

Comparisons Included in this Clinical Question

Anger control training versus control
BARKLEY2000
DEFFENBACHER1996
FEINDLER1984
LIPMAN2006
LOCHMAN1984
LOCHMAN2002
LOCHMAN2004
OMIZO1988
SHECHTMAN2000
SNYDER1999
SUKHODOLSKY2000
VANDEWIEL2007

Cognitive problem solving skills training versus control
KAZDIN1989
KENDALL1990
MICHELSON1983
VAN MANEN2004

Family interventions versus control for adolescents at risk of reoffending
ALEXANDER1973
BARNOSKI2004
GORDON1995
MCPHERSON1983

Family interventions versus control for children and adolescents with behaviour problems
NICKEL2005
NICKEL2006
NICKEL2006A
SANTISTEBAN2003
SAYGER1988
SZAPOCZNIK1989

Family therapy versus CBT
AZRIN2001

Multidimensional foster care versus Control
CHAMBERLAIN1998
CHAMBERLAIN2007

Multisystemic therapy versus Control
BORDUIN1995
BORDUIN2001
HENGELER1992
HENGELER1997
HENGELER1999
HENGELER2006
LESCHIED2002
OGDEN2004
ROWLAND2005
TIMMONSMITCHELL2006

Other multi-component intervention
BARRETT2000
CAVELL2000
FRASER2004

Parent training + additional child intervention versus Parent training
DISHION1995
DRUGLI2006
KAZDIN1992
NOCK2005

Parent training + additional parent intervention versus Parent training
DADDS1992
IRELAND2003
SANDERS2000A
SANDERS2000B
WEBSTER-STRATTON1994

Parent training + problem solving versus parent training + education
ELIAS2003

Parent training versus Control
ADAMS2001
BANK1991
BARKLEY2000
BEHAN2001
BERNAL1980
BRADLEY2003
CONNELL1997
FEINFIELD2004
GARDNER2006
GREENE2004
HUGHES1988
HUTCHINGS2007
IRVINE1999
JOURILES2001
KACIR1999
KAZDIN1987
LOCHMAN2004
MAGEN1994
MARKIE-DADDS2006
MARTIN2003
NICHOLSON1999
NIXON2003
PATTERSON2007
SANDERS2000
SANDERS2000A
SCOTT2001
SCOTT2006
STEWART-BROWN2007
STOLK2008
STRAYHORN1989
SUTTON1995
TAYLOR1998
TURNER2006
TURNER2007
WEBSTER-STRATTON1984
WEBSTER-STRATTON1988
WEBSTER-STRATTON1990
WEBSTER-STRATTON1992
WEBSTER-STRATTON1997

Social skills training versus control
DEFFENBACHER1996
DESBIENS2003
ISON2001
PEPLER1995

Characteristics of Included Studies

Methods	Participants	Outcomes	Interventions	Notes
ADAMS2001 Study Type: RCT Type of Analysis: Completers Blindness: Open Duration (days): Mean 56	n= 74 Age: Mean 10 Range 3-16 Sex: 46 males 28 females Diagnosis: Behaviour problems by Parent referred	Data Used Family Assessment Device	Group 1 N= 39 parent training - Systematic Training for Effective Parenting (STEP) = 8 x 4H weekly sessions. Highly structured group therapy delivered by trained professionals. Parent and child.	

Setting:
Outpatient

Exclusions: None reported.

Notes: TAKEN AT: pre- and post-assessment.
DROP OUTS: 22% (treatment group)

Group 2 N= 35
Control - Routine mental health services

Notes: Details on randomisation not reported;
the comparison group was not randomly
assigned to the parenting groups.

Baseline: No significant differences on pretest dependent
measures.

Info on Screening Process: Details not reported.

Results from this paper:

- 1.1 Well covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Not reported
- 1.6 Not addressed
- 1.7 Well covered
- 1.8 22% (treatment)
- 1.9 Not addressed
- 1.10 Not addressed

2.1 +

ALEXANDER1973

Study Type: RCT

n= 86

Data Used
Recidivism

Group 1 N= 46

Type of Analysis: Completers

Age: Range 13-16

Family interventions - Short-term
behavioural family intervention program.
Therapists were first and second year
graduate students on a clinical
psychology course.

Blindness: Open

Sex: 38 males 48 females

TAU

Duration (days): Mean 35

Diagnosis:
100% Offending history

Group 2 N= 19

Setting: US
Outpatient

Exclusions: None reported.

Control - Client-centered family group
program representative of treatment in
many juvenile centers.

Notes: Details on randomisation not reported

Baseline: No differences were found between groups.

Group 3 N= 11

Info on Screening Process: 99 families referred
by the Salt Lake County Juvenile Court to the
family clinic. Follow-up records were only
available for 86 families.

Parent + anger coping - Church
sponsored family counseling program.
Average treatment is 12-15 sessions
(with considerable variation between
families)

Results from this paper:

- 1.1 Well covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Well covered
- 1.6 Not addressed
- 1.7 Adequately covered
- 1.8
- 1.9 Not addressed
- 1.10 Not applicable

2.1 +

AZRIN2001

Study Type: RCT

n= 56

Data Used
Arrests
CBCL (Parent)

Group 1 N= 29

Blindness: Single blind

Age: Mean 15

Family interventions - Family Behaviour
Therapy: 15 session multicomponent
programme addressing cognitive, verbal,
social and familial factors in addition to

Duration (days): Mean 180

Sex: 46 males 10 females

Setting: US
Antisocial personality disorder: CD Appendix 15

Notes: RANDOMISATION: by coin toss

Diagnosis:
82% Conduct disorder by DSM-IV

18% Oppositional defiant disorder by DSM-IV

Exclusions: - not 12-17 years of age
- not living with a parent
- not living within 30 mins of clinic
- diagnosis of mental retardation or psychosis
- receiving a psychological intervention

Notes: Also all participants met DSM-IV criteria for substance abuse or dependence

BANK1991

Study Type: RCT
Blindness: Single blind
Duration (days): Mean 180
Followup: 1,2,3 years
Setting: US Community
Notes: no further details provided on method of randomisation

n= 60
Age: Mean 14
Sex: all males

Diagnosis:
100% Offending history

Exclusions: - less than 2 offences or no serious offences
- >16 years
- living with family 20 miles from treatment centre

Data Used
criminal activity
Notes: DROPOUTS: no details?

Group 2 N= 27

CBT - Individual Cognitive Problem Solving: 15 session cognitive behavioural problem solving skills training for youths with aggressive and defiant behaviours.

Group 1 N= 28

parent training - Parents trained to identify antisocial, prosocial and at risk behaviours (e.g. class attendance, defiance of teachers/adults, spending time with delinquent friends). Behaviour contracts were made on positive and negative consequence of actions.

Group 2 N= 27

Control - weekly family therapy, weekly drug counselling (for those with drug problems), school attendance and performance monitored either by family therapist or probation officer

BARKLEY2000

Study Type: RCT
Study Description: comorbidities: ADHD (66%)
Blindness: Open
Duration (days): Mean 224
Setting: US schools
Notes: randomisation violated on 8 occasions (2 sets of siblings had to be assigned to the same condition, 6 participants could not be used in)

n= 158
Age: Mean 5
Sex: 104 males 54 females

Diagnosis:
18% Conduct disorder by DSM-IV

64% Oppositional defiant disorder by DSM-IV

Exclusions: - can't speak English
- CPRS hyperactive-impulsive <93rd percentile
- scores on behavioural scales not within clinical range

Data Used
CBCL (Teacher)
Self-control Rating Scale (Teacher)
Normative Adaptive Behaviour Checklist
School Situations Questionnaire (Teacher)
Home Situations Questionnaire (Parent)
CBCL (Parent)

Group 1 N= 42

Waitlist

Group 2 N= 39

parent training - 10 weekly sessions plus 5 monthly booster sessions. Behavioural approach: rewarding nondisruptive behaviour, home token system, improving parental command effectiveness, understanding causes of disruptive behaviours

Group 3 N= 37

Special treatment classroom - Classrooms containing only high risk children and used a behavioural intervention based on Swanson, Pfifner and McBurnett. Includes: self-control training and group anger control training.

Group 4 N= 40

Anger Control Training - Includes: self-control training and group anger control training and parent training program.

substantial differences between groups in baseline levels of ADHD, ODD, and CD

BARNOSKI2004

Study Type: RCT
Type of Analysis: Completers
Blindness:
Duration (days): Mean 90
Followup: 12-months

n= 700
Age: Range 13-17
Sex:

Diagnosis:
100% Offending history

Data Used
Recidivism

Group 1 N= 387

Family therapy - FFT. Individual. 12 visits over 90 days. Trained therapists.

Group 2 N= 313

Control - TAU

Exclusions: - not moderate- or high-risk
- no dynamic risk factor score of at least 6/24

BARRETT2000

Study Type: RCT
Blindness: Single blind
Duration (days): Mean 70
Setting: Clinic and Hospital settings, Australia
Notes: no further details on randomisation

n= 57
Age: Mean 9 Range 7-12
Sex: 45 males 12 females
Diagnosis:
100% Oppositional defiant disorder
36% ADHD

Exclusions: - intellectual impairments or learning disabilities
- English as a second language
- children currently on prescribed medication for behaviour problems

Data Used
CBCL (Parent)

Group 1 N= 22

Family interventions - Reciprocal skills training for 10 weeks: combined elements of family therapy, anger control, and problem solving approaches. Hospital setting.

Group 2 N= 23

Family interventions - Reciprocal skills training for 10 weeks: combined elements of family therapy, anger control, and problem solving approaches. Clinic setting.

Group 3 N= 12

Waitlist

BEHAN2001

Study Type: RCT
Type of Analysis: Completers
Blindness:
Duration (days): Mean 56
Setting: IRELAND, Dublin
Outpatient
Notes: Details on randomisation not reported.
Info on Screening Process: Details not reported.

n= 40
Age: Mean 8 Range 3-12
Sex:
Diagnosis:
100% Behaviour problems by Referred by other
10% Conduct disorder by DSM-IV
13% Oppositional defiant disorder by DSM-IV
5% ADHD

Exclusions: - If primary referral to outpatient child psychiatry clinic was not for child misconduct which included noncompliance, oppositional behaviours, aggression or destructiveness.

Notes: 2/3 had DSM-IV diagnosis that included: ADHD, ODD, CD, anxiety disorder, specific learning disability.

Baseline: Means for SDQ at pre-treatment = 22.60 (4.98) for treatment and 19.86 (6.61) for control. Means for CBCL = 61.61 (24.48) for treatment and 54.25 (30.29) for control.

Data Used
Parenting Stress Index (PSI)
CBCL (Parent)
Strengths and Difficulties Questionnaire (SDQ)
Notes: TAKEN AT: pre- and post-treatment, follow-up at 5.5 months but only for treatment group. DROP OUTS: 10 in total + 1 in treatment and 1 in control at post-treatment.

Group 1 N= 26

parent training - Parenting Plus Programme. Specific to Irish context. Group therapy. 8 weekly session, 2H each. Video & manual. Facilitators = experienced child mental health professionals.

Group 2 N= 14

Waitlist

Results from this paper:

- 1.1 Adequately addressed
 - 1.2 Not reported
 - 1.3 Not addressed
 - 1.4 Not addressed
 - 1.5 Poorly addressed [papers states that there are differences as pre-treatment, appears to be differences in CBCL]
 - 1.6 Adequately addressed [state that both groups are getting multidisciplinary child mental health services but do not provide further detail so cannot deduce whether one group is receiving specifically more targeted interventions however both groups are receiving extra service so less likely for there to be a systematic bias]
 - 1.7 Well covered
 - 1.8 20% in total
 - 1.9 Not addressed
 - 1.10 Not applicable
- 2.1 +

BERNAL1980

Study Type: RCT
Study Description: DATA NOT EXTRACTABLE
Type of Analysis: Completers
Blindness: Open
Duration (days): Mean 56
Followup: 1 year
Notes: Details on randomisation not reported.
In methods state that waitlist was randomised and in discussion states that it was not randomised!
Info on Screening Process: Details not reported.

n= 36
Age: Mean 8 Range 5-12
Sex: 31 males 5 females
Diagnosis:
Behaviour problems
Exclusions: Inclusion criteria (Initial screen):
- 5-12 y/o
- no debilitating physical impairment or intellectual deficit
- receiving no treatment at the time of referral
- no psychosis or history of psychological referral other than social aggression
- demonstrated problem behaviours at home
Inclusion criteria (baseline)
- Children had to reach reach 2/3 criteria: (a) observed Overall Deviant behaviour rate above the mean for a normal sample of boys, (b) Tailored Checklist mean occurrence score 1SD above the score for the first 8 subjects* and c) Standard Checklist means score of 1.5 SD above the scores for a normal sample of boys
Notes: 58% met criterion on the observation Overall Deviant scale; 92% Tailored Checklist; 100% Standard Checklist (Standard Checklist was devised for the study after initial screening)

Data Used
Overall Deviant behaviour
Tailored Checklist
Standard Checklist
Notes: TAKEN AT: pre- and post-intervention, 6-month and 1 year follow-up and a telephone interview at 2-years. DROP OUTS: 5 after randomisation; details not given on loss to follow-up

Group 1 N= 12
parent training - 8-week treatment including 10 x 1H sessions + x2 weekly telephone reports. Tailored to the child. Child attended 2-3 sessions. Homework assignment. Therapists = counselling psychology graduates. Clients paid for therapy.

Group 2 N= 11
Client-centered counselling - 8-week treatment: 10 x 1H sessions + x2 weekly telephone reports. Emphasized feelings, attitudes & experiences in the family. Children attended 1-2 sessions so they could express feelings. Counselling psychology graduates. Clients paid for therapy.

* First 8 children passed the initial screen & it was noted that 5/8 had observation Overall Deviant scores below a mean for normal boys; to ensure that subjects were truly in need of treatment baseline inclusion criteria were adopted after the 8th child

Results from this paper:

- 1.1 Well addressed
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Adequately addressed
- 1.6 Adequately addressed
- 1.7 Adequately addressed
- 1.8 ?
- 1.9 Not addressed
- 1.10 Not applicable

- 2.1 +

BORDUIN1995

Study Type: RCT
Blindness: No mention
Duration (days):
Followup: 4-, 13.5-years
Setting: US
Referred by the court
Notes: RANDOMISATION: no details on method

n= 176
Age: Mean 15
Sex: 123 males 53 females
Diagnosis:
100% Offending history
Exclusions: - <2 arrests
- not living with at least one parent figure
- evidence of psychosis or dementia

Data Used
peer relations
Aggression
Revised Behaviour Problem Checklist
Notes: DROPOUTS: at follow-up. MST 22/92
Standard care 28/84

Group 1 N= 92
Multisystemic therapy - problem focused interventions within the family, peer group, school and other systems of the participants environment

Group 2 N= 84
Standard Continuing Care - Individual therapy was the usual care for juvenile offenders in that particular judicial district. Involved eclectic blend of methods including psychodynamic, client centred, and behavioural. Focused on the individual not on social systems

BORDUIN2001

Study Type: RCT
Type of Analysis: No mention

n= 48
Age:
Sex: no information

Data Used
Arrests

Group 1 N= 24
Multisystemic therapy - Problem focused interventions within the family, peer

Blindness: No mention
 Duration (days):
 Setting: Community
 Notes: Details on randomisation not reported.
 Info on Screening Process: Details not reported.

Diagnosis:
 Offending history
 Exclusions: - no information provided.

Notes: TAKEN AT: 8-year follow-up for both sexual and non-sexual offences.

group, school and other systems of the participants environment.

Group 2 N= 24

Standard Continuing Care - No further information provided.

BRADLEY2003

Study Type: RCT
 Type of Analysis: Completers
 Blindness: Open
 Duration (days): Mean 28
 Setting: CANADA
 Outpatient
 Notes: Details on randomisation not reported.
 Info on Screening Process: Details not given.

n= 198
 Age: Range 3-4
 Sex: 121 males 77 females
 Diagnosis:
 100% Behaviour problems by Parent referred
 Exclusions: No exclusion or inclusion criteria.

Data Used

Brief Symptom Inventory (BSI)
 Preschool Characteristics Questionnaire (PCC)
 Preschool Behavior Questionnaire (PBQ)
 Parenting Scale (PS)
 Notes: TAKEN AT: pre- and post-intervention (3-months after randomization) and 1-year follow-up. DROP OUTS: At post-assessment: intervention group = 8; Control group = 16. At 1 year follow-up 25/33

Group 1 N= 89

parent training - Group therapy consisting of a 2H group meeting once a week for 3 weeks followed by a booster session 4 weeks after the third session. Uses a video 1-2-3 Magic that has not been formally evaluated.

No inclusion/exclusion criteria but parents who were experiencing problems managing the behaviour of their 3- or 4-year-old child who attended orientation sessions.

Group 2 N= 109

Control - Waitlist condition

Results from this paper:

- 1.1 Adequately addressed
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Well covered
- 1.6 Not addressed
- 1.7 Well covered
- 1.8 Loss to follow-up at 1-year: 87.3% (intervention group; did not follow-up control)
- 1.9 Not addressed
- 1.10 Not applicable
- 2.1 +

CAVELL2000

Study Type: RCT
 Blindness:
 Duration (days): Mean 485
 Followup: 1 year post-treatment
 Setting: School, US
 Notes: no further details on randomisation

n= 62
 Age: Mean 8 Range 7-8
 Sex: 46 males 16 females
 Diagnosis:
 100% Behaviour problems by Teacher referred
 Exclusions: - not in 2nd or 3rd grade at school
 - not rated as aggressive by teachers

Data Used

CBCL (Parent)
 Notes: CBCL - both parent and teacher outcome:

Group 1 N= 31

Cognitive Problem Solving Skills Training - Prime time intervention: 16 months duration. Included problem solving skills training and mentoring from undergrad student for child. Parents and teachers also received regular visits to provide support.

