On discharge both groups advised to contact their GP if they needed further help Depression data were combined with anxiety data, so this outcome was not included

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'Randomisation took place ... using sequentially numbered sealed envelopes' (p. 237) Probably done
Allocation concealment?	Yes	'Randomisation took place...using sequentially numbered sealed envelopes' (p. 237) No mention of whether envelopes were opaque, but probably done
Blinding?	No	
Incomplete outcome data addressed?	No	Of the 77 randomised participants, four dropped out after 1 week and another 21 by 16 weeks. Some reasons provided; no mention of intention to treat analysis
Free of selective reporting?	Yes	No reason to suspect that all outcomes were not reported
Free of other bias?	Yes	No suggestion of other sources of bias

WELU1977

Bibliographic reference	Welu, T. (1977) A follow-up program for suicide attempters: evaluation of effectiveness. *Suicide and Life-Threatening Behavior*, *7*, 17–30.
Methods	Allocation: participants were randomly assigned using a table of random numbers Follow-up period: 4 months N lost to follow-up: 1 out of 120 (1%) for repetition data
Participants/	Total N: 120

demographic/ diagnosis	N used in analysis: control 57, experimental 63 Setting: Pittsburgh, PA, US Inclusion criteria: (i) over 16 years old; (ii) not a student living in university accommodation; (iii) not resident in care giving institution or institutionalized at the time of the attempt. Gender: unclear Profile: repeaters 60% (n = 72) Source of participants: patients admitted to an A&E department for self-harm
Interventions	Experimental: special outreach programme: a community mental health team contacted participants immediately after discharge and a home visit arranged as soon as possible. Weekly/bi-weekly contact with therapist. Control: routine treatment program: psychiatric consultation at request of treating physician. Participants were given a next day appointment for evaluation at the community mental health team centre. Any further contact after discharge was up to the patient to decide. Therapist: four nurses, three social workers and two community workers Type of therapy offered: experimental – special outreach (variety of treatments); control – usual care Length of treatment: 4 months
Outcomes	Included: (i) repetition Excluded: (i) extent of follow-up coverage; (ii) type and frequency of contacts; (iii) purposive accidents; (iv) excessive use of alcohol; (v) drug misuse
Notes	Repetition data from: interview with patient, hospital records, interviews with family and friends

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'Random assignment was worked out in advance from a table of random numbers' (p. 20). Probably done
Allocation concealment?	Unclear	No specific details given
Blinding?	Unclear	No details given
Incomplete outcome data addressed?	No	Reasons for missing data were not given. No ITT analyses conducted.
Free of selective reporting?	Unclear	No reason to suspect that all outcomes were not reported; however, in the absence of the trial protocol, cannot be certain.
Free of other bias?	Yes	No suggestion of other sources of bias

WOOD2001

Bibliographic reference	Wood, A., Trainor, G., Rothwell, J., *et al.* (2001) Randomized trial of group therapy for repeated deliberate self-harm in adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*, *40*, 1246–1253.
Methods	Allocation: performed by independent statistician at remote site Follow-up period: 7 months N lost to follow-up: 1 out of 32 experimental; none in control
Participants/ demographic/	Total N: 63 N used in analysis: control 31, experimental 32

diagnosis	Setting: Manchester, UK Inclusion criteria: (i) aged 12 to 16 years; (ii) referred to child and adolescent mental health service following deliberate self-harm; (iii) had deliberate self-harm on at least one other occasion during the previous year. Profile: repeaters who harm themselves on average 4 times before study entry, most commonly by overdose and cutting 100%; Tended to come from disadvantaged backgrounds. 50% showed evidence of physical or sexual abuse; 83 to 84% MDD; conduct or oppositional disorder diagnosis in 75% (experimental) and 62% (control). Source of participants: referred to child and adolescent mental health service following deliberate self-harm
Interventions	Experimental: developmental group psychotherapy involved a variety of techniques, including a variety of interventions involving problem solving and CBT, DBT and group psychodynamic psychotherapy interventions. Initial assessment phase – six acute group sessions, followed by weekly group therapy in a long-term group continuing until the young person felt ready to leave. Routine care also offered. Control: routine care - interventions given by community psychiatric nurses and psychologists Therapist: two therapists, one senior nurse and one psychiatrist Type of therapy offered: experimental – themes focused on were: relationships, school problems and peer relationships, family problems, anger management, depression and self-harm and hopelessness and feelings about the future; control – usual care. Family sessions, non-specific counselling, psychotropic medication where indicated Length of treatment: experimental – median eight group sessions over 6 months plus 2.5 additional individual sessions
Outcomes	Included: (i) repetition of self-harm; (ii) suicide (review authors contacted trialist for this information); (iii) depressive symptoms; (iv) suicidal ideation; (v) compliance. Excluded: (i) admissions; (ii) behavioural problems; (iii) global outcome rating scale.

