APPENDIX 15C: PSYCHOSOCIAL INTERVENTIONS

CHARACTERISTICS OF INCLUDED STUDIES

ALLARD1992

Methods	Allocation: Subjects were randomly assigned using sealed and numbered envelopes. Follow-up period: 24 months after trial entry. N lost to follow up: 24/150 (16%) for repetition data.
Participants	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 a week previous to entry. Numbers: 150 participants: 76 experimental, 74 control. Profile: 55% (n=83) female. 50% (n=75) were repeaters. 87% (n=131) had diagnosis of depression, 53% (n=80) substance abuse diagnosis, and 45% (n=68) personality disorder. 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: 1 social worker. Type of therapy offered: Experimental: various interventions (e.g. psychoanalytic psychotherapy, psychosocial, drug or behavioural therapy); Control:

	usual care. Length of treatment: 12 months.
Outcomes	Included: i) repetition of DSH; ii) suicide; iii) compliance (encounters with therapist). Excluded: i) none.
Notes	Repetition data from: hospital records, coroners office records plus interview with participants and interview with other informants e.g. relatives or friends of patient.

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	Quote: "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 if the allocation sequence was adequately generated.
Allocation concealment?	Yes	Quote: "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 they were being treated by a different team or not. Personnel: Personnel aware of which team they were in - intervention or control. Outcome assessors: If personnel were doing the job of the assessors then 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 drop outs; 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" Quote: "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

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	Setting: New Zealand Inclusion criteria: i) presented to the psychiatric emergency service following self-harm or attempted suicid; ii) residents of New Zealand; iii) able to speak English sufficiently well to understand the study Numbers: 327 participants: 153 experimental, 174 control. Profile: Mean age: 34 years. 84% (n=215) female. Source of participants: Individuals aged 16+ who presented to psychiatric emergency services at Christchurch Hospital, New Zealand, 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 (1.psychiatric emergency services, 2. hospital medical record)
Notes	Baseline diff in number of prior attendances for SH in past 12 months. Control group higher than intervention group (but it's been adjusted); Early stopping of the trial (but final results contrasted with interm 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

Methods	Allocation: primary care practices were stratified into 4 groups according to rate of DSH; 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: 0/1932 (0%) for repetition data.
Participants	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 DSH; 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 DSH 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) DSH episode not managed entirely in primary care. Numbers: practices: 98 participants: 49 experimental, 49 control. participants: 1932 participants: 964 experimental, 968 control. Profile: 59% (n=1140) female. Aged 16-95 years. 13% (n=251) were repeaters (based on case register information). Source of participants: patients presenting to hospital who belonged to participating practices.
Interventions	Experimental: letter from GP: letter invited 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 DSH 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	Quote: "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; triallists clarified that primary care practices were stratified into 4 groups according to rate of DSH; 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	Triallists report that clustering was accounted for by their analysis and also that intention-to-treat 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

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: 35/120 (29%) for repetition data.
Participants	Setting: Pennsylvania, USA. 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. Numbers: 120 participants: 60 experimental, 60 control. Profile: participants aged 18-66 years. 61% (n=73) female. 74% (n=89) were repeaters. 68% (n=82) had diagnosis of substance abuse and 77% (n=92) major depressive disorder. Source of participants: patients presenting to hospital after suicide attempt.
Interventions	Experimental: cognitive therapy (10 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: 10-20 weeks.
Outcomes	Included: i) repetition; ii) suicide; iii) suicidal ideation; iv) depression; v) hopelessness. Excluded: i) compliance.
Notes	Repetition data from: participant report. 352/612 (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	Quote: "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 TAU) they were giving their patients. Outcome assessors: not blinded.
Incomplete outcome data addressed?	Yes	Of the 120 randomized participants, 2 dropped out during the intervention and 35 were lost to follow up at 18 months. Reasons were given for drop outs. ITT analysis attempted: Quote: "All effectiveness analyses were conducted using the intent-to-treat (ITT) principle" (p.565) Quote: "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