Group 2 N= 29

TAU - received only mentors

CHAMBERLAIN1998

Study Type: RCT
 Blindness: Single blind
 Duration (days):
 Followup: 12 months
 Setting: US
 Fostercare
 Notes: no further details on method of Antisocial personality disorder: CD Appendix 15

n= 85
 Age: Mean 15 Range 12-17
 Sex: all males
 Diagnosis:
 100% Offending history
 Exclusions: - <12 years of age and >18 years of age
 - no history of serious and chronic delinquency

Data Used

incarceration
 criminal activity

Group 1 N= 40

Multidimensional foster care - problem focused interventions within the family, peer group, school and other systems of the participants environment. Included weekly family therapy with biological parents and weekly group meetings for foster parents in addition to 24-hour phone contact

randomisation

- living at parent's home

Notes: DROPOUTS: MTFC 11/40 Standard care **Group 2 N= 45**
16/45

Standard Continuing Care - Positive peer culture approach used most frequently (but other approaches were used). Therapeutic group work seeks to establish prosocial norms, confront each other about negative behaviour, and take part in discipline and decision-making

CHAMBERLAIN2007

Study Type: RCT

n= 81

Blindness: Single blind

Age: Mean 15 Range 13-17

Duration (days): Mean 174

Sex: all females

Followup: 2 years

Diagnosis:
100% Offending history

Setting: US

Notes: RANDOMISATION: no methods reported

Exclusions: - pregnant
- not in foster care because of chronic delinquency

Data Used

incarceration
criminal activity

Group 1 N= 37

Multidimensional foster care - problem focused interventions within the family, peer group, school and other systems of the participants environment. Included weekly family therapy with biological parents and weekly group meetings for foster parents in addition to 24-hour phone contact

Group 2 N= 44

Standard Continuing Care - group care interventions either focusing on behavioural (70%), eclectic (26%), family (4%) approaches. On average sessions were once weekly.

CONNELL1997

Study Type: RCT

n= 23

Type of Analysis: Completers

Age: Range 2-6

Blindness: Open

Sex: 10 males 13 females

Duration (days): Mean 70

Diagnosis:
52% ADHD by DSM-IV

Followup: 3-months

Setting: AUSTRALIA, Queensland

61% Oppositional defiant disorder by DSM-IV

Info on Screening Process: 42 structured intake interviews were completed, 2 ineligible due to absence of clinically elevated behaviour problems on ECBI, 16 did not complete assessment packs.

13% Conduct disorder by DSM-IV

100% Behaviour problems by ECBI

Exclusions: Criteria:

- families had to reside in rural area
- child needed to be between 2-6, no developmental delay or significant health impairment
- mothers had to report concern about child's behaviour + rate behaviour within clinical range of ECBI
- mothers were asked not to access any other therapy program

Baseline: No significant differences were found for any of the measures of child behaviour, parenting style, or parental adjustment.

Data Used

Parenting Sense of Competence (PSOC)
Parenting Scale (PS)
ECBI
Parent Daily Report Checklist
consumer satisfaction questionnaire
Depression-Anxiety-Stress Scales (DASS)

Notes: TAKEN AT: pre- and post-treatment.
DROP-OUTS: 8.3% (WL), 0% (Intervention)

Group 1 N= 12

Self-directed behavioural family intervention - Parents were required to read sections of 'Every Parent' (Sanders, 1992) and complete tasks in 'Every Parent's Workbook' (Sanders et al., 1994) each week for 10 weeks + weekly telephone contact initiated by client.

Group 2 N=

Results from this paper:

- 1.1 Adequately covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Well covered
- 1.6 Poorly addressed
- 1.7 Well covered
- 1.8 8.3% (WL), 0% (Intervention)

1.9 Not addressed
1.10 Not applicable

2.1 +

DADDS1992

Study Type: RCT
Type of Analysis: Completers
Blindness: Open
Duration (days): Mean 56
Followup: 6-month
Setting: AUSTRALIA, Queensland
Notes: Details on randomisation not reported.
Info on Screening Process: Approximately 50% of people who sought help were included; exclusions were mainly that the child did not meet criteria for a behavioural disorder or parent requested alternate counsel.

n= 22
Age: Mean 5
Sex:
Diagnosis:
Oppositional defiant disorder by DSM-III-R

Conduct disorder by DSM-III-R

Exclusions: Inclusion criteria:
- availability of a person to function as an ally throughout the course of the treatment
- child met the DSM-III-R criteria for ODD or CD
- child's behaviour is not associated with organic pathology + no psychiatric pathology apart from conduct problem
- no family member could be undergoing other psychological treatment
- participants were to indicate willingness to complete self report & home observation procedures

Data Used
Parent Daily Reports (PDR)
Revised Behaviour Problem Checklist
Notes: TAKEN AT: pre- and post-intervention and 6-month's follow-up.

Group 1 N= 11
Family interventions - Child management training + ally support (included 2 mothers, 2 sisters, 1 brother & 6 female friends). The role of allies was to support the parent rather than assist. Child management = 6 training sessions by trainee psychologist.

Group 2 N= 11
Child training group - Child management = 6 training sessions by trainee psychologist.

Results from this paper:

1.1 well covered
1.2 not reported
1.3 not addressed
1.4 not addressed
1.5 Well addressed
1.6 Poorly addressed
1.7 Well covered
1.8
1.9 Not addressed
1.10 Not applicable

2.1 +

DEFFENBACHER1996

Study Type: RCT
Type of Analysis: Completers
Blindness: Open
Duration (days): Mean 63
Setting: US
Schools
Notes: Details on randomisation not reported.
Info on Screening Process: 694 participants screened; 178 eligible; 11 moved or were unavailable before the project started, 4 moved or could not be assessed at follow-up, 8 requested that their child not be involved, 35 did not return consent form = 120 were completed study.

n= 120
Age: Range 12-14
Sex: 63 males 57 females
Diagnosis:
100% Behaviour problems

Exclusions: - If the child did not have an upper quartile on the Trait Anger Scale (TAS > 23)

Data Used
Trait Anger (Self)
Anger Rating Scale (Child)
Anger Situation Rating (Child)
Anger Expression Inventory (Child)
Deviant Behavior Rating (Self)
Notes: TAKEN AT: pre and 8 weeks post-treatment DROP OUTS: 4.8% (cognitive-relaxation coping skills); 2.4% (social skills training); 2.4% (no treatment).

Group 1 N= 39
Anger Control Training - 9 x 45 min in groups of 12-14. List anger-provoking situations and learn cognitive & relaxation techniques to lower arousal. Homework assignments. Therapists = masters level psychologist & doctoral student.

Group 2 N= 40
Social skills training - 9 x 45 min in groups of 12-14. List major provocations and list ways to handle the situation calmly. Rehearsed positive behaviours both mentally & in role plays. Homework assignments. Therapists = masters level psychologist & doctoral student.

Group 3 N= 41
No treatment

Results from this paper:

1.1 Well covered

1.2 Not reported
 1.3 Not addressed
 1.4 Not addressed
 1.5 Not addressed
 1.6 Not addressed
 1.7 Well covered
 1.8 4.8% (cognitive-relaxation coping skills); 2.4% (social skills training); 2.4% (no treatment)
 1.9 Not addressed
 1.10 Not applicable

2.1 +

DESBIENS2003

Study Type: RCT n= 54
 Age: Mean 9
 Sex: 33 males 21 females
 Diagnosis:
 Behaviour problems by Teacher referred
 Exclusions: - not identified by the school as having behaviour problems
 - not identified by a teacher as having behaviour problems

Blindness: No mention
 Duration (days): Mean 30
 Setting: CANADE, Quebec Schools
 Notes: no further details on randomisation
 Info on Screening Process: 212, 158 excluded

Data Used
 Perceived Competence Scale
 Notes: teacher rated outcomes

Group 1 N= 18

Social skills training - Social skills: 1 hour session, once a week for a month. Reinforcement of socially appropriate behaviour, role playing, and problem solving skills. Group therapy.

Group 2 N= 19

Social skills training - Social skills + cooperative learning: 1 hour session, once a week for a month. Reinforcement of socially appropriate behaviour, role playing, and problem solving skills. Also learned to work cooperatively with prosocial peers. Group therapy

Group 3 N= 17

Control - No further details reported.

DISHION1995

Study Type: RCT n= 158
 Age: Mean 12 Range 10-14
 Sex: 83 males 75 females
 Diagnosis:
 100% Behaviour problems
 Exclusions: Children had to meet 4/10 risk factors which were: (1) closeness to parents, (2) emotional adjustment, (3) academic engagement, (4) involvement in positive activities, (5) experience seeking, (6) problem behaviors, (7) child's substance use, (8) peer substance use, (9) family substance use history and (10) stressful life events.

Type of Analysis: ITT
 Blindness: Open
 Duration (days): Mean 84
 Notes: Details on randomisation not reported.
 Info on Screening Process: Details not given

Data Used
 CBCL (Parent)
 Notes: TAKEN AT: pre- and post-intervention at 1-year follow-up.

Group 1 N= 26

parent training - 12 x 90min group sessions (8 families) per week. Targets parents family management paractices & communication skills.

Group 2 N= 32

Child training group - 12 x 90min group sessions (7-8 teenagers) per week. Aims to enhance the teeneager's regulation of their prosocial & disruptive behaviour in parent & peer environment. Homework assigned & group incentives.

Group 3 N= 31

Child + parent training group

Group 4 N= 29

Self-directed behavioural family intervention - Did not involve weekly group meetings or therapists contact but received all the intervention materials that accompanied the parent focus and teen focus interventions = 6 newsletters + 5 brief videotapes.

Results from this paper:

1.1 Well covered
 1.2 Not reported
 1.3 Not addressed
 1.4 Not addressed
 1.5 Well covered
 1.6 Not addressed

1.7 Well covered
1.8 ??
1.9 Not addressed
1.10 Not addressed
2.1 +

DRUGLI2006

Study Type: RCT n= 127
Type of Analysis: Completers Age: Mean 7
Blindness: Open Sex: 101 males 26 females
Duration (days): Range 70-84
Diagnosis:
100% Behaviour problems by ECBI
83% Behaviour problems at school by PBQ and TRF
Setting: NORWAY
Outpatient
Exclusions: Children with gross physical impairment, sensory deprivation, intellectual deficit or autism.

Data Used
KIDDIE-SADS
TRF
Preschool Behavior Questionnaire (PBQ)
WALLY
CBCL (Parent)
ECBI
Social Competence and Behavior Evaluation (SCBE)
INVOLVE-T
Student-Teacher Relationship Scale (STRS)
Notes: TAKEN AT: pre- and post-intervention assessment and for intervention group at 1-year follow-up. DROP OUTS: Intervention group: 3 (2.4%)

Group 1 N= 47
parent training - Basic Incredible Years Parenting Programme. A total of 10-12 parents met in groups with 2 therapists at the clinic for 12-14 weekly 2H sessions.
Group 2 N= 52
Child + parent training group - Parent training plus child therapy. A total of 6 children and 2 therapists met weekly in 2H sessions for 18 weeks at the clinic for the Incredible Years Dinosaur School Programme.

All children received a possible or defined diagnosis of ODD and/or CD according to KIDDIE-SADS. "Possible diagnosis" refers to those children who scored one criterion less than the 4 required for a DSM-IV ODD or the 3 items required for CD.

Results from this paper:

1.1 Well covered
1.2 Not reported
1.3 Not addressed
1.4 Not addressed
1.5 Well covered
1.6 Not addressed
1.7 Well covered
1.8 Intervention group: 2.4%
1.9 Not addressed
1.10 Not applicable
2.1 +

ELIAS2003

Study Type: RCT n= 39
Blindness: Open Age: Mean 9 Range 8-11
Duration (days): Mean 126 Sex: all males
Diagnosis:
100% Behaviour problems
Setting: BRAZIL
Notes: Details on randomisation not reported.
Info on Screening Process: Details not given
Exclusions: Inclusion criteria:
- child between 8 & 11 y/o
- no physical impairment, intellectual deficit, history of psychosis
- not receiving any sort of psychological or psychiatric treatment at the time of referral
- primary referral problem was low performance at school associated with behaviour problems

Data Used
Interpersonal problem solving
School achievement
Child Behaviour (Rutter Scale)
Notes: TAKEN AT: pre- and post-intervention (long term follow-up is planned as well). DROP OUTS: Problem solving (5.3%, N = 1); Language workshop (15%, N = 3)

Group 1 N= 19
Problem Solving - Intervention = modified version of "I can Problem Solve" (Shure, 1992) + parent training. 18 x 2H group session (3-4 children) per week; mean no. of sessions = 15.7. Adult guides the child in applying problem-solving concepts to solve a real-life problem.
Group 2 N= 20
Language Workshop - 18 x 2H group session of 3-4 children per week; mean number of sessions = 15.2 + parent training. Main goal is to help school-age children improve motivation for school learning. Children develop research + projects on themes that meet their interests.

Results from this paper:

- 1.1 Well covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Well covered
- 1.6 Adequately covered
- 1.7 Well covered
- 1.8 5.3% (Problem solving); Language workshop (15%)
- 1.9 Not addressed
- 1.10 Not applicable

2. 1 +

FEINDLER1984

Study Type: RCT
 Type of Analysis: Completers
 Blindness: Open
 Duration (days): Mean 49
 Setting: US School
 Notes: Details on randomisation not reported.
 Info on Screening Process: 36/100 disruptive students from an existing specialized program. 100 students chosen for the programs as they had been suspended for offenses (other than smoking or truancy) at least twice during the previous school year.

n= 36
 Age: Mean 14 Range 12-16
 Sex:
 Diagnosis:
 100% Behaviour problems by Teacher referred
 Exclusions: If the adolescent did not have the highest rate of classroom and/or community disruption as recorded on school records.
 Baseline: Baseline data was reported; no test that examined differences between the conditions in the baseline data were reported.

Data Used
 Self-control Rating Scale (Teacher)
 Notes: TAKEN AT: pre- and 5-weeks post-intervention

Group 1 N= 18
 Anger Control Training - 10 x 50 min biweekly training sessions over 7 week treatment period. Trained therapist. Behavioural and cognitive controls were taught i.e. relaxation sequence and problem solving. Homework assigned. Group therapy.
Group 2 N= 18
 Control - No treatment

Results from this paper:

- 1.1 Adequately covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Poorly addressed
- 1.5 Not reported
- 1.6 Not addressed
- 1.7 Adequately addressed
- 1.8 0%
- 1.9 Not applicable
- 1.10 Not applicable

2.1 +

FEINFIELD2004

Study Type: RCT
 Type of Analysis: Completers
 Blindness: Open
 Duration (days): Mean 77
 Notes: Details on randomisation not reported.
 Info on Screening Process: Details not reported.

n= 47
 Age: Mean 7 Range 4-8
 Sex:
 Diagnosis:
 100% Behaviour problems by ECBI
 Exclusions: If the child was not between the ages of 4 and 8 years of age, developmentally delayed and if the primary referral problem was not persistent and significant disruptive behaviour problems.
 If the child did not have a significant disruptive behaviour problems according to the primary caregiver's CBCL externalizing domain (T score of 60 or greater) or the ECBI (problem domain score of 12 or greater).

Data Used
 Walker-McConnell Scale of Social Competence
 ECBI
 Homes Situations Questionnaire (Parent)
 School Situations Questionnaire (Teacher)
 Parenting Sense of Competence (PSOC)
 Parenting Stress Index (PSI)
 CBCL (Parent)
 TRF
 Parent Satisfaction Questionnaire
 Alabama Parenting Questionnaire (APQ)
 Parent-Child Relationship Questionnaire (PCRQ)

Group 1 N= 24
 parent training - Parent and child together groups for the first 30 min of every group meeting plus, parent groups (whilst children are in child groups) that consisted of nine 1H 30min group sessions and three 40min individual sessions. Minimal fee for service.
Group 2 N= 23
 Waitlist - Involved in post-delayed treatment.

Baseline: Waitlist condition had significantly higher TRF aggressions-scores, higher SSQ severity scores and lower Walker-McConnell total scores than the treatment condition at the initial assessment.

Consistency question
 Index of Parental Attitudes (IPA)
 Behavioral Vignettes Test-Hyperactivity
 Leader evaluation
 Behavior Global Change Rating

Notes: TAKEN AT: pre- and post-intervention (waitlist also assessed at post-delayed intervention) and at a 5-month follow-up. DROP OUTS: 4 (treatment condition) and 5 (waitlist); 8 waitlist declined participation in delayed-treatment group.

Results from this paper:

- 1.1 Adequately addressed
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Poorly addressed
- 1.6 Not addressed
- 1.7 Well covered
- 1.8 9.6% (treatment condition); 11.5% (waitlist)
- 1.9 Not addressed
- 1.10 Not applicable

2.1 +

FRASER2004

Study Type: RCT n= 115
 Age: Mean 9 Range 6-12
 Blindness: No mention
 Sex: 72 males 43 females
 Duration (days):
 Diagnosis:
 Setting: During school/After school, in 6 sites in USA (3 urban, 3 town/rural)
 Exclusions: - infrequent aggressive behaviour (hitting, arguing, defiance, anger)
 Notes: no further details on randomisation - not rejected by prosocial peers (liked by or not isolated from classmates)

Data Used
 Carolina Child Checklist-Teacher Form
 Notes: Dropouts: Treatment 17/62 Control 12/53

Group 1 N= 45
 Multidimensional intervention - Families received on average 26h of training, children received 28h of training. Family intervention delivered in the home drawing from parent training, MST etc. Child intervention included social skills training and interacting with prosocial peers

Group 2 N= 41
 Control

GARDNER2006

Study Type: RCT n= 76
 Age: Mean 6 Range 2-9
 Type of Analysis: ITT
 Sex: 56 males 20 females
 Blindness: Unclear
 Duration (days): Mean 98
 Diagnosis:
 Setting: UK
 Outpatient (5 sites)
 Info on Screening Process: Of the 158 referrals, 37 did not meet inclusion criteria, 24 were unwilling to participate and 11 were assigned to a 3rd arm of the trial that was dropped.
 Exclusions: Inclusion criteria:
 - child aged 2-9
 - referred for help with conduct problems
 - score >10 on ECBI problem scale
 - parent able to attend group and communicate in English
 Exclusion criteria:
 - child severely disabled
 - child in temporary care
 - parent drug addict

Data Used
 Observation settings
 Beck Depression Inventory
 Parenting Scale (PS)
 Parenting Sense of Competence (PSOC)
 ECBI
 Notes: TAKEN AT: pre- and post- intervention (6-months later) and for intervention group at 12-month follow-up. DROP OUTS: Post-intervention = 11.4% (intervention) and 0% (control); at follow up = 13.7% (intervention).