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	'An independent statistician at a distant site ... assigned a trial number and then randomly allocated participants' (p. 1247). Probably done
Allocation concealment?	Yes	'Treatment allocation was concealed from the outcome assessors' (p. 1247) Probably done
Blinding?	Unclear	Due to the nature of this study, participants and therapists were not blind to the treatment the participants were receiving. Treatment allocation was concealed from the outcome assessors.
Incomplete outcome data addressed?	Yes	Of the 63 participants randomised, 20 did not complete four or more sessions and one was not available for follow-up at 7 months. 'We used the most stringent [method of ITT] in which all randomized cases were included,

		regardless of whether they started or completed treatment. The analysis was conducted just once, all cases were analyzed as allocated, and no interim or subgroup analyses were permitted' (p. 1248).
Free of selective reporting?	Unclear	Suicide data was obtained from the trial investigators, reducing risk of bias
Free of other bias?	Yes	No suggestion of other sources of bias

1.2 CHARACTERISTICS OF EXCLUDED STUDIES

BANNAN2010

Reason for exclusion	Nine participants in each group only; group-based problem solving therapy.

BARR2010

Reason for exclusion	Non-RCT.

CURRIER2010

Reason for exclusion	Unclear if participants have had a self-harm episode.

DIAZGRANADOS2010

Reason for exclusion	All patients had MDD. It was also unclear if they had a self-harm episode before.

GREGORY2010

Reason for exclusion	BPD population coexisting with alcohol use disorders. Primary outcome does not seem to be the resolution of self-harming behaviour.

HARNED2010

Reason for exclusion	DBT for BPD and post-traumatic stress disorder versus BPD-only population.

KASPER2010

Reason for exclusion	100% MDD and unclear if participants had a self-harm episode before.

KLEIM2010

Reason for exclusion	BPD population (a meta-analysis for DBT).

MOREY2010

Reason for exclusion	BPD population looking at MACT with therapeutic assessment augmentation. Self-harm outcome does not seem to be the primary outcome.

NEACSIU2010

Reason for exclusion	BPD population looking at DBT skills use as mediator. Self-harm outcome does not seem to be the primary outcome.

WEINBERG2006

Reason for exclusion	BPD population. Self-harm outcome does not seem to be the primary outcome.

References for excluded studies

Bannan, N. (2010) Group-based problem-solving therapy in self-poisoning females: a pilot study. *Counselling & Psychotherapy Research*, *10*, 201–213.

Barr, W., Kirkcaldy, A., Horne, A., *et al.* (2010) Quantitative findings from a mixed methods evaluation of once-weekly therapeutic community day services for people with personality disorder. *Journal of Mental Health*, *19*, 412–421.

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Diazgranados, N., I. (2010) Rapid resolution of suicidal ideation after a single infusion of an N-methyl-D-aspartate antagonist in patients with treatment-resistant major depressive disorder. *Journal of Clinical Psychiatry*, *71*, 1605–1611.

Gregory, R. J. D. (2010) Dynamic deconstructive psychotherapy versus optimized community care for borderline personality disorder co-occurring with alcohol use disorders: a 30-month follow-up. *Journal of Nervous and Mental Disease*, *198*, 292–298.

Harned, M. S., Jackson, S. & Harned, M. S. (2010) Dialectical behavior therapy as a precursor to PTSD treatment for suicidal and/or self-injuring women with borderline personality disorder. *Journal of Traumatic Stress*, *.23*, 421–429.

Kasper S., Montgomery, S., Möller, H. J., *et al.* (2010) Longitudinal analysis of the suicidal behaviour risk in short-term placebo-controlled studies of mirtazapine in major depressive disorder. *World Journal of Biological Psychiatry*, *11*, 36–44.

Kliem, S., Kroger, C., Kosfelder, J. (2010) Dialectical behavior therapy for borderline personality disorder: A meta-analysis using mixed-effects modeling. *Journal of Consulting and Clinical Psychology*, *78*, 936–951.

Morey, L. C. L. (2010) A pilot study of manual-assisted cognitive therapy with a therapeutic assessment augmentation for borderline personality disorder. *Psychiatry Research*, *178*, 531–535.

Neacsiu, A. D. R. (2010) Dialectical behavior therapy skills use as a mediator and outcome of treatment for borderline personality disorder. *Behaviour Research and Therapy*, *48*, 832–839.

Weinberg, I., Gunderson, J. G., Hennen, J., *et al.* (2006) Manual assisted cognitive treatment for deliberate self-harm in borderline personality disorder patients. *Journal of Personality Disorders*, *20*, 482–492.