Methods	Allocation: randomisation prior to consent based on

	computer generated randomisation schedule. Follow up-period: 24 months. N lost to follow up: 0/772 (0%) for repetition data.
Participants	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. Numbers: 772 participants: 378 experimental, 394 control. Profile: 68% (n=525) female. 17% (n=131) were repeaters. Median age was 33 years. 43% (n=333) had diagnosis of any affective disorder, 13% (n=104) alcohol abuse and/or dependence, 40% (n=311) other substance related disorders, and (n=169) personality disorder. 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 triallist 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 intention-to-treat analyses by original authors.

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	Quote: "Randomisation was by database (HanDBase version 2.0; DDH Software, FL, USA) on a personal digital assistant (Palm III; Palm, CA, USA) that was populated with a pregenerated randomisation schedule (in blocks of 10) and carried by the duty toxicologist" (p.2) of Carter 2005a FULL TEXT Probably done.
Allocation concealment?	No	Participants were given the option to change the treatment they had been allocated (as Zelen design was used) so, therefore, no allocation concealment
Blinding?	No	Participants: No, participants gave consent to treatment they were receiving. Plus, (p.806) of Carter 2005a explains that some control participants were inadvertently exposed to the intervention. Personnel: knew if they had sent a postcard or not, therefore they were not blinded. Outcome assessors:Unclear as no details reported.
Incomplete outcome data addressed?	Yes	'Flow of participants through trial' figure (p.3 of Carter 2005) 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.)
Free of selective reporting?	Unclear	Data on repetition and suicide were obtained from triallists, reducing risk of

	bias.
Free of other bias?	No — Zelen design used, which can produce bias.

CEDEREKE2002a

Methods	Allocation: randomised in groups of two or four participants using sealed envelopes. Follow-up period: 12 months. N lost to follow up: 44/216 (20%) for repetition data.
Participants	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. Numbers: 216 participants: 107 experimental, 109 control. Profile: 66% (n=143) female. 52% (n=112) were repeaters. 91% (n=197) had diagnosis of mood disorder. Source of participants: patients treated in hospital after suicide attempt.
Interventions	Experimental: telephone contact (20-45 minutes) at four and eight 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 it was the outcome assessors that ran the meetings and if they were blinded or not.
Incomplete outcome data addressed?	Yes	Quote: "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

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: 0/467 (0%) for repetition data.
Participants	Setting: East London/Essex, UK. Inclusion criteria: i) resident in catchment area; ii) aged 16 years or older; iii) not aged 16-19 years and still in full-time secondary education; iv) overdoses did not include recreational or problematic alcohol

	and/or drug usage. Numbers: 467 participants: 220 experimental, 247 control. Profile: 56% (n=263) female. 47% (n=104) were repeaters. 17% (n=80) had psychiatric history, 13% (n=60) alcohol problems, and 3% (n=12) schizoaffective disorder. Source of participants: patients presenting to hospital for DSH.
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 six months, reviewable.
Outcomes	Included: i) repetition; ii) suicide (review authors contacted triallist for this information). Excluded: none.
Notes	Repetition data from: hospital admission records.

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	Quote: "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	Quote: "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. 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, readmission rates being the primary outcome and having been assessed by followup via A&E records it does not seem likely blinding was an issue.
Incomplete outcome data addressed?	Yes	Trial profile on (p.171) does not show any drop outs, as all patients were followed up at 12 months via A&E records. Quote: "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

Methods	Allocation: Adequate allocation concealment and sequence generation. Pragmatic RCT by sealed envelopes.