Group 1 N= 44
 parent training - Parent training (Webster-Stratton, 1998) consisted of a 14-week intervention delivered weekly to groups of 10-12 parents in 2H session. Children did not participate but were offered supervised child care.

Group 2 N= 32
 Control - Waitlist

- previous attendance at Family Nurturing Network

Baseline: Significant difference between groups on the outcome measure, observed child independent play where the intervention group scored: M=11.3 (SD = 9.9) and control group scored: M= 18.6 (SD + 10.9).

Results from this paper:

- 1.1 Well covered
- 1.2 Well covered
- 1.3 Well covered
- 1.4 Not addressed
- 1.5 Poorly addressed
- 1.6 Not addressed
- 1.7 Well covered
- 1.8 Post-intervention: 11.4% (intervention) and 0% (control); at follow-up = 13.7% (intervention)
- 1.9 Not addressed
- 1.10 Not addressed

2.1 +

GARRISON1983

Study Type: RCT
Blindness: Open
Duration (days): Mean 7
Followup: 2-week
Setting: Schools
Notes: Details on randomisation not reported.

Info on Screening Process: 73 children assessed using teacher ratings of the Aggression Scale of the CBCL; the 30 obtaining the highest scores were included.

n= 30
Age: Range 8-11
Sex: all males
Diagnosis:
Exclusions: Exclusion criteria:
- children known to be receiving psychological services or remediation for academic difficulties or had repeated a grade

Baseline: Pre-treatment scores on fear scale of Affect Questionnaire was 105.0 for control intervention and 82.4 and 88.0 respectively for intervention and no treatment group.

Data Used
Behaviour problem checklist
Notes: TAKEN AT: pre- and post-intervention and 2-week follow-up.

Group 1 N= 10
Affective Imagery Training - 3 x 30 - 40 min sessions in the same week. Situations which elicit specific affective states for the child were identified, physiological correlates were listed and affective imagery training was done. Group therapy.

Group 2 N= 10
Control - Attention control group received attention by playing a game i.e. "Battleship"

Group 3 N= 10
TAU - No treatment

Results from this paper:

- 1.1 Well covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Not addressed
- 1.6 Poorly addressed
- 1.7 Well covered
- 1.8 Details not given
- 1.9 Not addressed
- 1.10 Not reported

2.1 +

GORDON1995

Study Type: Non-Randomised Control Trial
Blindness: Single blind
Duration (days): Mean 150
Setting: US

n= 54
Age: Mean 15
Sex: 38 males 16 females
Diagnosis:
100% Offending history
Exclusions: - not court referred juveniles

Data Used
Recidivism

Group 1 N= 27
Family interventions - Functional Family Therapy: reducing conflict and promoting family cohesion through social learning and behavioural techniques. Parent training and family living skills were also taught to families (e.g. communication skills, problem solving etc).

include as not RCT?

GREENE2004

Study Type: RCT n= 47
 Study Description: DATA NOT EXTRACTABLE Age: Range 4-12
 Type of Analysis: Completers Sex: 32 males 15 females
 Blindness: Open Diagnosis:
 Duration (days): Mean 11 Range 7-16 100% Oppositional defiant disorder by DSM-IV
 Followup: 4-months
 Setting: Outpatient Exclusions: Inclusion criteria:
 Notes: Details on randomisation not reported. - Children with ODD between the ages of 4-12 who were clinically referred.
 Info on Screening Process: Details not given. Exclusion criteria:
 - IQ below 80
 - actively suicidal or homicidal
 Notes: All children had at least subthreshold features of either juvenile bipolar disorder or major depression.
 Baseline: Groups did not differ significantly on measures on treatment outcome.

Data Used

Clinical Global Impression
 ODD rating scale (ODDRS)
 parent-child relationship inventory (PCRI)
 Parenting Stress Index (PSI)
 Notes: TAKEN AT: pre- and post-intervention and 4-month follow-up (for completers). DROP OUTS: Of the children who completed treatment: loss to follow-up 15.8% (PT) and 10.8% (problem solving).

Group 1 N= 28

Problem Solving - Collaborative problem solving of weekly sessions ranging from 7-16 weeks, primarily for parents only. Treatment is manualized but session content and duration are not circumscribed in order to meet the individual needs of the children/parents.

Problem solving condition had significantly more adjustments to their medication regimens during active treatment compared with children in parent training condition.

Group 2 N= 19

parent training - Barkely's (1997) 10-week behaviour management programme, primarily for parents only. Manualized with specified weekly session content. Therapists are doctorate-level clinical psychologists.

Results from this paper:

- 1.1 Poorly addressed
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Not addressed
- 1.6 Poorly addressed
- 1.7 Adequately covered
- 1.8 20% problem solving; 20% parent training
- 1.9 Not addressed
- 1.10 Not applicable
- 2.1 +

HENGGELER1992

Study Type: RCT n= 84
 Blindness: Single blind Age: Mean 15
 Duration (days): Mean 94 Sex: 65 males 19 females
 Followup: 59-weeks; 2,4 years Diagnosis:
 Notes: RANDOMISATION: no information on method of randomisation and allocation concealment 100% Conduct disorder/behaviour problems by Juvenile offenders
 primary outcomes on crime and recidivism were blinded Exclusions: - not a juvenile offender
 - not at imminent risk for out-of-home placement because of serious criminal activity (e.g. crimes against the person, arson, other felonies)
 - recidivism data from state computer system not available
 Info on Screening Process: 96 screened, 12 excluded (2 did not have a felony arrest, 6 refused to participate or moved house, 2 randomisation was violated, 2 recidivism data was not available)

Data Used

Recidivism
 Arrests
 Revised Behaviour Problem Checklist
 Behaviour problems
 Aggression
 Notes: DROP OUTS: MST (10/43); CONTROL (18/41)

Group 1 N= 43

Multisystemic therapy - Problem focused interventions within the family, peer group, school and other systems of the participants environment

Group 2 N= 41

Standard Continuing Care - Received court orders including one or more stipulations (e.g. curfew, school attendance, participation with other agencies). Adherence was monitored by probation officers. If stipulations not met could be placed in a DYS institution.

HENGGELER1997

Study Type: RCT n= 155
 Age: Mean 15 Range 10-18
 Sex: 127 males 28 females

Data Used

peer relations
 criminal activity

Group 1 N= 82

Multisystemic therapy - problem focused interventions within the family, peer

Blindness: No mention
 Duration (days): Mean 122
 Followup: 1.7 years
 Setting: US
 Referred from Criminal Justice System
 Notes: RANDOMISATION: no details on method of randomisation

Diagnosis:
 100% Offending history

emotional behavioural functioning
 Notes: DROPOUTS: MST 7/82 Standard care 8/73

group, school and other systems of the participants environment

Group 2 N= 73

Standard Continuing Care - placed on probation for 6 months. During probation, typically seen by probation officer once a month, school attendance monitored, and referred to other social services agencies.

incarceration outcome blinded

HENGGELER1999

Study Type: RCT
 Blindness: Open
 Duration (days): Mean 130
 Followup: 6-month
 Setting: US
 Notes: RANDOMISATION: method not reported
 Info on Screening Process: 423 screened

n= 118
 Age: Mean 15 Range 12-17
 Sex:
 Diagnosis:
 35% Conduct disorder by DSM-III-R
 12% Oppositional defiant disorder by DSM-III-R
 100% Offending history

Data Used
 Arrests
 Self-Report Delinquency scale (SRD)
 Notes: DROP OUTS: 1/58

Group 1 N= 58

Multisystemic therapy. Mean dose 130 days - problem focused interventions within the family, peer group, school and other systems of the participants environment

Group 2 N= 60

Standard Continuing Care - mainly 12 step groups

Exclusions: - Not 12-17 years of age
 - not abusing or dependent on substances
 - not on probation
 - not resident with at least one parent

Baseline: greater alcohol and drug misuse in the standard care group

Results from this paper:

- 1.1 Adequately addressed
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Poorly addressed
- 1.6 Adequately addressed
- 1.7 Poorly addressed
- 1.8
- 1.9 Not addressed
- 1.10 Not addressed
- 2.1 +

HENGGELER2006

Study Type: RCT
 Blindness: Open
 Duration (days): Mean 84
 Followup: 12-months
 Setting: US
 Drug courts
 Notes: RANDOMISATION: no details on the method

n= 161
 Age: Mean 15 Range 12-17
 Sex: 134 males 27 females
 Diagnosis:
 36% Conduct disorder by DSM-IV
 24% Oppositional defiant disorder by DSM-IV
 100% Offending history

Data Used
 CBCL (Parent)
 Arrests
 Self-Report Delinquency scale (SRD)
 Notes: DROP OUTS: MST + drug court (9/28); MST + family court (6/43); drug court (9/38; famil; court (9/42)

Group 1 N= 38

Waitlist

Drug Court - court met once a week - provided incentives for negative urine and sanctions for positive urine samples

Group 2 N= 38

Multisystemic therapy - problem focused interventions within the family, peer group, school and other systems of the participants environment over a 4 month + drug court.

Exclusions: - not aged 12-17 years of age
 - not abusing or dependent on psychoactive substances
 - not on probation

- not resident with at least one parent

Group 3 N= 42

Family Court - Met on average once or twice per year. Youths were directed to receive group treatment for 12 weeks including risk reduction, peer influence, conflict resolution, and anger management. Also concurrently received family group therapy for 12 weeks.

Group 4 N= 43

Multisystemic therapy - MST + family court + contingency management.

HUDLEY1993

Study Type: RCT
Type of Analysis: Completers
Blindness: Open
Duration (days): Mean 42
Setting: US, Los Angeles Schools
Info on Screening Process: 3rd - 5th graders who had parental consent N = 529; only African-American boys were eligible (N=271); N=78 met criteria for aggressiveness; N=42 met criteria for nonaggressiveness; 72 aggressives and 36 nonaggressives were randomly assigned to groups.

n= 108
Age: Mean 10
Sex: all males
Diagnosis:
Exclusions: Inclusion criteria for aggressiveness:
- above the teacher median on perceived aggressiveness as rated by the Teacher Checklist (Coie, 1990)
- have a social preference score less than 0 as rated by peers
- have at least twice as many aggressive as prosocial nominations as rated by peers

Data Used
Teacher Rating Scale
Notes: TAKEN AT: pre- and post-assessment.
DROP OUTS: (treatment condition) 16.6%; (active intervention) 8.3%; (control) 0%

Group 1 N= 20

Attributional Intervention - 2 x 40-60 min sessions for 6 weeks with 6 students (4 aggressives + 2 nonaggressives). Therapists = educators. Cognitive intervention designed to teach boys not to infer hostile peer intent in negative social encounters of ambiguous causal origin.

Group 2 N= 22

Control - Building Thinking Skills focused on nonsocial problem solving skills such as classifying information and following directions.

Group 3 N= 24

No treatment

Results from this paper:

- 1.1 Poorly addressed
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Not reported
- 1.6 Not addressed
- 1.7 Well covered
- 1.8 treatment condition (16.6%); active intervention (8.3%); control (0%)
- 1.9 Not addressed
- 1.10 Not reported
- 2.1 +

HUGHES1988

Study Type: RCT
Study Description: DATA NOT EXTRACTABLE
Type of Analysis: Completers
Blindness: Open
Duration (days): Mean 49
Setting: AUSTRALIA
Notes: Details on randomisation not reported
Info on Screening Process: Screened 61 families, 11 did not meet selection criteria and 8 did not complete the full course of treatment. Final sample = 42.

n= 42
Age: Mean 12
Sex: 34 males 8 females
Diagnosis:
Exclusions: Inclusion criteria:
- major problems such as disobedience, temper tantrums, irritability, fighting, destructiveness, rudeness, lying or staying out late.
- at least 4 problems on the Conduct Problem subscale of the Behavior Problem Checklist
- age of child between 6-15
- absence of other major disorders
- absence of acute risk factors
child presently residing at home
- expression of willingness to co-operate on the part of the child

Data Used
Piers-Harris children's self-concept scale
Parent attitude survey (PAS)
Daily Report Diaries
Becker Adjective Checklist
Behaviour problem checklist
Notes: TAKEN AT: pre- and post-intervention.
DROP OUTS: 8 in total.

Group 1 N= 0

parent training - 7 x weekly 1.5H sessions conducted on an individual basis with each family. Half had child present at therapy (measured this effect on outcome).

Did not report the number of participants in each arm of the trial.

Group 2 N= 0

Communication skills/problem-solving training - 7 x weekly 1.5H sessions conducted on an individual basis with each family. Components: (1) teaching basic communication skills (2) training in problem solving (3) modification of unhelpful self-talk. Half had child present at therapy (measured effects).

- absence of major pathology or mental retardation on the part of the parent
- parent's expressed commitment to keeping the child at home
- fluency of parent + child in English language

Notes: No formal diagnosis or tool used; parents were screened with a subscale of Behavior Problem Checklist

Baseline: No significant differences between groups at pre-assessment

Results from this paper:

- 1.1 Well covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Well covered
- 1.6 Not addressed
- 1.7 Well covered
- 1.8
- 1.9 Not addressed
- 1.10 Not applicable
- 2.1 +

HUTCHINGS2007

Study Type: RCT
 Study Description: Pragmatic (effectiveness) trial
 Type of Analysis: I.T.T
 Blindness: Open
 Duration (days): Mean 84

n= 153
 Age: Range 3-4
 Sex: no information
 Diagnosis:
 100% Behaviour problems by ECBI

Data Used
 DPICS
 Strengths and Difficulties Questionnaire (SDQ)
 ECBI
 Notes: TAKEN AT: pre- and post-assessment
 DROP OUTS: 17.3% (intervention)

Group 1 N= 104
 parent training - Maximum of 12 parents attended wach weely sessions which lasted 2 - 2.5 hours over a period of 12 weeks.
Group 2 N= 49
 Control - Waitlist condition

Notes: The fourth author blindly and randomly allocated patricipants after stratification by age and sex, using a random number generator.

Exclusions: Inclusion criteria:
 - Child aged between 36 and 48 months
 - ECBI: Intensity score = 127; Problem score = 11
 - SDQ: Hyperactivity = 7

Info on Screening Process: 153 families were eligible and consented; 104 were allocated to intervention and 49 to control.

Results from this paper:

- 1.1 Adequately covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Not addressed
- 1.6 Not addressed
- 1.7 Well covered
- 1.8 17.3% (intervention)
- 1.9 Well covered
- 1.10 Not addressed
- 2.1 +

IRELAND2003

Study Type: RCT
 Type of Analysis: Completers
 Blindness: Open
 Duration (days): Mean 54

n= 37
 Age: Range 2-5
 Sex: 24 males 13 females
 Diagnosis:
 100% Behaviour problems by Parent referred

Data Used
 Parent problem checklist (PPC)
 Marital communication inventory
 ENRICH Marital Satisfaction Scale
 Abbreviated Dyadic Adjustment Scale (ADAS)

Group 1 N= 19
 Standard Group Triple-P - Group triple-p: 4 x 2H group sessions + 4 x 15-30min follow-up telephone consultations. For both parents.

Exclusions: Inclusion criteria for two-parent couples:
 - have a child between 2-5
 - exhibit clinically significant levels of marital conflict overparents (Parent Problem Checklist)
 - report qualitative concerns about the management of their child's disruptive or oppositional behaviour
 - be married or in cohabiting relationship for at least 12-months
 - both agree to attend all group sessions

Exclusion criteria:
 - both parents failed to attend at least 3/4 group sessions of standard triple-p or 5/6 group sessions for enhanced triple-p

Baseline: Parenting Scale (PS) a significant difference between condition for fathers such that the total score on this measure was significantly higher in the enhanced triple-p than the standard triple p.

Depression-Anxiety-Stress Scales (DASS)

Parenting Scale (PS)

ECBI

Notes: TAKEN AT: pre- and post-intervention and 3-month follow-up. DROP OUTS: Standard (23.8%); enhanced (30.4%).

Group 2 N= 18

Enhanced Group Triple-P - Group Triple P + 2 Group Partner Support (GPS) 90-minute sessions that aimed to improve marital communication + offer support for each other's parent efforts. For both parents; telephone consultations for one parent.

Results from this paper:

- 1.1 Well covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Adequately addressed
- 1.6 Not addressed
- 1.7 Well covered
- 1.8 Standard (23.8%); enhanced (30.4%).
- 1.9 Not addressed
- 1.10 Not applicable

2.1 +

IRVINE1999

Study Type: RCT
 Blindness: No mention
 Duration (days): Mean 84
 Followup: 3months
 Setting: US middle schools
 Notes: no further details on method of randomisation

n= 303
 Age: Mean 12
 Sex: 185 males 119 females
 Diagnosis:
 100% Behaviour problems by Teacher Risk Screening Instrument
 Exclusions: - not exhibiting risk behaviours according to Teacher Risk Screening Instrument
 - not middle school children

Data Used
 PDR
 CBCL (Parent)
 Notes: DROPOUTS: no info?

Group 1 N= 151

parent training - 12 weekly sessions of group parent training lasting 90mins-2hr. Parent monitoring, positive reinforcement, parent-child communication, problem solving skills. Each week expected to practice skills and discuss with group. Parents were given money to attend

Group 2 N= 152

Control - Waitlist condition

ISON2001

Study Type: RCT
 Blindness:
 Duration (days): Mean 49
 Setting: ARGENTINA Schools
 Notes: no further details on randomisation

n= 164
 Age: Range 8-12
 Sex: all males
 Diagnosis:
 100% Conduct disorder/behaviour problems by Child Behavior Report
 Exclusions: - not of low socio-economic status
 Notes: also included a 151 children without conduct disorder but analysed separately

Data Used
 Child Behavior Report

Group 1 N= 90

Social skills training - Social skills training: 14 sessions twice weekly. Units included learning appropriate ways to make a complaint, learning how to say no, asking others to change inadequate behaviors, empathy, listening etc.

Group 2 N= 74

Control - No treatment

JOURILES2001

Study Type: RCT
 Blindness:
 Duration (days): Mean 240
 Followup: 16 months
 Setting: US, shelter for battered women
 Notes: no further details on randomisation

n= 36
 Age: Mean 6 Range 4-9
 Sex: 26 males 10 females
 Diagnosis:
 72% Oppositional defiant disorder
 28% Conduct disorder

Exclusions: - mother not in shelter for battered women
 - child did not have CD or ODD
 - children not 4-9 years old

Data Used
 CBCL (Parent)

Group 1 N= 18
 parent training - Parent and child intervention for up to 8 months: Providing social and instrumental support for mother and child. Additionally, training mothers with problem solving and child management skills.

Group 2 N= 18
 Control - Monthly telephone conversations and visits

KACIR1999

Study Type: RCT
 Type of Analysis: Unclear
 Blindness: Open
 Duration (days): Mean 14
 Followup: 3-5 months
 Setting: USA Appalachian Southern Ohio
 Notes: Random number generator: mothers who received an even number were assigned to the experimental group.
 Info on Screening Process: Details not reported. Note: there are no exclusion criteria adopted in the study.

n= 38
 Age: Mean 14 Range 12-18
 Sex: 19 males 19 females
 Diagnosis:
 58% Behaviour problems by ECBI

Exclusions: No inclusion/exclusion criteria.
 Notes: ECBI scores ranged from no problem behaviour (1 in treatment group, 1 in control) to 27 - a clinically significant amount (M=11.68, SD= 8.1)
 Baseline: No significant differences between groups on the 3 outcome measures at pre-intervention.

Data Used
 Parenting knowledge test
 Parent behaviour questionnaire
 ECBI
 Notes: TAKEN AT: Pre- and post-intervention with a median of a 4-month follow-up.

Group 1 N= 19
 parent training - Parenting Adolescent Wisely (PAW) program consisting of 9 specific problems i.e. children not completing chores where the user is asked to pick 1 of 3 solutions based on how they would act in the situation. Parent receives feedback on-screen.

Group 2 N= 19
 Control - No treatment

Results from this paper:

- 1.1 Well covered
- 1.2 Well covered
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Adequately addressed
- 1.6 Adequately addressed
- 1.7 Well covered
- 1.8 Not reported
- 1.9 Not reported
- 1.10 Not applicable
- 2.1 +

KAZDIN1987

Study Type: RCT
 Type of Analysis: Completers
 Blindness: Open
 Duration (days): Mean 140
 Setting:
 Inpatient
 Notes: Details on randomisation not reported
 Info on Screening Process: Details not given

n= 40
 Age: Range 7-12
 Sex: 31 males 9 females
 Diagnosis:
 58% Conduct disorder by DSM-III
 8% ADHD by DSM-III
 10% Major depressive disorder by DSM-III
 Anxiety disorder by DSM-III

Exclusions: Inclusion:

Data Used
 School Behavior Checklist (SBCL-Form A2)
 CBCL (Parent)
 Notes: TAKEN AT: pre- and post treatment and at 4, 8, 12 month follow-up. DROP OUTS - at post-treatment: 16.7% (treatment); 1 2.5% (control) - at follow-up: 17.6% (treatment); 20.6% (control)

Group 1 N= 24
 parent training - Parent management training plus problem solving training (for child). Parent training = 13 x 2H weekly sessions. Child training = 20 x 50 minute sessions. Therapists = postgraduate mental health workers.

Group 2 N= 16
 Control - Contact-control condition.

- children referred for treatment for their antisocial behavior including aggressive acts, fighting, unmanageability at home or at school, stealing, running away, truancy or related antisocial behaviours as identified at intake assessment
- rated by their parent at the 98th percentile on either the aggressuib or delinquency scale of the CBCL
- between 7 and 13 y/o
- ISC-R IQ of 70+
- to show no evidence of neurological or organiz impairment, seaizures, psychoses or pervasive development disorder
- to not be receiving psychotropic medication

Baseline: No significant differences.

Results from this paper:

- 1.1 Well covered
 - 1.2 Not reported
 - 1.3 Not addressed
 - 1.4 Not addressed
 - 1.5 Well covered
 - 1.6 Adequately addressed
 - 1.7 Well covered
 - 1.8 17.6% (treatment); 20.6% (control)
 - 1.9 Not addressed
 - 1.10 Not applicable
- 2.1 +

KAZDIN1989

Study Type: RCT n= 112

Type of Analysis: Completers Age: Range 7-13

Blindness: Open Sex: 87 males 25 females

Duration (days): Mean 175

Followup: 1 year

Setting: US Exclusions: - not referred for treatment of antisocial Inpatient/outpatient behaviour (e.g. fighting, stealing, unmanageability)

Notes: No further details on randomisation - below 90th percentile on aggression or delinquency subcscales of CBCL

Info on Screening Process: Details not reported. - WISC-R IQ score <70
- receiving psychotropic medication

Baseline: No differences between groups at pre-intervention.

Data Used

Parent Daily Report Checklist
CBCL (Parent)
School Behavior Checklist (SBCL-Form A2)
Notes: DROP OUTS: problem solving 3/37; problem solving+ practice 6/38; relationship therapy 6/37

Group 1 N= 37

Cognitive Problem Solving Skills Training - Problem solving skills training for 25 sessions. Combined cognitive and behavioural techniques to teach problem solving skills. Individual therapy.

Group 2 N= 38

Cognitive Problem Solving Skills Training - Cognitive problem solving skills + in vivo practice for 25 sessions. Standard problem solving intervention + homework assignments. Individual therapy.

Group 3 N= 37

Control - Client centred relationship therapy for 25 sessions: developing a close relationship with the child and providing empathy and unconditional positive regard. Later sessions involved discussing interpersonal situations with peers, teachers, parents etc.

KAZDIN1992

Study Type: RCT n= 97

Type of Analysis: Completers Age: Range 7-13

Blindness: Open Sex: 76 males 21 females

Duration (days): Mean 213

Followup: 1-year

Setting: Outpatient Exclusions: 41% Oppositional defiant disorder by DSM-IIIR

Notes: Details on randomisation not reported

Data Used

Children's Action Tendency - Aggression Scale
Interview for Antisocial Behaviour
PDR
Self-Report Delinquency scale (SRD)
CBCL (Teacher)
CBCL (Parent)

Group 1 N= 29

CBT - Cognitive & behavioural techniques to teach problem solving skills. Child received 25 x 50min weekly sessions + homework + between-session phone contacts. Parents were brought into the sessions to watch, assist + foster child's new skills.

3% ADHD by DSM-III-R

Exclusions: Inclusion criteria:

- if they were referred to clinic for treatment for fighting, unmanageability at home or at school, stealing, running away, truancy or related antisocial behaviour
- above the 90th percentile on the aggression or delinquency scale of the CBCL
- aged 7-13
- read above the second grade level on the Wide Range Achievement Test
- were not receiving psychotropic medication
- both the child and parent/guardian provided consent

Baseline: No differences

Notes: TAKEN AT: pre- and post-intervention and at 1-year follow-up. DROP OUTS: 13.8% (CBT); 29.0% (PMT); 21.3% (CBT + PMT)

Group 2 N= 31

PMT - Parent seen individually for 16x1.5 - 2H sessions over 6-8 months; at different points in treatment the child was brought into the sessions. Child's performance at school was monitored + teachers involved.

Group 3 N= 37

CBT + PMT - over 6-8 months

Results from this paper:

- 1.1 well covered
- 1.2 not reported
- 1.3 not addressed
- 1.4 not addressed
- 1.5 well covered
- 1.6 poorly addressed
- 1.7 well covered
- 1.8 13.8% (CBT); 29.0% (PMT); 21.3% (CBT + PMT)
- 1.9 not addressed
- 1.10 not applicable
- 2.1 +

KENDALL1990

Study Type: RCT
 Blindness: Single blind
 Duration (days): Mean 120
 Setting: US
 Day hospital
 Notes: departure (3 participants during study) from randomisation

n= 29
 Age: Mean 11 Range 7-13
 Sex: 26 males 3 females
 Diagnosis:
 100% Conduct disorder
 Exclusions: - not conduct disordered

Data Used
CBCL (Teacher)

Group 1 N= 15

Cognitive Problem Solving Skills Training - CPSS: 20, 50 minute sessions over 4 months. Intervention included training in problem solving skills and reinforcement of good behaviour. Individual sessions.

Group 2 N= 14

Control - Standard care: 20, 50 minute session over 4 months. Either psychodynamic or supportive counselling. Individual sessions.

LESCHIED2002

Study Type: RCT
 Blindness: No mention
 Duration (days): Range 30-150
 Followup: 12-, 24-, 36-months
 Setting: CANADA
 referral from probation service
 Notes: Details on randomisation not reported.

n= 412
 Age: Mean 15
 Sex: 304 males 108 females
 Diagnosis:
 100% Juvenile offenders
 Exclusions: - risk/needs assessment indicating a high or very high risk (mean RNA = 23.5)
 - sex offenders
 - psychosis
 - home environment not appropriate for a family preservation treatment model

Data Used
Convicted (any crime)
Notes: DROP OUTS: 21/210

Group 1 N= 210

Multisystemic therapy - problem focused interventions within the family, peer group, school and other systems of the participants environment. Small caseloads; several visits per week; 2-15H per week.

Group 2 N= 202

Standard Continuing Care - Mainly case management delivered by probation officers.

LEWIS1986

Study Type: RCT
Type of Analysis: Unclear
Blindness: Open
Duration (days): Mean 42

n= 20
Age:
Sex: all females
Diagnosis:

Exclusions: If the mother did not have at least one child between the ages of 8 and 12 with adjustment difficulties such as poor peer relationships, hyperactivity, aggressiveness, or non-compliant behaviour

Notes: No formal diagnosis or tool used just children with general adjustment difficulties

Data Used
Family Adjustment Test (FAT)
Child Behavior Rating Scale (CBRS)
Notes: Dropouts: not reported

Group 1 N= 10
parent training - 6 weekly 6-hour training sessions in groups. Behavioural principles emphasized and reflective techniques incorporated in the program. Trainers were students on Master course in counselling. Parents given money if completed therapy. Homework assigned.

Notes: Details on randomisation not reported
Info on Screening Process: 23 responded to advertisements
20 families accepted

Results from this paper:

- 1.1 Well covered
 - 1.2 Not reported
 - 1.3 Not addressed
 - 1.4 Not addressed
 - 1.5 Well covered
 - 1.6 Not reported
 - 1.7 Adequately addressed
 - 1.8 Not reported
 - 1.9 Not reported
 - 1.10 Not applicable
- 2.1 +

LIPMAN2006

Study Type: RCT
Blindness:
Duration (days): Mean 112

n= 123
Age: Range 7-11
Sex:
Diagnosis:
100% Behaviour problems by Parent referred

Exclusions: - not between 7-11 years old
- not identified as having problem with anger or aggression
- intellectual or developmental impairment
- severe psychiatric problems
- changeable home situation

Data Used
Children's Hostility Index (Parent)
Child Behaviour Questionnaire (Parent)
Children's Inventory of Anger (Child)
Notes: Dropouts: intervention = 10/62 control = 14/61

Group 1 N= 62
Anger Control Training - 16 sessions: included interventions for parents, child group sessions, in home family practice sessions. Cognitive and behavioural focus on awareness of when they are losing their temper and problem solving approach learning alternative strategies.

Group 2 N= 61
Control - Standard information booklet about other community resources.

Setting: Community-based
Notes: no further details on randomisation
Info on Screening Process: 401 screened, 147 not eligible, 47 not interested, 84 excluded for other reasons

LOCHMAN1984

Study Type: RCT
Study Description: Means and s.d.s extracted from secondary reference LOCHMAN1985 where there is a fifth comparison of an extended Anger Coping Plus Goal Setting program
Type of Analysis: Completers
Blindness: Open
Duration (days): Mean 84

n= 76
Age: Mean 11 Range 9-12
Sex: all males
Diagnosis:
100% Behaviour problems by Missouri Children's Behavior Checklist

Exclusions: The children with the highest teacher ratings of aggression on the Missouri Children's Behavior Checklist

Data Used
Missouri Children's Behavior Checklist - Aggression
BOSPPT (Independent)
Notes: TAKEN AT: pre-intervention and 4-6 weeks post-intervention.

Group 1 N= 21
Anger Coping Plus Goal Setting - Anger coping = 12 x 45-60 min weekly sessions. Group therapy with 5-6 children. Cognitive + interpersonal problem solving. Plus 8 weeks of goal setting with contingent reinforcement. Therapist = school counselor/trainee psychologist.

Group 2 N= 20
Anger Control Training - Anger coping = 12 x 45-60 min weekly sessions. Group therapy with 5-6 children. Cognitive + interpersonal problem solving.

Setting: US
Notes: Details on randomisation not reported.
Info on Screening Process: Details not reported.

Group 3 N= 18

Goal Setting - 8 weeks of goal setting where children's weekly goals were established, monitored by classroom teacher and received contingent reinforcement if appropriate goal attainment occurred. Minimal treatment intervention.

Group 4 N= 17

Control - No treatment

Results from this paper:

- 1.1 adequately covered
- 1.2 not reported
- 1.3 not addressed
- 1.4 not addressed
- 1.5 not addressed
- 1.6 not addressed
- 1.7 well covered
- 1.8 ?
- 1.9 well covered
- 1.10 not applicable

2.1 +

LOCHMAN2002

Study Type: RCT

n= 245

Type of Analysis: Completers

Age: Mean 11

Blindness: Open

Sex: 163 males 82 females

Duration (days): Mean 480

Diagnosis:
100% Behaviour problems by Teacher referred

Setting: US

School

Exclusions: - Children who were not rated by their 4th-grade teachers as verbally aggressive, physically aggressive and disruptive.

Notes: Details on randomisation not reported.

Info on Screening Process: 31% (473) of the most aggressive 10 y/o children in 17 schools were eligible for randomisation; 245 consented.

Baseline: Equivalent at baseline on aggressive behaviour.

Data Used

- Behavioural Improvement at School (Teacher)
- Teacher Observation of Classroom Adaption-Revised
- Proactive-Reactive Aggression Scale(Teacher rated)
- Proactive-Reactive Aggression Scale (Parent rated)

Notes: TAKEN AT: pre-, mid- and post-intervention (secondary reference with 1-year follow-up). DROP OUTS: varies by outcome 213/245 (13%) Proactive-Reactive Aggression-parent rated; 187/245 (24%) Proactive-Reactive Aggression-Teacher Rated; 125/245 (51%) TOCA-R.

Group 1 N= 59

Anger Control Training - Coping Power Program: 16-month program, 34 x 40-50 min sessions with 5 - 8 children. Included for example: CM, awareness of physiological arousal, relaxation, problem-solving. Plus 16 sessions for parents.

Group 2 N= 63

Control - No treatment

Group 3 N= 61

Parent + anger control + universal intervention - Parent training, anger control intervention plus children were based in a classroom receiving a universal intervention (UI). UI included parent meetings and teacher in-service meetings designed to promoted home-school involvement.

Results from this paper:

- 1.1 Well covered
- 1.2 Not reported
- 1.3 Notaddressed
- 1.4 Poorly addressed
- 1.5 Adequately addressed
- 1.6 Not addressed
- 1.7 Poorly addressed
- 1.8 [not reported by intervention only by outcome]
- 1.9 Not addressed
- 1.10 Not addressed

2.1 +

LOCHMAN2004

Study Type: RCT
 Type of Analysis: Completers
 Blindness: Open
 Duration (days): Mean 450
 Followup: 1 year
 Setting: USA
 Schools (N=11)
 Notes: Details on randomisation not reported. 59% consent rate.
 Info on Screening Process: 1578 boys were screened. 546 passed initial Teacher Screen. 20 boys did not pass second screen using TRF and CBC. 15 already participating in a preventin study. 183 consented. Grant available to only study 180 children; no one else contacted.

n= 183
 Age: Range 10-11
 Sex: all males
 Diagnosis:
 100% Behaviour problems by TRF

Exclusions: If participants did not pass two screening stages: (1) a raw score of at least 7 on the teacher screen and (2) TRF score greater than 60 and CBC score greater than 55.

Baseline: No significant baseline differences between conditions for dependent variables for participants with data at 1-year follow-up.

Data Used
 School behaviour improvement
 Substance use (Parent)
 Behavioural Improvement at School (Teacher)
 National Youth Survey (Child)
 Notes: TAKEN AT: pre- and post-intervention and 1-year follow-up. DROP OUTS: Baseline measures only delivered to 70% of the boys and 69% of parents who were followed-up at 1-year. At 1-year teacher reports only available for 73% of sample.

Group 1 N= 60
 Anger Control Training - From the Coping Power intervention program. 8 x 40-60 min intervention sessions in the 1st year, 25 in the 2nd year. Derived from Anger Coping program. Groups consisted of 4-6 boys. Masters/doctoral level therapist.

Group 2 N= 60
 parent training - Child training + 16 parent group sessions over 15-month intervention delivered in groups of 5-6. Derived from social-learning-theory-based parent training programs. Supervised child waiting room was provided + \$10 for attending sessions.

Group 3 N= 63
 Control - Received services as usual within their schools.

Results from this paper:

- 1.1 Well covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Poorly addressed
- 1.6 Not addressed
- 1.7 Poorly addressed
- 1.8 Not reported.
- 1.9 Not addressed
- 1.10 Not addressed

2.1 +

MAGEN1994

Study Type: RCT
 Type of Analysis: Not reported
 Blindness: Open
 Duration (days): Mean 56
 Followup: 3 months
 Notes: Randomisation process not reported
 Info on Screening Process: Not reported

n= 56
 Age: Mean 7
 Sex: 5 males 51 females
 Diagnosis:
 100% Behaviour problems by ECBI

Exclusions: - If the child was not between the age of 5 and 11
 - If the parent or child had a developmental disability.