	Follow-up period: 3 & 6 months after trial entry. % lost to follow up: 35% at 3 months & 37% at 6 months.
Participants	Setting: UK Inclusion criteria: Participants admitted to A&E follow DSH; all misused alcohol according to Paddington alcohol test; aged over 18 years. Numbers: 103 participants: 51 experimental, 51 control. Profile: 49% female. Aged approximately 37-38. 72% overdosed, 21% self-cut; 67 of 75 assessed for Personality disorder met threshold for PD using SAPAS Source of participants: patients presenting to to A&E following DSH.
Interventions	Experimental: Brief intervention: Appointment card for patient to reatend A&E for appointment with alcohol nurse specialist with health leaflet on alcohol and health. Appointment consists of 30 min assessment and discussion of current and past drinking behaviours. Provide advice and options of referrals. It was a patient-centered and non-confrontational approach. Control: TAU: Blank piece of card with health info leaflet on alchol 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 disroders test; GHQ; assessed for personality disorder
Notes	Repitition 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

Methods	Allocation: simple randomisation using random numbers table (reviews authors obtained this information from triallists). Follow-up period: 3 and 6 months; follow up with sub sample at 12 months. N lost to follow up: 8/39 (21%) for repetition data.
Participants	Setting: Northeast, USA. Inclusion criteria: i) aged 12-17 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. Numbers: 39 participants: 21 experimental, 18 control. Profile: Participants had a mean age of 15 years. 48% (N=31; n=15) were repeaters. 29% (N=31; n=9) had diagnosis of major depressive disorder. 19% (N=31; n=6) had diagnosis of alcohol use disorder. 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 was comprised of two parts: (1) active treatment (first three months) included six individual sessions and one adjunct family session with two additional family sessions and two crisis sessions available at therapist's discretion; (2) 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: 5 clinicians and 2 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 triallist 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	Quote: "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 randomized participants, 31 completed the 3 and/or 6 month evaluations. Quote: "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 to 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

Methods	Allocation: random assignment. Follow-up period: 12 month. N lost to follow up: 18/102 (17.6%) for repetition data.
Participants	Setting: Bohars, France. Inclusion criteria: i) attended emergency department after a suicide attempt; ii) aged 15-34 years; iii) not hospitalised for more than 24 hours; iv) not currently being treated by a psychiatrist. Numbers: 102 participants: 51 experimental, 51 control.

	Profile: 80% (n=82) female. 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	Quote: "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 Quote: 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

Methods	Allocation: sealed envelope containing an emergency "green" card or a "dummy card". Follow-up period: 12 months. N lost to follow up: 0/827 (0%) for repetition data.
Participants	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. Numbers: 827 participants: 417 experimental, 410 control. Profile: 55.4% (n = 458) female. Mean age = 33.4 years. 42% (n=349) had previous history of DSH. Source of participants: patients admitted to general hospital following DSH 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	Quote: "Randomised...using the sealed envelope technique" (p.23) Probably done.
Allocation concealment?	Yes	Quote: "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) Quote: The effects on DSH 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

Methods	Allocation: opaque sealed envelopes opened sequentially. Follow-up period: 6 months. N lost to follow up: 2/34 (6%) for repetition data.
Participants	Setting: London, UK. Inclusion criteria: i) personality disturbance (antisocial, dissocial, impulsive or borderline); ii) at least one episode of DSH in 12 months preceding entry to trial; iii) not diagnosed with alcohol or drug dependence, schizophrenia, or organic psychiatric disorder. Numbers: 34 participants: 18 experimental, 16 control. Profile: Age range 16-50 years. 100% (n=34) were repeaters; 62% (n=21) female; 100% (n=34) had diagnosis of a personality disorder. Source of participants: patients seen after an episode of DSH in two hospitals in the London area (Paddington and Chelsea, Westminster).
Interventions	Experimental: manual assisted cognitive behavioural therapy (2-6 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: 1 psychiatrist, 2 nurses, and 2 social workers. Type of therapy offered: Experimental: cognitive behavioural therapy; 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	Quote: "Patients were allocated by opening opaque sealed envelopes sequentially at each centre" (p.20) Probably done.
Allocation concealment?	Yes	Quote: "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. Quote: "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, 2 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