Data Used
 Parent role-play test
 Social Problem Solving Inventory (SPSI)
 Revised Behaviour Problem Checklist
 Notes: TAKEN AT: Pretest, posttest, and follow-up at 3 months. DROP OUTS: not reported. OTHER: The parent role-playing test used in the study was under development at the time of stud;

Group 1 N= 19
 parent training - Group parent training focused on behavioural skills. Once a week for 8 weeks, 2 hours per session.

Group 2 N= 18
 Problem Solving - Group parent training focused on problem solving. Once a week for 8 weeks, 2 hours per session.

Group 3 N= 19
 Control - Waitlist condition.

Results from this paper:

- 1.1 Well covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Well covered
- 1.6 Not addressed
- 1.7 Adequately addressed
- 1.8 Not reported
- 1.9 Not reported
- 1.10 Not applicable

2.1 +

MARKIE-DADDS2006

Study Type: RCT
Type of Analysis: Completers
Blindness: Open
Duration (days): Mean 105
Followup: 6-month
Setting: Outpatient
Notes: Randomly assigned according to a table of random numbers.
Info on Screening Process: Details not given.

n= 63
Age: Range 2-5
Sex: 40 males 23 females
Diagnosis:
100% Behaviour problems by ECBI

Exclusions: The target child excluded if it was not between 2 and 5 years of age; the mother did not report that their were concerned about their child's behaviour; the child showed evidence of developmental disorder or significant health impairment; the child was currently having regular contact with another profession or agency or taking medication for behavioural problem; and if the parents were currently receiving therapy for psychological problems, were intellectually disable and could not read a newspaper without assistance.
The child was excluded if it did not have an ECBI Intensity Score of at least 127 or a Problem Score of at least 11.

Data Used
Client Satisfaction Questionnaire (CSQ)
Depression-Anxiety-Stress Scales (DASS)
Parenting Problem Checklist (PPC)
Parenting Sense of Competence (PSOC)
Parenting Scale (PS)
PDR
ECBI

Notes: TAKEN AT: Pre- and post-intervention and 6-month follow-up. DROP OUTS: at post-intervention assessment were 9 (intervention group) and 7 (waitlist); at 6-month follow-up a further 10 (intervention group).

Group 1 N= 32
Triple P - 10-unit self-directed program of Triple P teaching parents 17 core child management strategies.

Group 2 N= 22
Control - Waitlist condition

Results from this paper:

- 1.1 Well covered
 - 1.2 Well covered
 - 1.3 Not addressed
 - 1.4 Not addressed
 - 1.5 Well covered
 - 1.6 Adequately covered
 - 1.7 Well covered
 - 1.8 Intervention group: 28% (at post-assessment); 43% (6-month follow-up). Control group: 23% (at post-assessment)
 - 1.9 Poorly addressed
 - 1.10 Not applicable
- 2.1 +

MARTIN2003

Study Type: RCT
Type of Analysis: Unclear
Blindness: Open
Duration (days): Mean 56
Followup: 4-months
Setting: AUSTRALIA, Brisbane
Notes: Details on randomisation not reported.
Info on Screening Process: 68 people responded to e-mail detailing intervention; 45 met eligibility criteria and were allocated to group; final sample = 42.

n= 42
Age: Mean 6 Range 2-9
Sex: no information
Diagnosis:
100% Behaviour problems by Strengths and Difficulties Questionnaire

Exclusions: Inclusion criteria:
Child:
-between 2 and 9
- behavioural problems in the clinical range as measured by SDQ
Parents:
- experiencing significant level of distress juggling demands of work and home.
- working at least 20 hours per week

Baseline: The groups were significantly different on one pre-intervention measure: ECBI problem score such that the intervention group reported fewer disruptive behaviours (M = 11.89, SD = 5.60; M=17.00, SD = 7.57). ECBI problem score was used as a covariate.

Data Used
Work related self-efficacy
Work Commitment Questionnaire
Work Stress Measure
Social Support Scale (SSS)
Problem Setting and Behavior Checklist
Parenting Scale (PS)
ECBI
Strengths and Difficulties Questionnaire (SDQ)

Notes: TAKEN AT: pre- and post-intervention and for intervention group, at a 4-month follow-up. DROP OUTS: Intervention group at post-assessment (4;17%) and at 4-month follow-up (16;30.4%). Control group (50%)

Group 1 N= 23
parent training - Work-Place Triple P (WPTP). Families received four group sessions of parent training of 2H duration, plus four individual telephone consultations of 15-20 min duration.

Group 2 N= 11
Control - Waitlist condition

Participants drawn from academic and general staff at the University of Queensland in order to test a version of Triple-P specifically designed for the work place.

Results from this paper:

- 1.1 Well covered

1.2 Not reported
 1.3 Not addressed
 1.4 Not addressed
 1.5 Well covered
 1.6 Not addressed
 1.7 Well covered
 1.8 Control group (50%) Intervention group (30.4%)
 1.9 Not addressed
 1.10 Not applicable

2.1 +

MCPHERSON1983

Study Type: RCT

n= 75

Blindness:

Age: Mean 15 Range 11-17

Duration (days): Range 90-120

Sex: no information

Followup: 0-1- and 3-4-months

Diagnosis:
 100% Offending history

Setting: US

Community (undergoing court supervision)

Exclusions: - no commission of a status

Notes: Every fifth assignment was assigned to experimental group and the remaining were control

/misdemeanor/felony offense

- previous supervision by the Lane County Juvenile Court

- more than 17 years and 5-months at the time assignment

- not a resident with family in the Eugene/Springfield metropolitan area

Data Used

Recidivism

Notes: TAKEN AT: 4- and 7-months from inception of a 3-4-month trial.

Group 1 N= 15

Family therapy - Family = system. 3-4 months therapy. Counselors as therapists. 10x2H session for parents + 10x1H sessions with child.

Group 2 N= 60

TAU - Regular casework-oriented probation services.

Results from this paper:

1.1 Well covered
 1.2 Poorly addressed
 1.3 Not addressed
 1.4 Not addressed
 1.5 Poorly addressed [inclusion criteria but do no baseline data]
 1.6 Not addressed
 1.7 Well covered
 1.8 None reported
 1.9 Not applicable
 1.10 Not applicable

2.1 +

MICHELSON1983

Study Type: RCT

n= 61

Blindness:

Age: Mean 11 Range 8-12

Duration (days): Mean 84

Sex: all males

Followup: 1-year

Diagnosis:
 100% Behaviour problems by Parent referred

Setting: US

Outpatient

Notes: no further details on randomisation

Exclusions: - psychosis

- organic brain syndrome

- mental retardation

- severe antisocial tendencies

- not referred by parents

Data Used

School Behavior Checklist (SBCL-Form A2)

Notes: DROP OUTS: 42/61 completed the intervention

Group 1 N= 14

Cognitive Problem Solving Skills Training - Interpersonal problem solving skills for 12 weeks. Identification of interpersonal problems and generating solutions to these problems. Group therapy. 12 x 1H weekly sessions.

Group 2 N= 14

Cognitive Problem Solving Skills Training - Behavioural social skills training for 12 weeks. Utilized behavioural techniques such as modelling, feedback, shaping, social reinforcement to teach social skills. Group therapy. 12 x 1H weekly sessions.

NICHOLSON1999

Study Type: RCT n= 60
Age: Mean 9 Range 7-12
Blindness: Sex:
Duration (days): Mean 70
Diagnosis:
Setting: US 100% Behaviour problems by CBCL
Community
Exclusions: - not 7-12 years old
- do not have significant conduct or oppositional behaviours (CBCL <40) for a minimum of 6 months

NICKEL2005

Study Type: RCT n= 44
Age: Mean 15 Range 14-16
Blindness: Single blind Sex: all males
Duration (days): Mean 180
Diagnosis:
Setting: GERMANY 100% Behaviour problems
community
Notes: no further details on randomisation
Info on Screening Process: 69 screened, 25 excluded (11 failed to meet inclusion criteria, 9 refused, 5 other)
Exclusions: - not 14-16 years old
- not bullying for >6months
- psychotic illness
- liability to be prosecuted
- use of psychotropic medication and/or psychotherapy
- current use of narcotics

NICKEL2006

Study Type: RCT n= 72
Age: Mean 15 Range 14-15
Blindness: Sex: all males
Duration (days): Mean 84
Diagnosis:
Setting: GERMANY 100% Behaviour problems
Community
Notes: No further details on randomisation
Info on Screening Process: 83 screened, 11 excluded (5 did not meet criteria, 5 refused, 1 other)
Exclusions: - not 14-15 years old
- not bullies

NICKEL2006A

Study Type: RCT n= 40
Age: Mean 15
Blindness: Sex: all females
Duration (days): Mean 84
Diagnosis:
Followup: 1 year 100% Behaviour problems
Setting: Germany
Notes: no further details on randomisation
Exclusions: - not 15 years old

Data Used
Parent Daily Reports (PDR)
CBCL (Parent)
Notes: 18/60 dropped out

Data Used
Adolescents' Risky-Behavior Scale
State Trait Anger Expression Inventory (Self)
Notes: dropouts: family intervention 3/22 control 4/22

Data Used
Adolescents' Risky-Behavior Scale
State Trait Anger Expression Inventory (Self)
Notes: dropout: Family 4/36 Control 5/36

Data Used
Adolescents' Risky-Behavior Scale
State Trait Anger Expression Inventory (Self)
Notes: Dropouts: 2/20 family, 2/20 control

Group 3 N= 14

Control - Non directive group treatment that was designed to help express their feelings. 12 x 1H weekly sessions. Group therapy.

Group 1 N= 14

Family interventions - Behaviour family intervention for 10 weeks: family intervention + triple P parenting intervention.

Group 2 N= 12

Family interventions - Self directed behavioural family intervention for 10 weeks: self-directed material same as that used in the therapist directed intervention.

Group 3 N= 16

Waitlist

Group 1 N= 22

Family interventions - Brief Strategic Family Therapy for 6 months. Brief Strategic Family Therapy for 12 weeks. Focuses on the family's conflict resolution style and on specific interventions to help families negotiate and resolve their differences.

Group 2 N= 22

Control - Attentional control: Attentional control for 6 months. Structure session with detailed questions about how they felt and their daily activities.

Group 1 N= 36

Control - Attentional control for 12 weeks. Structure session with detailed questions about how they felt and their daily activities.

Group 2 N= 36

Family interventions - Brief Strategic Family Therapy for 12 weeks. Focuses on the family's conflict resolution style and on specific interventions to help families negotiate and resolve their differences.

Group 1 N= 20

Family interventions - Brief Strategic Family Therapy for 12 weeks. Focuses on the family's conflict resolution style and on specific interventions to help families negotiate and resolve their differences.

- no physical or verbal bullying for at least 6 months
- psychosis
- taking psychotropic medication
- liability to prosecution
- substance use disorder

NIXON2003

Study Type: RCT n= 54

Type of Analysis: Completers Age: Mean 4 Range 3-5

Blindness: Open Sex: 38 males 16 females

Duration (days): Mean 84 Diagnosis:
100% Oppositional defiant disorder by DSM-IV

Setting: AUSTRALIA Outpatient 100% Behaviour problems by ECBI

Notes: Details on randomisation not reported.

Info on Screening Process: 71 families self-referred to participate in the study. 54 meet inclusion criteria.

Exclusions: Inclusion criteria:
- ECBI score > 132
- diagnosis for ODD
- primary referral problem was disruptive behaviour that was present for at least 6 months

Exclusion criteria:
- behaviour problems because of organic pathology, trauma or history of severe physical or mental deficits and receiving medication to manage behavioural difficulties.
-

Baseline: No significant differences on parent-report and observational data between groups.

Data Used

Parent Locus of Control Scale
DPICS
Parenting Scale (PS)
Parenting Sense of Competence (PSOC)
Parenting Stress Index (PSI)
Homes Situations Questionnaire (Parent)
CBCL (Parent)
ECBI

Notes: TAKEN AT: Pre- and post-treatment and 6-month follow-up DROP OUTS: Standard intervention (23%); Abbreviated intervention (13%); WL (0.05%)

Group 2 N= 20

Control - Attentional control for 12 weeks. Structure session with detailed questions about how they felt and their daily activities.

Group 1 N= 16

Parent-Child Interaction Therapy
parent training - Parent-child interaction therapy but parenting skills are discussed and modelled on videotape (which is given to the families) + 5 x 30-min telephone consultations + 1-hour booster session (face-to-face) 1-month post-treatment. Took 9.5 to administer.

Group 2 N= 19

parent training - 12 x 1-2 hour weekly sessions for parents + 1-hour booster session (face-to-face) 1-month post-treatment. Took 15.5 hours to administer. Therapist = master's level clinician on doctorate course.

Group 3 N= 19

Control - waitlist condition

Results from this paper:

- 1.1 Well covered
 - 1.2 Not reported
 - 1.3 Not addressed
 - 1.4 Not addressed
 - 1.5 Adequately addressed
 - 1.6 Not addressed
 - 1.7 Well covered
 - 1.8 Standard intervention (23%); Abbreviated intervention (13%); WL (0.05%)
 - 1.9 Not addressed
 - 1.10 Not applicable
- 2.1 +

NOCK2005

Study Type: RCT n= 76

Type of Analysis: ITT Age: Mean 7

Blindness: Open Sex:

Duration (days): Mean 42 Diagnosis:
Behaviour problems

Setting: US Outpatient

Notes: Details on randomisation not reported.

Info on Screening Process: 120 parents of antisocial children contacted the clinic, met eligibility criteria and scheduled an intake appointment; 76 attended appointment and all consented to participate.

Data Used

Treatment attendance
Treatment adherence

Group 1 N= 39

Parent training + participation enhancement - Parent training plus children greater than 7 received cognitive problem solving. In addition, parents received participation enhancement intervention. 5-25 min during, 1st, 5th, 7th sessions, therapists conducted MI and discussed barriers to attendance.

Group 2 N= 37

parent training - TAU: parent training plus children greater than 7 received cognitive problem solving.

OGDEN2004

Study Type: RCT
Type of Analysis: Unclear
Blindness: Open
Duration (days): Mean 183
Followup: 2-years
Notes: Details on randomisation not reported.
Info on Screening Process: Details not given.

n= 100
Age: Mean 15 Range 12-17
Sex: 63 males 37 females
Diagnosis:
100% Behaviour problems
Exclusions: Inclusion Criteria
- problem behaviour such as law-breaking or other antisocial acts
- 12-17 years of age
- parents sufficiently involved/motiated for MST
Exclusion Criteria
- ongoing treatment by another agency
- substance abuse without other antisocial behaviour
- sexual offending
- autism, acute psychosis, or imminent risk of suicide
- presence of the youth in the home posed a serious risk to the youth or to the family
- ongoing investigation by the municipal child protective services
Notes: No formal diagnosis or tool used.
Baseline: Significant differences in baseline demographic measures. Pre-intervention assessments not compared between groups.

Data Used
Family Satisfaction Survey
Out-of-Home placement
FACES-III
Social Competence with Peers Questionnaire (SCPQ)
Self-Report Delinquency scale (SRD)
Social Skills Rating Scale (SSRS)
CBCL (Parent)
Notes: TAKEN AT: pre- and post intervention.
DROP OUTS: Intervention group: 4 (7%) families withdrew from MST early in treatment and were replaced; 1 withdrew prior to post-assessment.
Control group: 3 prior to post-assessment.

Group 1 N= 62
Multisystemic therapy - MST therapists had a professional education equal to a Masters/Bachelors degree. Each therapist had a low caseload of 3-6 families and were available 24/7. Economic rewards for completion of assessments.
Group 2 N= 38
Standard Continuing Care - Usual child welfare services. 14 youths received long-term institutional placement, 5 were placed in a crisis institution for assessment and in-home follow-up, 6 were supervised by a social worker, 7 were given home-based treatment and 6 refused services.

Results from this paper:

- 1.1 Well covered
 - 1.2 Not reported
 - 1.3 Not addressed
 - 1.4 Not addressed
 - 1.5 Poorly addressed
 - 1.6 Adequately addressed
 - 1.7 Well covered
 - 1.8 Intervention group: 8% Control group: 7.9%
 - 1.9 Not addressed
 - 1.10 Not addressed
- 2.1 +

OMIZO1988

Study Type: RCT
Type of Analysis: Completers
Blindness: Open
Duration (days): Mean 70
Setting: School
Info on Screening Process: Of 47 nominated children for aggressive/hostile behaviour, 24 were randomly selected and assigned to treatment or control.

n= 24
Age: Range 10-12
Sex: 14 males 10 females
Diagnosis:
100% Behaviour problems by Teacher referred
Exclusions: - Children who were not nominated by their teachers as being aggressive or hostile and who were not randomly selected to participate.
Baseline: Baseline data was reported; no test that examined differences between the conditions in the baseline data were reported.

Data Used
Perceived Competence Scale
School Behavior Checklist (Teacher rated)
Notes: TAKEN AT: pre- and post-assessment
DROP OUTS: none reported

Group 1 N= 12
Anger Control Training - 10 x 45 - 50 min group sessions that incorporated cognitive behaviour techniques targeted to assist children in controlling their anger.
Group 2 N= 12
Control - Group members watched films that did not have aggressive content.

Results from this paper:

- 1.1 Poorly addressed
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Poorly addressed

1.5 Not addressed
 1.6 Not addressed
 1.7 Adequately covered
 1.8 0%
 1.9 Not applicable
 1.10 Not applicable
 2.1 +

PATTERSON2007

Study Type: RCT n= 116
 Type of Analysis: ITT Age: Range 2-8
 Blindness: Sex: no information
 Duration (days): Mean 70 Diagnosis:
 Followup: 6-month 100% Behaviour problems by ECBI
 Setting: UK Exclusions: Exclusions - children already receiving treatment
 Primary Care for behaviour problems (N=27) and those with learning
 Notes: Randomisation occurred by tossing difficulties (N=78).
 coin in the presence of an independent witness to treatment or control. Notes: All children had a score above the median value on
 the EBI (score = 100).
 Info on Screening Process: N=1788 - all children aged 2-8 y/o registered at 3 GPs in Oxford received postal survey.
 N=1105 - questionnaires returned
 N=487 - children scored above median on ECBI + invited to participate
 N=105 - excluded
 N= 116 - consented

Data Used
 General Health Questionnaire (GHQ)
 Strengths and Difficulties Questionnaire (SDQ)
 ECBI
 Notes: TAKEN AT: pre- and post-intervention and at 6-month follow-up

Group 1 N= 60
 parent training - Webster-Stratton 10-week parenting programme (2H sessions) delivered by trained health visitors or nursery nurse.
Group 2 N= 56
 Control - No intervention.