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	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. Numbers: 1867 participants: 922 experimental, 945 control. Profile: Mean age: 23 years. 58% (n=1086) female. Source of participants: patients emergency care settings within a defined catchment area with a population of at least 250,000.
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 (e.g. psychiatrist, nurse, doctor). Type of therapy offered: Experimental: cognitive behavioural therapy; 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	Quote: "An allocation sequence based on a random-number table was used to randomly assign all enrolled subjects..." (p.704)
Allocation concealment?	Yes	Quote: "...the allocation sequence was maintained in a separate location to prevent clinician bias" (p.704)
Blinding?	Unclear	Particiapants: 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

Methods	Allocation: participants were randomly assigned using sequentially numbered, sealed, opaque envelopes (review authors obtained this information through correspondence with triallist). Follow-up period: 12 months. N lost to follow up: 0/400 (0%) for repetition data.
Participants	Setting: Southampton, UK. Inclusion criteria: i) over 17 years old; ii) no immediate suicide risk; iii) no formal psychiatric illness. Numbers: 400 participants: 200 experimental, 200 control. Profile: Self-poisoning patients. Repeaters and first timers. 71% (n=284) females. 44% (n=176) had diagnosis of depressive neurosis, 2% (n=8) phobic neurosis, 2% (n=8 affective psychosis, and 1% (n=4) schizophrenia. 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 etc. Control: usual care: 54% (108) were referred to their GP, 33% (n=66) received a psychiatric referral, and 13% (n=26) received unspecified referral. Therapist: 2 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 triallist).
Allocation concealment?	Yes	Participants were randomly assigned using sequentially numbered, sealed, opaque envelopes (review authors obtained this information through correspondence with triallist).
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_inpress

Methods	Allocation: By minimisation controlling for self-esteem, presence of behavioural disorder or depressive disorder and prescence or absence of high psychosocial risk. Follow-up period: 12 months. % lost to follow up: 4%
Participants	Setting: Manchester, UK.

	Inclusion criteria: i) between 12-17 years old; ii) presenting with 2/more episodes of self-harm during the previous 12-months Numbers: 366 participants: 183 experimental, 183 control. 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:6 initial sessions, transition up to 12 months. .
Outcomes	Repetition of self-harm (interview-based assesment), Suicide ideation (SIQ)
Notes	

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

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 DSH). Follow-up period: 6 months. N lost to follow up: 0/119 (0%) for repetition data.
Participants	Setting: Manchester, UK. Inclusion criteria: i) aged 18-65 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. Numbers: 119 participants: 58 experimental, 61 control. Profile: 55% (n=65) female. Mean age of 31.2 years. 60% (n=71) were repeaters. 55% (n=65) had psychiatric history. 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	Quote: “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)."
Allocation concealment?	Yes	Quote: “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	Particiapants: 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) Quote: "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

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: 13/162 (8%) for repetition data.
Participants	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 (e.g. cutting or hanging). Numbers: 162 participants: 85 experimental, 77 control. Profile: age range 10-16 years. Mean age 14.5 years. 89.5 % (n=145) female. 64.5% (n=104) had diagnosis of major depression. 10.5% (n=17) had diagnosis of conduct disorder. 100% (n=162) had self-poisoned. Source of participants: patients referred to mental health teams in four hospitals.
Interventions	Experimental: manualised home based family therapy intervention (one assessment session plus 4 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.
Notes	

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	Quote: "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	Quote: "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	Quote: "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. Quote: "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

Methods	Allocation: 'Random number method' (sealed, opaque envelopes used). Follow-up period: 12 months. N lost to follow up: 0/96 (0%) for repetition data.
Participants	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 dug addiction; v) not in need of inpatient psychiatric care; vi) suitable for randomisation e.g. not of no fixed abode. Numbers: 96 participants: 48 experimental, 48 control. Profile: 70% (n=67) female. 100% (n=96) aged over 16 years. Mean age 25.3 years. 32% (n=31) were repeaters. 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 therapists assessment of needs. Open telephone access to the general hospital service. Control: out-patient therapy once a week in an out-patient clinic in a general hospital. Therapist: 2 junior psychiatrists, 1 psychiatric nurse, and 1 social worker. Type of therapy offered: in both groups brief problem-orientated psychological therapy was used. 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	Quote: 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

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: 0/80 (0%) for repetition data.
Participants	Setting: Oxford, UK. Inclusion criteria: i) over age of 16; ii) registered with a general practitioner; iii) living up to 15 miles away from hospital; iv) suitable for out-patient counselling; v) not in need of psychiatric care (day-patient or in-patient; vi) not in current psychiatric care; vii) willing to accept aftercare offered.

	Numbers: 80 participants: 41 experimental, 39 control. Profile: 66% (n=53) female. 31% (n=25) were repeaters. Source of participants: patients admitted to a general hospital for self poisoning.
Interventions	Experimental: outpatient problem-solving therapy by non-medical clinicians. Up to 8 sessions, each lasting on average 54 minutes. Control: GP care (e.g. individual support, marital therapy). Therapist: 5 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) General Health Questionnaire; 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	Quote: "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?	Unclear	At two and four months....JD to explain
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

Methods	Allocation: Random allocation to groups was carried out by a distant site coordinator. Follow-up period: 12 months N lost to follow up:0/72 for repetition data.
Participants	Setting: Adolescent mental health services in Newcastle, Brisbane North and Logan (Australia) Inclusion criteria: 1.) Aged between 12 and 16 years, 2.) had been referred to a child and adolescent mental health service in Australian sites at Newcastle, Brisbane North, or Logan, and 3.) reported at least two episodes of self-harm in the past year, one of which had occurred in the past 3 months Numbers: 72 participants: 35 experimental, 37 control. Profile: 90% female: 100% repeaters; 4% had alcohol problems; 0% had substance misuse problems; 57% had depression; 7% had a diagnosis of conduct/oppostional 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, 2) suicide, 3) suicidal ideation, 4) depression. Excluded:None
Notes	Repetition data based on self-report (interview).

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Unclear	Quote: "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	Quote: "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	Quote: "Continuous outcome data were analyzed on an intent-to-treat basis" (p.664) Comment: LOCF 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

Methods	Allocation: 'Assigned randomly' - method not described. Follow-up period: 24 months. N lost to follow up: 0/24 (0%) for repetition data.
Participants	Setting: Los Angeles, USA. Inclusion criteria: i) not psychotic; ii) not addicted to drugs and alcohol; iii) without organic brain syndrome; iv) at least one previous suicide attempt. Numbers: 24 participants: 12 experimental, 12 control. Profile: 67% (n=16) female. Mean age of 29.7 years. Aged 18-47 years. 100% (n=24) had diagnosis of depressive neurosis. Most met criteria for personality disorder. 100% (n=24) were repeaters. Source of participants: patients were referred by the psychiatric emergency service or the hospital A&E department following DSH.
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 2 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	Quote: "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

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: 0/39 (0%) for repetition data.

Participants	Setting: Cork, Ireland. Inclusion criteria: i) aged 15-45 years; ii) no history of psychosis, mental retardation, or organic cognitive impairment; iii) not requiring psychiatric treatment (day care or inpatient). Numbers: 39 participants: 19 experimental, 20 control. Profile: 74% (n=29) female. Mean age 24.4 years. 35.6% (n=14) were repeaters. 23% (n=9) had diagnosis of dysthymia, 15% (n=6) dependent personality disorder, and 13% (n=5) alcohol abuse. Source of participants: patients admitted to A&E department following self-poisoning.
Interventions	Experimental: interpersonal problem-solving skills training (5, 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	Quote: "participants 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 do not complete. Of the 50 randomised participants, 5 dropped out of treatment before completion and 6 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