Results from this paper:

1.1 Well covered
 1.2 Well covered
 1.3 Inadequate
 1.4 Not addressed
 1.5 Not addressed
 1.6 Adequately covered
 1.7 Well covered
 1.8 23.4% (Intervention group); 17.9% (Control group)
 1.9 Well addressed
 1.10 Not addressed
 2.1 +

PEPLER1995

Study Type: RCT n= 74
 Blindness: Open Age: Mean 9 Range 6-12
 Duration (days): Range 84-105 Sex: 63 males 11 females
 Notes: Details on randomisation not reported. Diagnosis:
 Info on Screening Process: Not reported. 100% Behaviour problems by Teacher referred
 Exclusions: Inclusion criteria:
 - teachers identified them as having aggressive behaviour problems
 - their teachers rated them above the mid-point on a five-point scale for aggression, disruption and non compliance
 - school principal concurred with the referral
 - parents consented

Data Used
 CBCL (Teacher)
 CBCL (Parent)
 Notes: TAKEN AT: pre- and post-assessment
 DROP OUTS: none reported.

Group 1 N= 40
 Social skills training - Focused on skills training at school + parent groups to facilitate child's learning/to teach effective child management + teacher participation where the teacher taught the skills to entire class. Groups of 7. Therapist = trained child care workers.
Group 2 N= 34
 Control - Waitlist condition.

Results from this paper:

- 1.1 Well covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Not addressed
- 1.6 Not addressed
- 1.7 Well covered
- 1.8 0%
- 1.9 Well covered
- 1.10 Not applicable

2.1 +

ROWLAND2005

Study Type: RCT
 Blindness:
 Duration (days):
 Followup: 6-month
 Setting: US, Hawaii
 Info on Screening Process: 64 met inclusion criteria 5 consented

n= 31
 Age: Mean 14 Range 9-17
 Sex: 16 males 15 females
 Diagnosis:
 39% Conduct disorder by DSM-IV

- Exclusions: - did not attend public school
 - did not qualify to receive mental health services
 - not currently at risk of a costly out-of-home fund
 - not between 9 and 17
 - not living at home with caregiver and/or family
 - autism
 - severe developmental disabilities
 - sexual offending
 - youths in custody without a permanent home

Baseline: Initial rates for self-reported delinquency were higher for MST than controls.

Data Used

Arrests
 CBCL (Child)
 CBCL (Parent)
 Notes: DROP OUTS: 4/26 (MST); 3/29 (CONTROL), analysis based upon 15 MST and 16 CONTROL that had received their 6-month service evaluation

Group 1 N= 26

Multisystemic therapy - Master level therapists. Home-based model of service delivery. 24/7 support.

Group 2 N= 29

Standard Continuing Care - Could include individual + family therapy, medication, foster care.

SANDERS2000

Study Type: RCT
 Type of Analysis: Not clear
 Blindness: No mention
 Duration (days): Mean 42
 Followup: 6-months
 Setting: Home
 Notes: Details on randomisation not reported.
 Info on Screening Process: Not reported.

n= 56
 Age: Mean 5
 Sex: 33 males 23 females
 Diagnosis:
 100% Behaviour problems by ECBI

- Exclusions: - If the child had a chronic illness or disability, was in receipt of treatment for behavioural or psychological problems.

Data Used

Abbreviated Acceptability Rating Profile (AARP)
 Parenting Problem Checklist (PPC)
 Parenting Sense of Competence (PSOC)
 Depression-Anxiety-Stress Scales (DASS)
 Parenting Scale (PS)
 ECBI
 Notes: TAKEN AT: Pre-test and post-test and at 6-month follow-up (experimental group only followed up. DROP OUTS: not reported.

Group 1 N= 28

parent training - 12 videotapes each containing a different episode of the "Famililes" television series which is a media component of Triple P (Positive Parenting Program) + 12 self-help information sheet. Mothers were instructed to watch 2 videos per week at home

Group 2 N= 28

Control - Waitlist condition

Results from this paper:

- 1.1 Adequately assessed
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Poorly addressed
- 1.6 Not addressed
- 1.7 Well covered

1.8 Not reported
1.9 Not reported
1.10 Not Applicable

2.1 +

SANDERS2000A

Study Type: RCT n= 305
Type of Analysis: Completers Age: Mean 3
Blindness: Open Sex: no information
Duration (days): Mean 105 Diagnosis:
100% Behaviour problems by ECBI
Followup: 1-year
Setting: AUSTRALIA, Brisbane
Outpatient
Notes: Details of randomisation not reported.
Info on Screening Process: 940 families
responded to advertisement
216 met initial telephone screening but did not
return questionnaire
724 returned questionnaire of these 343
excluded
381 met all inclusion criteria
74 declined to participate

Exclusions: Initial screening inclusion criteria:
- child aged between 36 and 48 months
- mother's concerned about child's behaviour
- child showed no evidence of developmental disorder or
significant health impairment
- child was not currently having regular contact with another
professional or taking medication for behavioural problems
- parents were not currently receiving therapy for
psychological problems or intellectually disabled and could
read a newspaper without assistance.

Inclusion criteria after initial screening:
- ECBI Intensity score > 127 or Problem score > 11
- Family was required to have at least one of the following
family adversity factors: (a) maternal depression (BDI > 20)
(b) relationship conflict (Parent Problem Checklist >5) (c)
single parent household (d) low gross family income
(<AUS\$345/week)

Baseline: No significant differences in outcome measures
at pre-intervention.

Data Used

SESBI
DISC
Abbreviated Dyadic Adjustment Scale (ADAS)
Client Satisfaction Questionnaire (CSQ)
Depression-Anxiety-Stress Scales (DASS)
Parenting Problem Checklist (PPC)
Parenting Sense of Competence (PSOC)
Parenting Scale (PS)
Parent Daily Reports (PDR)
ECBI
Notes: TAKEN AT: pre- and post-intervention
and at 1 - follow-up

Group 1 N= 76

EBFI - Enhanced Behavioural Family
Intervention (enhanced Triple P). Parents
received an intensive version of the
therapy delivered in SBFI. Parents
attended 12 session of 14H or therapy in
total. Therapy tailored to the needs of the
parents. Homework given.

Group 2 N= 77

SBFI - Standard Behavioural Family
Intervention (Standard Triple P). Parents
attended 10 sessions of 10H in total.
Parents were encouraged to bring their
child to 6/10 sessions. Therapists =
trainee clinical psychologists, qualified
psychologists, psychiatrists.

Group 3 N= 75

SDBFI - Self Directed Behavioural Family
Intervention (Self-helf Triple P). Families
received 10 sessions of self-directed
Triple P.

Group 4 N= 77

Control - Waitlist

Results from this paper:

1.1 Adequately covered
1.2 Not reported
1.3 Not addressed
1.4 Not addressed
1.5 Well covered
1.6 Adequately covered
1.7 Well covered
1.8 6.8% (EBFI); 35.1% (SBFI); 45.3% (SDBFI).
1.9 Not addressed
1.10 Not applicable

2.1 +

SANDERS2000B

Study Type: RCT n= 47
Type of Analysis: completers Age: Mean 4 Range 3-9
Blindness: Open Sex:
Duration (days): Mean 84 Diagnosis:
4% Conduct disorder by DSM-IV
89% Oppositional defiant disorder by DSM-IV
Info on Screening Process: 160 families were
initially screened; 61 were screened further to
determined diagnoses for child + mother; 47
were eligible and provided consent and began
treatment.
Exclusions: Inclusion criteria:
- mother met DSM-IV diagnosis for major depression with at

Data Used

Family Observation Schedule (FOS)
Parent Daily Reports (PDR)
CBCL (Parent)

Group 1 N= 23

Parent training + CBT - 12 sessions (8
clinical sessions + 4 feedback session in
mother's home) completed over 5- to 5-
month period plus cognitive therapy for
the treatment of depression. Clinical
sessions = 1 to 1.5 H and home visits =
40 min. Parent + child were involved.

least 1 child meeting DSM-IV diagnosis for either conduct disorder or oppositional-defiant disorder
- child was 3-9 y/o with no evidence of developmental disability

Baseline: No differences between groups at preintervention.

Notes: TAKEN AT: pre- and post-assessment
DROP outs: at end of treatment - 21% (parent training), 13% (parent training + CBT for mothers); at 6-month follow-up - 79% (in total) provided data.

Group 2 N= 24

parent training - 12 sessions (8 clinical sessions + 4 feedback session in mother's home) completed over 5- to 5-month period. Clinical sessions = 1 to 1.5 H and home visits = 40 min. Parent + child were involved. Therapist = trainee postgraduate clinical psychologists.

Results from this paper:

- 1.1 Well covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Well covered
- 1.6 Not addressed
- 1.7 Well covered
- 1.8 21% (parent training), 13% (parent training + CBT for mothers); at 6-month follow-up - 79% (in total) provided data.
- 1.9 Not addressed
- 1.10 not applicable
- 2.1 +

SANTISTEBAN2003

Study Type: RCT
Type of Analysis: Completers
Blindness: Open
Duration (days): Mean 77 Range 28-140
Setting: USA
Notes: Details of randomisation not reported.
Info on Screening Process: Details not given.

n= 126
Age: Mean 16 Range 12-18
Sex:
Diagnosis:
100% Behaviour problems by Revised Behaviour Problem Checklist (RBPC)

Exclusions: If the adolescent did not meet the inclusion criteria of parental or school complaints of externalizing behaviour problems.

Baseline: No significant differences on pre-intervention measures between groups.

Data Used

Structural Family Systems Rating (SFSR)
Family Environment Scale (FES)
Revised Behaviour Problem Checklist
Addiction Severity Index
Notes: DROP OUTS: 30% (intervention group); 37% (control group)

Group 1 N= 80

Brief Strategic Family Therapy (BSFT) - All family members who lived in the household or were significantly involved in childrearing were asked to participate in therapy. Participants received between 4 and 20 weekly, 1H sessions of therapy, depending on the severity of the condition.

Group 2 N= 46

Control - Group treatment control for adolescents only. Sessions ranged between 6 and 16 weekly 90 min sessions in groups of 4-8.

Results from this paper:

- 1.1 Well covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Poorly addressed
- 1.6 Not addressed
- 1.7 Well covered
- 1.8 30% (intervention group); 37% (control group)
- 1.9 Not addressed
- 1.10 Not applicable
- 2.1 +

SAYGER1988

Study Type: RCT
Blindness: No mention
Duration (days): Mean 70
Setting: USA

n= 43
Age: Range 8-12
Sex: all males
Diagnosis:
100% Behaviour problems by Parent referred

Data Used

Family Environment Scale (FES)
Parent Daily Reports (PDR)
CBCL (Parent)

Group 1 N= 22

Control - Waitlist condition

families assigned to control were placed in family intervention because of abusive environment)

Exclusions: - not 8-12 years
- not high level of aggression

Notes: DROPOUT: Treatment 3/23 Control 12/20 **Group 2 N= 23**

Family interventions - Social learning family therapy: 10 weekly sessions. Included sessions on discipline, reinforcement, encouragement, school involvement, self control, setting up for success and family communication.

SCOTT2001

Study Type: RCT

n= 141

Type of Analysis: Completers

Age: Mean 6 Range 3-8

Blindness: Open

Sex: 104 males 37 females

Duration (days): Range 91-112

Diagnosis:

84% Oppositional defiant disorder by ICD-10

Setting: Outpatient (four sites)
UK

Exclusions: Inclusion criteria:

- children aged 3-8
- referred for antisocial behaviour

Notes: Allocation was determined by date of receipt of referral letter.

Info on Screening Process: Of 430 referrals, 67 families could not be contacted, 33 said they no longer had problems, 62 declined to take part, 124 did not fulfil eligibility criteria, 3 dropped out before consent or assessment.

Exclusion criteria:

- major developmental delay
- hyperkinetic syndrome, any other condition requiring separate treatment
-parents had to be able to understand english and attend at group times

Notes: The calculation of the percentage of ODD only includes completers.

Baseline: No significant differences between groups.

Data Used

CBCL (Parent)
Strengths and Difficulties Questionnaire (SDQ)
Parent account of child symptoms
Notes: TAKE AT: pre- and post- intervention (approx 5-7 months after intervention). DROP OUTS: 19% (intervention), 27% (waitlist)

Group 1 N= 90

parent training - Basic videotape parent training programme (Webster-Stratton, 1998). Parents of 6-8 children were seen in groups for 2H each week over 13-16 weeks; the children did not take part and no other treatment given. Therapists had regular jobs in services.

Group 2 N= 51

Control - Waitlist condition

Results from this paper:

- 1.1 Well covered
- 1.2 Well covered
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Well covered
- 1.6 Well covered
- 1.7 Well covered
- 1.8 9% (intervention), 27% (waitlist)
- 1.9 Well covered
- 1.10 Not addressed

2.1 +

SCOTT2006

Study Type: RCT

n= 72

Type of Analysis: ITT

Age: Mean 6

Blindness: Open

Sex:

Duration (days): Mean 126

Diagnosis:

Behaviour problems by Strengths and Difficulties Questionnaire

Setting: UK, London (disadvantaged areas)

Notes: Randomisation at classroom level

Info on Screening Process: 665/672 had SDQs completed by teachers, 532 by parents - 24% had behaviour problems. 174/233 provided consent.

Exclusions: - inability to understand English

- index child no free of clinically apparent marked global developmental delay or disorder

Notes: ONLY REPORT DETAILS FOR THE 72 CHILDREN WITH BEHAVIOUR PROBLEMS; DEMOGRAPHIC INFORMATION NOT PROVIDED FOR THIS SUBSAMPLE

Data Used

Parent account of child symptoms
Notes: TAKEN AT: pre-, 6-month and 1-year post randomisation. DROP OUTS (for total sample with and without elevated behaviour problems): 13/89 TREATMENT, 9/85 CONTROL.

Group 1 N= 33

parent training - 12-week Incredible Years + 6-week readiness programme for parents to use with children. Group therapy. 2 1/2 H. Parent only.

Group 2 N= 39

TAU

Results from this paper:

- 1.1 Well covered

1.2 Not reported
 1.3 Not addressed
 1.4 Not addressed
 1.5 Adequately addressed [study did not assess whether there are differences among subsample with behaviour problems in each arm]
 1.6 Not addressed
 1.7 Well addressed
 1.8 13/89 (14.6%) TREATMENT, 9/85 (10.6%) CONTROL.
 1.9 Well covered
 1.10 Not addressed

2.1 +

SHECHTMAN2000

Study Type: RCT n= 70
 Type of Analysis: Completers Age: Range 10-15
 Blindness: Open Sex: 55 males 15 females
 Duration (days): Mean 70 Diagnosis:
 100% Behaviour problems by Teacher referred
 Setting: ISRAEL School
 Exclusions: - children not nominated by their teachers for being aggressive as assessed by a 10-item questionnaire that referred to verbal and physical aggression.
 Notes: Details on randomisation not reported.
 Info on Screening Process: Details not reported.

Baseline: No significant differences.

Data Used
 CBCL (Teacher)
 CBCL (Child)
 Notes: TKAEN AT: pre- and post-assessment.
 DROP OUTS: 63/70 (9%) CBCL-YSR and 68/70 (3%) CBCL-TRF. CBCL-TRF was rated by teachers in the following year that were not involved in the intervention.

Group 1 N= 33
 Anger Control Training - 10 x 45 min sessions. Students asked to identify feelings leading to aggression in short stories/poems, risk of aggressive responses and to look at the connection between their own behaviour and that in the literature. Group or individual therapy.

Group 2 N= 36
 Control - No treatment; control students remained in their homeroom groups with their teachers.

Results from this paper:

1.1 Well covered
 1.2 Not reported
 1.3 Not addressed
 1.4 Poorly addressed
 1.5 Well covered
 1.6 Not addressed
 1.7 Well covered
 1.8 0% drop out of intervention; missing data for outcome measures
 1.9 Not addressed
 1.10 Not addressed

2.1 +

SIEGERT1980

Study Type: RCT n= 30
 Study Description: NO EXTRACTABLE DATA Age:
 Type of Analysis: ITT Sex: no information
 Blindness: No mention Diagnosis:
 Duration (days): Mean 35 Exclusions: Target child who exhibits behavior problems is not between the ages of 5 to 15, is diagnosed as psychotic by a physician, has brain damaged or severely mentally or physically handicapped.
 Followup: 4 months Notes: No formal diagnosis or tool used.
 Setting: Home or office
 Notes: Details on randomisation not reported.
 Info on Screening Process: Details not reported.

Data Used
 Target behaviour frequency reduction
 Marginal percentage reduction in behaviour
 Issue checklist
 Therapist report of adherence
 Notes: TAKEN AT: pre- and post-intervention with 4 month follow-up. DROP OUTS: 1 (individual in-office condition); 1 (individual in-home condition)

Group 1 N= 8
 individual in-home - Individual parent training delivered at home. One hour weekly sessions. Therapists are masters-degree-level counselors or a clinical graduate with experience.

Group 2 N= 7
 group in-office - Group parent training delivered in the office. One-half hours of weekly sessions.

Group 3 N= 7
 individual in-office - Individual parent training delivered in the office. One hour weekly sessions.

Group 4 N= 8

Control - Parents met with data collector for 15 to 20 minutes wach week, informally discussing child-management problems but avoiding description of any behaviour-change strategies.

Results from this paper:

- 1.1 Well covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Well covered
- 1.6 Not addressed
- 1.7 Poorly addressed
- 1.8 1 (individual in-office condition); 1 (individual in-home condition)
- 1.9 Well covered
- 1.10 Well covered
- 2.1 +

SNYDER1999

Study Type: RCT n= 50
 Study Description: INPATIENT SAMPLE Age:
 Type of Analysis: Completers Sex: 28 males 22 females
 Blindness: Open Diagnosis:
 Duration (days): Mean 14 100% Behaviour problems by STAXI
 Followup: 4-6 week follow-up 62% Disruptive Behaviour Disorder by DSM-IV
 Setting: USA, New York Inpatient
 Notes: Randomization was done by a random number generator using the Apple Computer SANE Mathematics routine.
 Info on Screening Process: Details not reported.

Exclusions: - If the treatment team could not recommend the adolescent to be admitted to the hospital unit based on a review of the patient's history, observations of behavior on the unit and a semistructured clinical interview
 - If the adolescent did not ger a score of 75% or higher on the Trait Anger Scale of the State-Trait Anger Expression Inventory (STAXI)

Baseline: Baseline data was reported; no test that examined differences between the conditions in the baseline data were reported.

Data Used

School Social Behavior Scale - Antisocial Scale
 HCSBS - Antisocial Scale
 MMPI-A - Anger Content Scale
 Notes: TAKEN AT: pre- and post-interventiona and 4-6 week follow-up. DROP OUTS: 9/59 (15%)

Group 1 N= 25

Anger Control Training - 4 x 45- 50 min sessions with 4-6 patients over a 2 week period. Interpretation/verbal labeling of internal arousal levels + regulation of affect and subsequent behaviour.
 Supporting new skills and their transfer to social situations.

Group 2 N= 25

Control - Series of psychoeducational videotapes on topics relevant to adoloesnts i.e. conflict resolution, drugs, careers and the Nutty Professor (which has excerpts that demonstrate some strategies for responding to provocations).

Results from this paper:

- 1.1 Well covered
- 1.2 Adequately addressed
- 1.3 Not addressed
- 1.4 Poorly addressed
- 1.5 Adequately addressed
- 1.6 Adequately addressed
- 1.7 Well covered
- 1.8 15% in total
- 1.9 Not addressed
- 1.10 Not applicable
- 2.1 +

STEWART-BROWN2007

Study Type: RCT n= 116
 Type of Analysis: ITT Age: Mean 5 Range 2-8
 Sex: no information

Data Used

Rosenberg Self Esteem Scale (RSE)
 General Health Questionnaire (GHQ)

Group 1 N= 60

The Incredible Years Programme - Videotape modelling and experiential

Just over half of the participants were boys however exact figures not given on the sex of the

Blindness: Open
 Duration (days): Mean 70
 Followup: 6-month and 12-month
 Setting: ENGLAND, Oxford
 Notes: Details on randomisation not reported
 Info on Screening Process: Numbers not reported. All parents of 2-8 year old children registered with three GPs in Oxford were invited to participate in a survey to determine eligibility to the study. Of those invited in the study 30% consented to enter the trial.

Diagnosis:
 100% Behaviour problems by ECBI

Exclusions: Parents excluded if the child was not between the ages of 2 and 8; if at least one child in the family did not fall above the median of ECBI or if the child was diagnosed with a learning difficulty or had previous treatment for behaviour problems.

Goodman Strengths and Difficulties questionnaire
 Parenting Stress Index (PSI)
 ECBI

Notes: TAKEN AT: pre- and post-intervention and at a 6 and 12 month follow-up. DROP OUTS 26 non-attenders (intervention group); loss to follow-up at 12-months was 13 (23%; control group) and 16 (28%; intervention group).

learning. Parents set themselves goals, undertake homework each week and report back on progress. Sessions are 2H, weekly over 10 weeks. Delivered by trained health visitors and nursery nurses. children.

Group 2 N= 56
 Control - Waitlist condition

Results from this paper:

- 1.1 Poorly covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Adequately covered
- 1.6 Not addressed
- 1.7 Well covered
- 1.8 loss to follow-up: 23% (control group) and 28% (intervention group).
- 1.9 Well covered
- 1.10 Well covered
- 2.1 +

STOLK2008

Study Type: RCT
 Blindness:
 Duration (days): Mean 240
 Setting: Netherlands
 Notes: no further details on randomisation

n= 237
 Age: Mean 2 Range 1-3
 Sex: 132 males 105 females
 Diagnosis:
 100% Behaviour problems by CBCL

Exclusions: - children that did not have dutch first or surnames
 - CBCL age:1 <13, age:2 <19, age:3 <20

Data Used
 CBCL (Parent)

Group 1 N= 64

Parent - First-time mothers: 4 sessions every month then 2 booster sessions. Personal feedback on mother-baby interaction using video cameras and education on development of baby. Individual therapy.

Group 2 N= 66

Control - First time mothers: received 6 telephone calls as attentional control.

Group 3 N= 56

Parent - Not first time mothers: 4 sessions every month then 2 booster sessions. Personal feedback on mother-baby interaction using video cameras and education on development of baby.

Group 4 N= 51

Control - Not first time mothers: received 6 telephone calls as attentional control.

STRAYHORN1989

Study Type: RCT
 Type of Analysis: ITT
 Blindness: No mention
 Duration (days): Mean 42
 Setting: USA
 Notes: Randomisation process not detailed in this paper but reported in the secondary reference as sequentially, by drawing a face-

n= 98
 Age: Mean 4 Range 2-5
 Sex: 43 males 55 females
 Diagnosis:
 100% Behaviour problems by Parent referred

Exclusions: - Families whose primary language was not English or whose children had vocabulary test standard scores under 50 (where 100 is the population mean and 15

Data Used
 Verbal ability measures
 Frequency of behaviour for preschoolers
 Parents' ratings on ODD and ADHD from DSM III-R
 Behar Preschool Behavior Questionnaire (PBQ)
 Child Behavior in Play with Parent Scale
 CBCL (Parent)
 Shipley Scale

Group 1 N= 50

parent training - Group training involving instruction and role-playing practice and individual sessions. Also viewed three videotapes and received pamphlets summarizing the content of training. Training delivered by research assistant. Financial incentives given.

down card from a table-top
Info on Screening Process: Not reported.

the SD).
- If parent or care taker of the child did not indicate in the screening conversation that the child had at least one undesirable behaviour.

Parent Behavior in Play with Child Scale
Commands Self-Report
Parent Practices Scale
consumer satisfaction questionnaire
Beck Depression Inventory

Notes: TAKEN AT: pre- and post-intervention.
Post intervention was taken on average 139 days after the last group meeting; or 33 days after the last individual session with the child.

Group 2 N= 48

Control - Minimal treatment (most efficacious available intervention per unit of staff time expenditure). Parents viewed two videotapes (also shown to the experimental group) and received a copy of the "Suggestions for Parents" handout.

Results from this paper:

- 1.1 Not addressed
 - 1.2 Not reported
 - 1.3 Not addressed
 - 1.4 Not addressed
 - 1.5 Not addressed
 - 1.6 Not addressed
 - 1.7 Adequately addressed
 - 1.8 Experimental condition (5 drop outs)
 - 1.9 Well covered
 - 1.10 Not applicable
- 2.1 +

SUKHODOLSKY2000

Study Type: RCT
Blindness: Open
Duration (days): Mean 70

Setting: US
School

Notes: Details on randomisation not reported. 3 boys changed groups after randomisation due to scheduling difficulties.

Info on Screening Process: Not reported.

n= 33
Age: Range 9-11
Sex: all males
Diagnosis:
100% Behaviour problems by Teacher referred

Exclusions: - Male students not nominated by their teachers for having anger-related problems
- children who did not return parent consent forms

Data Used

Teacher Rating Scale
Pediatric Anger Expression Scale (Self-report)
Children's Inventory of Anger (Child)
Notes: TAKEN AT: pre- and post-intervention.
DROP OUTS: none reported.

Group 1 N= 16

Anger Control Training - CBT delivered in groups of 4-7 for 40 min sessions with (1) affective education; (2) techniques dedicated to cognitive & physiological elements of anger and; (3) rehearsal of anger-control skills. Groups run by authors of study.

Group 2 N= 17

Control - Playing various games such as "Jenga" and "Connect Four". These games offer an entertaining context within which various problematic behaviours can be addressed.

Results from this paper:

- 1.1 Poorly addressed
 - 1.2 Not reported
 - 1.3 Not addressed
 - 1.4 Not addressed
 - 1.5 Not addressed
 - 1.6 Not addressed
 - 1.7 Well covered
 - 1.8 0%
 - 1.9 Poorly addressed
 - 1.10 Not reported
- 2.1 +

SUTTON1995

Study Type: RCT
 Study Description: DATA NOT EXTRACTABLE
 Type of Analysis: Unclear
 Blindness: Open
 Duration (days): Mean 56
 Followup: 12-18 months
 Setting: UK
 Notes: Details on randomisation not reported.
 Info on Screening Process: 26 children screened, 24 were appropriate referrals, 23 had sufficient data.

n= 23
 Age:
 Sex: 17 males 6 females
 Diagnosis:
 Exclusions: Not reported.
 Notes: No formal diagnosis or tool.

Data Used
 Goal compliance
 Positive count
 Negative count
 O'Dell, Tarler-Benlolo and Flynn questionnaire
 Child Behaviour Questionnaire (Parent)
 Home Situations Questionnaire (Parent)
 Beck Depression Inventory
 Notes: TAKEN AT: pre-and post-intervention and at follow-up. DROP OUTS: not reported.

Group 1 N= 11
 parent training - Immediate intervention group received training via telephone. Eight weekly phone calls, one per week, of between 5 and 40 minutes. Followed by a follow-up session two weeks and 2 - 3 months after final session.
Group 2 N= 12
 Waitlist - Waitlist were compared initially with immediate intervention group. Waitlist received training 8 weeks after randomisation.

Results from this paper:

- 1.1 Well covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Well covered
- 1.6 Not addressed
- 1.7 Well covered
- 1.8 Not reported
- 1.9 Not applicable
- 2.1 +

SZAPOCZNIK1989

Study Type: RCT
 Blindness: Single blind
 Duration (days): Mean 180
 Setting: US
 Notes: RANDOMISATION: method not reported
 Info on Screening Process: 979 screened

n= 69
 Age: Mean 9 Range 6-12
 Sex: all males
 Diagnosis:
 16% Conduct disorder by DSM-III
 32% Oppositional defiant disorder by DSM-III
 Exclusions: - not 6-12 years
 - not from a 2 parent family
 - lived in the US for less than 3 years
 - history of mental retardation, organic dysfunction, mental health care, psychoactive medication, or suicidal ideation

Data Used
 Revised Behaviour Problem Checklist
 Notes: DROPOUTS: 19/88

Group 1 N= 26
 Family interventions - Structured family therapy: 60-90min session per week at first and then less frequently. Emphasis was on modifying maladaptive patterns of interactions
Group 2 N= 26
 Psychodynamic intervention - Individual psychodynamic child therapy: one 50 min session per week. Non directive approach, the child was seen in a playroom situation. Expression of feelings, limit setting, transference interpretations, and insight were emphasised.

TAYLOR1998

Study Type: RCT
 Type of Analysis: ITT
 Blindness: Open
 Duration (days): Range 77-98
 Setting: CANADA, Ontario
 Community-based
 Notes: Details of randomisation process not reported. Urgent families could not be randomised into waitlist control.
 Info on Screening Process: Initial screening number not reported but of those who met the

n= 108
 Age: Mean 6 Range 3-8
 Sex: no information
 Diagnosis:
 100% Behaviour problems by Parent referred
 Exclusions: - Child not between the ages of 3 and 8. The primary reason for referral was not child management problems.
 Baseline: The ECBI for families assigned to waitlist control was 16.5 and 127 in comparison to 19.0 and 144.5 for families assigned to PACS and 19.2 and 148.3 for families

Data Used
 Therapy Attitude Inventory
 Brief Anger-Aggression Questionnaire (BAAQ)
 Support Scale
 Dyadic Adjustment Scales (DAS)
 MESSY
 Achenbach Teacher Report Form (TRF)
 Beck Depression Inventory
 PDR
 CBCL (Parent)
 ECBI

Group 1 N= 46
 parent training - 7 families per group that met for 2 hours and 15 minutes weekly for 11 to 14 weeks. Between group meetings, therapists made calls to families who missed sessions or were having difficulties. Monetary award if completed questionnaires.

inclusion criteria for the study, 51 declined to participate. 108 families randomised to treatment.

assigned to eclectic treatment.

Notes: TAKENT AT: pretest, post-test (after 4 months of treatment)

Group 2 N= 46

Control - Treatment typically offered at the centre. Therapeutic approaches or theories included ecological, solution-focused, cognitive-behavioural, family system. Families met with therapist on an individual basis and negotiated frequency and intensity.

Results from this paper:

- 1.1 Well covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Well covered
- 1.6 Not addressed
- 1.7 Well covered
- 1.8 PACS: 5 families TAU: 8
- 1.9 Well covered
- 1.10 Not applicable

2.1 +

TIMMONSMITCHELL2006

Study Type: RCT

n= 93

Blindness:

Age: Mean 15

Duration (days): Mean 145 Range 90-150

Sex: 71 males 22 females

Followup: 6-month

Diagnosis:
100% Offending history

Notes: Randomization was accomplished by having the court administrator flip a coin.

Exclusions: Inclusion criteria:

Info on Screening Process: 105 participants who met the inclusion criteria agreed to participate in the study.

- felony conviction
- suspended commitment to the Department of Youth Services incarcerating facility
- parent's consent to participate

Baseline: No significant differences in pre-treatment offences, misdemeanors or felonies.

Data Used

Recidivism

Notes: TAKEN AT: pre- and post-treatment and at 6-month follow-up and 18-month recidivism follow-up. DROP OUTS: 11% (in total)

Group 1 N= 48

Multisystemic therapy - MST provides service delivery at home and in the community 24 hours a day, 7 days a week. Treatment ranges between 3 and 5 months (no prescribed length of service). Mater's level MST supervisor + 14 therapists.

Group 2 N= 45

Standard Continuing Care

Results from this paper:

- 1.1 Well covered
- 1.2 Adequately addressed
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Well covered
- 1.6 Not addressed
- 1.7 Adequately addressed
- 1.8 11% (in total)
- 1.9 Not addressed
- 1.10 Not applicable

2.1 +

TURNER2006

Study Type: RCT

n= 30

Type of Analysis: ITT

Age: Range 2-5

Blindness: Open

Sex: no information

Duration (days): Range 21-28

Diagnosis:
100% Behaviour problems by Parent referred

Data Used

- Client Satisfaction Questionnaire (CSQ)
- Parenting Experience Survey (PES)
- Goal Achievement Scales (GAS)
- Family Observation Schedule (FOS)
- Observation settings

Group 1 N= 16

parent training - Primary care Triple P. Three to four brief (30 minute) individual family consultations once per week. Five nurses delivered the intervention.

Primary Care
 Notes: Details on randomisation not reported.
 Info on Screening Process: Details not reported.

Exclusions: - If the child was not between 2 and 5 years of age and had started primary school.
 - If the primary caregiver did not have one or more concerns about their child's behavior or their own parenting skills.
 - If the child had received a diagnosis of developmental delay, developmental disorder, conduct disorder or ADHD.
 - If the child was currently taking medication or in regular contact with another professional for behavioral problems.
 - If the parents were currently in therapy for psychological or relationship problems or could not read English.

Baseline: No significant group difference on any measure at pre-intervention assessment.

Home and Community Problem Checklist (HCPC)
 Depression-Anxiety-Stress Scales (DASS)
 Parenting Sense of Competence (PSOC)
 Parenting Scale (PS)
 ECBI
 Parent Daily Reports (PDR)

Notes: TAKEN AT: pre- and post-intervention; experimental group followed up at 6-months.
 DROP OUTS: 3 (18.75%; waitlist) and 2 (14.28%; parent training).

Group 2 N= 12
 Control - Waitlist condition

Results from this paper:

- 1.1 Well covered
 - 1.2 Not reported
 - 1.3 Not addressed
 - 1.4 Not addressed
 - 1.5 Well covered
 - 1.6 Well covered
 - 1.7 Well covered
 - 1.8 18.75% (waitlist) and 14.28% (parent training)
 - 1.9 Well covered
 - 1.10 Not applicable
- 2.1 +

TURNER2007

Study Type: RCT
 Type of Analysis: Completers
 Blindness: Open
 Duration (days): Mean 56
 Setting: AUSTRALIA, Brisbane
 Outpatient
 Notes: Families were randomly assigned using a random number generator and consecutive case allocation.
 Info on Screening Process: Details not given.

n= 51
 Age: Mean 6
 Sex: 33 males 18 females
 Diagnosis:
 100% Behaviour problems by Parent referred
 Exclusions: If target child was not between 1 and 13 years of age and if the primary caregiver did not have concerns about their child's behaviour or their own parenting skills. If the target child had a development delay, major physical disability or severe chronic illness; chronic illness; and current medication or contact with another professional for behavioural problems.

Baseline: Differences between groups of pre-intervention measures not calculated. ECBI scores (Intensity and Problem subscales) are higher for the intervention group (150.05; 19.81) than the waitlist group (130.18;15.79).

Data Used
 Strengths and Difficulties Questionnaire (SDQ)
 Client Satisfaction Questionnaire (CSQ)
 Depression-Anxiety-Stress Scales (DASS)
 Parenting Experience Survey (PES)
 Parenting Scale (PS)
 ECBI

Notes: TAKEN AT: pre- and post-intervention and at a 6-month follow-up (for intervention group only). DROP OUTS: Intervention group: 3 non-attenders and 3 non-completers. Waitlist group: 7 non-completers.