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: 0/212 (0%) for repetition data.
Participants	Setting: Bristol, UK. Inclusion criteria: i) no previous episode of DSH; ii) resident within healthcare trust catchment area. Numbers: 212 participants: 101 experimental, 111 control. Profile: mean age of 30 years. No repeaters. Source of participants: patients admitted to hospital following first episode of DSH.
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 e.g. 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	Quote: "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	Quote: "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	Quote: "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

Methods	Allocation: randomly assigned. Follow-up period: 3 weeks (end of treatment). N lost to follow up: unknown for repetition data as data was not reported in this study.
Participants	Setting: Charleston, USA. Inclusion criteria: i) admitted to psychiatric ward for suicide attempt; ii) not psychotic, iii) no substance abuse. Numbers: 15 participants: 10 experimental (5 cognitive restructuring, 5 problem solving), 5 control. 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 one-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	Quote: "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

Methods	Allocation: predetermined random allocation (sampling without replacement using envelopes). Follow-up period: 12 months. N lost to follow up: 0/20 (0%) for repetition data.
Participants	Setting: Leeds, UK. Inclusion criteria: i) Age 16-65 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. Numbers: 20 participants: 12 experimental, 8 control. Profile: 50% (n=10) female. Mean age 27.5 years. 100% (n=20) were repeaters with a high risk of further repetition. 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, one-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 triallist 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	Quote: "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

Methods	Allocation: randomization 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: 8/90 (21%) for repetition data.

Participants	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. Numbers: 90 participants: 48 experimental, 42 control. Profile: 86% (n=77) female; aged between 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 (e.g. psychotropic medication, psychotherapy, hospitalization). Therapist: experienced CBT practitioners. Type of therapy offered: Experimental: CBT + TAU; Control: TAU. 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	Quote: '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, 8 did not receive their allocated intervention and 9 were lost to follow up - reasons given. LOCF 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

Methods	Allocation: simple randomisation using random numbers table. Follow-up period: 3 months. N lost to follow up: 13/76 (17%) for repetition data.
Participants	Setting: Northeast USA. Inclusion criteria: i) adolescents aged 12-18 years; ii) receiving medical care in either the emergency department or paediatrics wards of a children's hospital due to a suicide attempt. Numbers: 76 participants: 36 experimental, 40 control. Profile: 90% (n=63) female. Source of participants: patients presenting to hospital after suicide attempt.
Interventions	Experimental: Compliance enhancement intervention plus standard disposition planning: single, one-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 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: 3 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 triallist 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 adolescents but only adolescents' responses were used; 2 cases existed where parents reported repetition of DSH but adolescent denied repetition.

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	Quote: "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

Methods	Allocation: no details. Follow-up period: 2 months. % lost to follow up: CBT 66%; PST 62%; TAU 34% .
Participants	Setting: Austrailia. Inclusion criteria: i) recent suicide attempt with reported suicide intent; ii) residence within either The Prince Charles Hospital or Royal Brisbance and Women's Hospital. Numbers: 32 participants: 11CBT, 9 control, 12 PST. Profile: 53% female. Source of participants: Patients presenting to a hospital after a suicide attempt, either discharged with referral for community follow up.
Interventions	Experimental: 2 arms of treatment a) 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/ 4 sessions lasting 1 hour. b) CBT: Behavioural interventions, case conceptualisation, cognitive restructuring /7 sessions lasting one hour. Control: TAU: 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, didn't report training. Length of treatment: 4 & 7 sessions (1 hr each)
Outcomes	i) repetition; ii) hopelessness (BHS), iii) problem-solving (social prob-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

Methods	Allocation: participants were randomly offered treatments. Follow-up period: 12 months. N lost to follow up: 11/141 (5.7%) for repetition data.
Participants	Setting: Munich, Germany. Inclusion criteria: i) non-psychotic. Numbers: 141 participants: 68 experimental, 73 control. Profile: 63% (n=89) female. 48% (n=68) were repeaters. 100% (n=141) had self-poisoned. Source of participants: patients hospitalised after a suicide attempt.
Interventions	Experimental: short crisis intervention during hospital stay, fixed out patient 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 out patient appointment with a different therapist than was seen in hospital. Motivational interview, letter, and assessment of motivation towards therapy. Therapist: 3 therapists trained in psychotherapy and 1 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 triallist for this information); iii) compliance (review authors contacted triallist for this information); iv) depression (review authors contacted triallist 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	Quote: "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	11 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 ITT.
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

Methods	Allocation: randomization to treatment (method not

	specified). Follow-up period: 12 months. N lost to follow up: 0/80 (0%) for repetition data.
Participants	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 traveling distance of research centre; vii) previous episodes of DSH. Numbers: 80 participants: 40 experimental, 40 control. Profile: 100% (n=80) were repeaters. Source of participants: patients who had deliberately self-poisoned referred to liaison service of toxicological ward.
Interventions	Experimental: following hospitalization for self-poisoning (duration: approximately three days) long-term therapy: one therapy session per month over a period of 12 months. Control: following hospitalization for self-poisoning (duration: approximately three days) short-term therapy: 12 weekly therapy sessions over a period of three months. Therapist: 3 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	Quote: "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%-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

Methods	Allocation: randomization to treatment (method not specified). Follow-up period: 12 months. N lost to follow up: 11/26 (42%)
Participants	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. Numbers: 24 participants: 12 experimental, 12 control. Profile: 19 females, 5 males. Mean age = 22 (range: 18-27) 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

	seperate DBT skills training group). Control: Client centred therapy: based on Carkhuff's models of client centered 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.
Notes	

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	

TYRER2003a

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: 50/480 (10%) for repetition data.
Participants	Setting: Glasgow, Edinburgh, Nottingham, West London, and South London, UK. Inclusion criteria: i) aged 16-65 years; ii) previous history of DSH; 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 hospitalization not required. Numbers: 480 participants: 239 experimental, 241 control. Profile: 68% (n=326) female. Aged 16-65 years. Mean age of 31 years. 42.1% (n=202) diagnosed with personality disorder. Source of participants: patients presenting to hospital after DSH.
Interventions	Experimental: manual-assisted cognitive-behavioural therapy (up to 5 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	Quote: "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) The use of a computer random number generator means the allocation sequence was adequately generated.
Allocation concealment?	Yes	Quote: "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

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: 0/605 (0%) for repetition data.
Participants	Setting: Northern France. Inclusion criteria: i) aged 18-65 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. Numbers: 605 participants: 293 experimental, 312 control. Profile: 72.9% (n=441) female. 9% (n=54) had history of more than 4 suicide attempts in past 3 years. 49% (n=296) had stressful life event in past 6 months. 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: 1 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	Quote: "A computer generated list of pseudorandom numbers" (p.1) Probably done.
Allocation concealment?	Yes	Quote: "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.

VANDERSANDER1997

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: 0/240 (0%) for repetition data.
Participants	Setting: Utrecht, The 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. Numbers: 240 participants: 140 experimental, 134 control. Profile: 66% (n=158) female. All aged over 15 years. 73% (n=175) were repeaters. 32% (n=77) had diagnosis of mood disorder and 15% (n=36) adjustment disorder. Source of participants: patients admitted to hospital following a suicide attempt.
Interventions	Experimental: Brief psychiatric unit admission, encouraging participants to contact unit on discharge. Out patient therapy plus 24-hour emergency access to unit. Control: Usual care: 25% hospitalization, 65% outpatient referral. Therapist: 1 psychiatrist, 2 community psychiatric nurses, and 9 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 triallist for this information); iii) compliance; iv) depression (as sub scale 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	Quote: "Envelope[s] contained a

		number obtained from a list of random numbers generated by computer" (p.36) Probably done.
Allocation concealment?	Yes	Quote: "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

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: 125/516 (24%) for repetition data.
Participants	Setting: Gent, Belgium. Inclusion criteria: i) resident in catchment area; ii) over 15 years old; iii) not in in-patient medical treatment. Numbers: 516 participants: 258 experimental, 258 control. Profile: 43% (n=222) female. 30% (n=155) repeaters. 15% (n=77) had diagnosis of mood disorder, 2.7% (n=14) anxiety disorder. 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	Quote: "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

Methods	Allocation: randomisation using sequentially numbered sealed envelopes in the casualty department. Follow-up period: 16 weeks.

	N lost to follow up: 0/77 (0%) for repetition data.
Participants	Setting: York, UK. Inclusion criteria: i) no immediate medical or psychiatric treatment needs. (ii) aged over 16 years old. Numbers: 77 participants: 38 experimental, 39 control. Profile: 62% (n=48) female. 36% (n=28) were repeaters. Mean age of 30 years. Source of participants: patients admitted to an A&E department for DSH.
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	Quote: "Randomisation took place...using sequentially numbered

		sealed envelopes" (p.237) Probably done.
Allocation concealment?	Yes	Quote: "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, 4 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

Methods	Allocation: participants were randomly assigned using a table of random numbers. Follow-up period: 4 months. N lost to follow up: 1/120 (1%) for repetition data.
Participants	Setting: Pittsburgh, USA. 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. Numbers: 120 participants: 57 control, 63 experimental. Profile: 60% (n=72) were repeaters. Source of participants: patients admitted to an A&E department for DSH.
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: 4 nurses, 3 social workers, and 2 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	Quote: "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 was not explained. 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

Methods	Allocation: performed by independent statistician at remote site Follow-up period: 7 months N lost to follow up: 1/32 experimental; none in control.
Participants	Setting: Manchester, UK Inclusion criteria: i) 12-16 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 Numbers: 63 participants: 31 control, 32 experimental. Profile: 100% repeaters who harm themselves on average 4 times before study entry, most commonly by overdose and cutting. Tended to come from disadvantaged backgrounds. Half showed evidence of physical or sexual abuse. Major depressive disorder in 83-84% of groups; 75% (experimental) and 62% (control) had conduct or oppositional disorder diagnosis 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, 6 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: 2 therapists, a senior nurse and a 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 8 group sessions over 6 months plus 2.5 additional individual sessions
Outcomes	Included: i) repetition of DSH; ii) suicide (review authors contacted triallist for this information); iii) depressive symptoms; iv) suicidal ideation; v) compliance. Excluded: i) admissions; ii) behavioural problems; iii) global outcome rating scale.
Notes	

Risk of bias table

Item	Judgement	Description
Adequate sequence generation?	Yes	Quote: "An independent statistician at a distant site...assigned a trial number and then randomly allocated participants" (p.1247) Probably done.
Allocation concealment?	Yes	Quote: "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 4 or more sessions and 1 was not available for follow up at 7 months. Quote: "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.

Characteristics of excluded studies

BANNAN2010

Reason for exclusion 9 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 Major Depressive Disorder. It was also unclear if they had a self-harm episode before.

GREGORY2010

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

HARNED2010

Reason for exclusion Dialectical Behaviour Therapy for Borderline Personality Disorder and Post-traumatic Stress Disorder versus Borderline Personality Disorder only population

KASPER2010

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

KLEIM2010

Reason for exclusion	Borderline personality disorder population (a meta-analysis for DBT).

MOREY2010

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

NEACSIU2010

Reason for exclusion	Borderline Personality Disorder population looking at dialetical behaviour therapy skills use as mediator. Self-harm outcome does not seem to be the primary outcome.

WEINBERG2006

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