Group 1 N= 26
 parent training - A culturally sensitive adaptation of the group Triple P that takes into consideration the tradition and needs of the Indigenous people of Australia. An 8 session programme in groups of 10-12 parents.
Group 2 N=

Results from this paper:

- 1.1 Well covered
- 1.2 Well covered
- 1.3 Well covered
- 1.4 Not addressed
- 1.5 Adequately addressed
- 1.6 Well covered
- 1.7 Well covered
- 1.8 23% (intervention group); 28% (waitlist)
- 1.9 Not addressed

1.10 Not addressed

2.1 +

VAN MANEN2004

Study Type: RCT n= 97
 Type of Analysis: Completers Age: Mean 11 Range 9-13
 Blindness: Sex: all females
 Duration (days): Diagnosis: Conduct disorder by DSM-IV
 Followup: 1 year
 Setting: Netherlands Outpatient
 Notes: Details on randomisation not reported. Exclusions: Inclusion criteria:
 Info on Screening Process: Details not reported - DSM-IV criteria for CD or ODD
 - WISC-R IQ score above 85
 - CBCL aggressive and/or delinquent behaviour in the clinical range and attention problems in the non-clinical range
 - ODD/CD boys with a few ADHD symptoms according to DSM-IV criteria but without an ADHD diagnosis were not excluded
 Baseline: No significant differences

Data Used
 TRA
 CBCL (Parent)
 CBCL (Teacher)
 Notes: TAKEN AT: pre- and post-intervention and 1-year follow-up.

Group 1 N= 42
 Cognitive Problem Solving Skills Training - Social cognitive intervention program. Group treatment (N=4). 11 x 70 min weekly session. Therapist trained in both manuals and delivered both treatments. Includes the training of problem solving skills in social situations.

Group 2 N= 40
 Social skills training - Social skills training program = behavioural training; teaching children various social skills to improve interaction with peers. Group treatment (N=4). 11 x 70 min weekly session.

Group 3 N= 15
 Waitlist

Results from this paper:

- 1.1 Adequately addressed
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Well covered
- 1.6 Not addressed
- 1.7 Well covered
- 1.8
- 1.9 Not addressed
- 1.10 Not applicable

2.1 +

VANDEWIEL2007

Study Type: RCT n= 77
 Age: Mean 10 Range 8-13
 Blindness: Sex: 68 males 9 females
 Duration (days): Mean 270
 Setting: US Outpatient
 Notes: no further details on randomisation
 Diagnosis: 94% Disruptive Behaviour Disorder by DSM-IV
 100% ADHD by DSM-IV
 Exclusions: - not 8 to 13 years
 - in an institution
 - IQ <80

Data Used
 CBCL (Parent)
 Parent Daily Reports (PDR)

Group 1 N= 38
 Anger Control Training - parent + anger coping: 23 sessions for children and 15 sessions for parents. Based on Lochman's coping power interventions.

Group 2 N= 10
 Family interventions - TAU: Family interventions based on systemic therapy or communication skills.

Group 3 N= 16
 Behaviour Therapy - TAU: Cognitive problem solving skills

WEBSTER-STRATTON1984

Study Type: RCT n= 35
 Type of Analysis: Completers Age: Mean 5
 Sex: 25 males 10 females

Data Used
 consumer satisfaction questionnaire
 Behar Preschool Behavior Questionnaire (PBQ)

Group 1 N= 11
 parent training - 9 weeks of one-to-one sessions between te therapist, parent and

Blindness:
Duration (days): Mean 63

Setting: USA
Outpatient

Notes: Randomisation occurred using a sealed enveloped designating the assigned group to the participant.

Info on Screening Process: Details not reported.

Diagnosis:
100% Behaviour problems

Exclusions: - Child was not between the ages of 3 and 8.
- Child had debilitating physical impairment, intellectual deficit or history of psychosis.
- If the primary referral was not for the child's oppositional behaviours.

Parent Daily Reports (PDR)
ECBI
CBCL (Parent)

Notes: TAKEN AT: Pre- and post-intervention (at baseline and at 3-months) with 1 year follow-up.
DROP OUTS: 40 families entered the study, 35 completed treatment, 31 assessed at follow-up.

target child. Parents role-played and rehearsed the modeled skills with their child while therapist watched. Therapists were doctorally trained psychologists.

Group 2 N= 13

parent training - 9 sessions of therapist-led discussion program where parents in groups of 8-10 observed videotapes of modeled parenting skills. Children did not attend the sessions. Both experimental groups paid for therapy.

Group 3 N= 11

Control - Waitlist condition.

Results from this paper:

- 1.1 Well covered
- 1.2 Well covered
- 1.3 Well covered
- 1.4 Not addressed
- 1.5 Well covered
- 1.6 Not addressed
- 1.7 Well covered
- 1.8 Full details not given
- 1.9 Not addressed
- 1.10 Not applicable

2.1 +

WEBSTER-STRATTON1988

Study Type: RCT

n= 114

Type of Analysis: Completers

Age: Mean 5 Range 3-8

Blindness: No mention

Sex: 79 males 35 females

Duration (days): Range 70-84

Diagnosis:
100% Conduct disorder by ECBI

Notes: A randomly selected sealed envelopewas opened that designated each family's parent-training condition.

Exclusions: Child was not between the ages of 3 and 8.
Child had debilitating physical impairment, intellectual deficit or history of psychosis and was receiving any form of psychological treatment at the time of referral.
If the primary referral was not for child misconduct that had been occurring for 6 months.
If parent did not report a clinically significant number of child behaviour problems (more than 2 SD above the mean) on the ECBI.

Info on Screening Process: Not reported.

Data Used

consumer satisfaction questionnaire
Behar Preschool Behavior Questionnaire (PBQ)
DPICS
Parenting Stress Index (PSI)
PDR
ECBI
CBCL (Parent)

Notes: TAKEN AT: pre- and post-intervention (one month after treatment). DROP OUTS: not reported but significantly more parents dropped out from the GD treatment compared with the GDVM and IVM treatments.

Group 1 N= 48

GDVM - Group discussion videotape modeling training (28 mothers and 20 fathers). Parents came to clinic weekly for 10-12 two-hour sessions in groups of 10 - 15. Parents met with therapist who showed 10 videotape programs.

Group 2 N= 49

IVM - Individually administered videotape modeling training (29 mothers and 20 fathers). Parents came to clinic weekly for self-administered sessions where they viewed 1 of the 10 videotape programs.

Group 3 N= 47

Group discussion training - Group discussion training (28 mothers and 19 fathers). Parents came to the clinic weekly for 10-12 two-hour sessions in groups of 10-15. Met with a therapist who led a group discussion of the same topics covered in GDVM without the videotapes.

Group 4 N= 47

Control - Waitlist control

Results from this paper:

- 1.1 Well covered
- 1.2 Well covered
- 1.3 Well covered
- 1.4 Not addressed
- 1.5 Well covered
- 1.6 Adequately addressed
- 1.7 Well covered

1.8 Not reported
1.9 Not addressed
1.10 Not applicable

2.1 +

WEBSTER-STRATTON1990

Study Type: RCT

n= 43

Type of Analysis: Completers

Age: Mean 5 Range 3-8

Blindness: No mention

Sex: 34 males 9 females

Duration (days): Mean 70

Diagnosis:

Behaviour problems by ECBI

Notes: Details on randomisation not reported.

Info on Screening Process: Not reported.

Exclusions: Child was not between the ages of 3 and 8. Child had debilitating physical impairment, intellectual deficit or history of psychosis and was receiving any form of psychological treatment at the time of referral. If the primary referral was not for child misconduct that had been occurring for 6 months. If parent did not report a clinically significant number of child behaviour problems (more than 2 SD above the mean) on the ECBI.

Baseline: Comparisons not made between groups on pre-intervention data therefore level of significance is unknown. Pre-scores do vary. ECBI intensity (mother) 164.59 for IVM and 157.36 for control. CBCL (mother) 49.29 for IVM and 64.46 for IVMC. PSI (mother) 145.17 for IVM and 153.46 for IVMC.

Data Used

consumer satisfaction questionnaire
DPICS
Parenting Stress Index (PSI)
PDR
ECBI
CBCL (Parent)

Notes: TAKEN AT: pre- and post-intervention (one month after treatment). DROP OUTS: IVM (no drop outs); IVMC (two families dropped out, not included in study)

Group 1 N= 27

IVM - Individually Administered Videotape Modeling Treatment (17 mothers and 10 fathers). Parents came to the clinic weekly for 10 weeks to see 10 videotape programs.

Group 2 N= 25

IVMC - Individually Administered Videotape Training Plus Therapist Consultation (16 mothers and 9 fathers). Viewed the same videos as IVM plus they were told that they could contact therapist at any time and were scheduled for 2 individual 1-hour appointments.

Group 3 N= 19

Control - Waitlist condition

Results from this paper:

1.1 Well covered
1.2 Not reported
1.3 Not addressed
1.4 Not addressed
1.5 Not addressed
1.6 Adequately addressed
1.7 Well covered
1.8 2 families in IVMC
1.9 Not addressed
1.10 Not applicable

2.1 +

WEBSTER-STRATTON1992

Study Type: RCT

n= 100

Type of Analysis: Unclear

Age: Mean 5 Range 3-8

Blindness: No mention

Sex: 72 males 28 females

Duration (days): Mean 70

Diagnosis:

100% Behaviour problems by ECBI

Followup: 1 year

Info on Screening Process: No reported.

Exclusions: Child was not between the ages of 3 and 8. Child had debilitating physical impairment, intellectual deficit or history of psychosis and was receiving any form of psychological treatment at the time of referral. If the primary referral was not for child misconduct that had been occurring for 6 months. If parent did not report a clinically significant number of child behaviour problems (more than 2 SD above the mean) on the ECBI.

Data Used

Parent Daily Reports (PDR)
DPICS
Behar Preschool Behavior Questionnaire (PBQ)
ECBI
CBCL (Parent)
Parenting Stress Index (PSI)

Group 1 N= 96

IVM - Individually Administered videotape Modeling Training (59 mothers and 37 fathers). Parents came to the clinic weekly for 10 weeks to see 10 videotape programs. Videotapes were accompanied with manual. Weekly homework assignments were included.

Group 2 N= 41

Control - Waitlist condition

Notes: TAKEN AT: pre- and post-intervention and follow-up assessment (delayed-treatment control group families not included). DROP OUTS: 2 mothers and 3 fathers dropped out of control group; 2 mothers and 6 fathers dropped out of experimental group.

Results from this paper:

- 1.1 Well covered
 - 1.2 Not reported
 - 1.3 Not addressed
 - 1.4 Not addressed
 - 1.5 Well covered
 - 1.6 Adequately addressed
 - 1.7 Well covered
 - 1.8 2 mothers and 3 fathers dropped out of control group; 2 mothers and 6 fathers dropped out of experimental group.
 - 1.9 Not reported
 - 1.10 Not applicable
- 2.1 +

WEBSTER-STRATTON1994

Study Type: RCT
 Type of Analysis: Completers
 Blindness: No mention
 Duration (days): Mean 189
 Followup: short term follow-up
 Info on Screening Process: Not reported.

n= 78
 Age: Range 3-8
 Sex:
 Diagnosis:
 Conduct disorder by DSM-III-R
 Oppositional defiant disorder by DSM-III-R

Exclusions: Child was not between the ages of 3 and 8. Child had debilitating physical impairment, intellectual deficit or history of psychosis and was receiving any form of psychological treatment at the time of referral. If the primary referral was not for child misconduct that had been occurring for 6 months. If parent did not report a clinically significant number of child behaviour problems (more than 2 SD above the mean) on the ECBI. Child did not meet DSM-III-R criteria for ODD and CD.

Data Used

Marital Adjustment Test (MAT)
 SPST-R
 DPICS
 consumer satisfaction questionnaire
 PS-I CARE
 ECBI
 CBCL (Parent)
 Beck Depression Inventory
 Parenting Stress Index (PSI)
 Brief Anger-Aggression Questionnaire (BAAQ)
 Notes: TAKEN AT: pre- and post-GDVM and a post-ADVANCE. DROP OUTS: study only included families who had completed all stages of therapy.

Group 1 N=

GDVM - Basic videotape parent skills training program delivered to all parents. Consisted of weekly meetings at clinic for 12 to 13 weeks for 2 hour sessions in groups of 10 to 15. Therapists were social workers or psychologists with experience. GDVM + ADVANCE

Group 2 N= 38

GDVM + ADVANCE - In addition to GDVM sessions, parents also received 14 additional weekly 2 hour sessions. ADVANCE trains parents to cope with interpersonal distress through improved communication, problem solving and self-control skills.

78 families who completed all phases of the treatment program. Study parents included 77 mothers and 58 fathers.

Results from this paper:

- 1.1 Well covered
 - 1.2 Not reported
 - 1.3 Not addressed
 - 1.4 Not addressed
 - 1.5 Well covered
 - 1.6 Adequately addressed
 - 1.7 Well covered
 - 1.8 7 families dropped out of the study; 6 did not complete initial GDVM and 1 did not complete ADVANCE. Study only used families that completed all the phases.
 - 1.9 Not addressed
 - 1.10 Not applicable.
- 2.1 +

WEBSTER-STRATTON1997

Study Type: RCT

Type of Analysis: Unclear

Blindness: Open

Duration (days): Range 154-168

Followup: 1 year

Setting: USA

Notes: Details of randomisation process not reported.

Info on Screening Process: Numbers not reported

n= 97

Age: Mean 6 Range 4-7

Sex: 72 males 25 females

Diagnosis:

100% Conduct disorder by DSM-III-R

100% Oppositional defiant disorder by DSM-III-R

ADHD by DSM-III-R

Exclusions: - Child was not between the ages of 4 and 7.
- Child had debilitating physical impairment, -intellectual deficit or history of psychosis and was receiving any form of psychological treatment at the time of referral.
-If the primary referral was not for child misconduct that had been occurring for 6 months.
-If parent did not report a clinically significant number of child behaviour problems (more than 2 SD above the mean) on the ECBI.
-Child did not meet DSM-III-R criteria for ODD and CD.

Data Used

WALLY

Parenting Stress Index (PSI)

PDR

ECBI

CBCL (Parent)

PS-I CARE

Behar Preschool Behavior Questionnaire (PBQ)

consumer satisfaction questionnaire

PPS-I CARE

Parent Daily Reports (PDR)

DPICS-R

Notes: TAKEN AT: pre-treatment, post-treatment (2 months and 1 year)

DROP OUTS: CT-PT (no drop outs)

Group 1 N= 26

parent training - 26 mothers and 17 fathers divided into groups of 10-12, met weekly with therapist at clinic over course of 22-24 weeks for 2 hour sessions. Therapists had Masters or Doctoral level of education with 5-20 years of experience.

Group 2 N= 22

Child + parent training group - 20 mothers, 16 fathers and 22 children came to clinic weekly for 22 to 24 sessions for parent training and child training.

Group 3 N= 27

Child training group - 20 boys and 7 girls divided into groups of 5 or 6 met at the clinic weekly for 22 sessions with two therapists for 2 hour sessions.

Group 4 N=

Results from this paper:

- 1.1 Adequately addressed
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Not addressed
- 1.6 Adewuately addressed
- 1.7 Well covered
- 1.8 Unclear
- 1.9 Not reported
- 1.10 Not applicable

2.1 +

Characteristics of Excluded Studies

Reference ID	Reason for Exclusion
ABELL2001	Design: non-RCT
ADAMS1992	Outcome: not validated
ANTSHEL2003	Population: ADHD
ARMSTRONG1994	Design: non-RCT
BARTON1985	Design: non-RCT
BIENERT1995	Data: not extractable
BIERMAN1987	Data: not extractable
BIERNERT1995	Data: not extractable
BLUE1981	Method: less than 10 in each group
BORDUIN1990	Method: less than 10 in each group
BOSWORTH2000	No validated outcome measure; insufficient follow-up
BRASWELL1997	
BRESTAN1997	
BROTMAN2007	Outcome: not relevant
BRUNK1987	Aim: focus on child maltreatment

CAMP1977	Data: not extractable
CHUNG1994	No relevant outcomes
CIRILLO1998	Data: not extractable
COATS1979	Method: less than 10 per group
CULLEN1996	Outcomes not relevant
CUNNINGHAM1995	Comparisons: not relevant
DADDS1987	Data: not extractable
DEAN2007	not RCT
DEROSIER2007	Method: less than 10 participants in one group
DOZIER2006	Insufficient follow-up
DUBOW1987	no extractable data
DUPPER1993	no extractable data
EMSHOFF1983	Data: not extractable
FENNELL1998	Outcome: not relevant
FERGUSON2006	Insufficient follow-up
FESHBACH1979	Data: not extractable
FISHER1999	Outcome: no relevant
FISHER1999A	Design: not an intervention study
FORMAN1980	Method: less than 10 participants per group
FORREST1984	No relevant outcomes
FRANKEL1997	Data: not extractable
FUNG2006	6 participants per group
GANT1981	Data: not extractable
GARDNER2007	No relevant outcomes
GARRISON1983	Data: not extractable
GRIZENKO1994	No control group
GRIZENKO1997	Design: non-RCT
GROSS1995	Method: N<10
HARRINGTON2000	Setting's paper
HENGGELER1991	Outcomes
HENGGELER1999A	Population/comparison not relevant
HENRY2004	Method: not an intervention paper
HINSHAW2000	Population: main focus on ADHD
HOATH2002	Method: less than 10 people in each group
HOBBS1984	Outcomes: no validated
HUDLEY1993	Data: not extractable
HUEY1984	Data: not extractable
IALONGO1993	Main focus on ADHD
KAMON2005	Design: not a RCT
KANNAPPAN1993	Method: not sufficient details on participants/intervention
KAZDIN2003	Outcome: used a unvalidated composite measure
KAZDIN2003A	Design: not an intervention paper
KELLNER1999	Less than 10 participants in each arm.
KNAPP1989	Comparisons: not relevant
LANE1999	Outcomes: not relevant

LARKIN1999	Outcomes: not relevant
LEE1979	No validated outcome measures.
LEIBER1995	Design: non-RCT
LESURE-LESTER2002	Method: n<10
LOCHMAN1993	Method: of the children who are aggressive and rejected, there are less than 10 in the treatment and control group.
LOCHMAN2003A	Method: n<10 in each group
LONG1993	Aim: main focus on ADHD
LOVERING2006	Method: not a RCT
LUK1998	Less than 8 people in the Family Therapy arm
MAGER2005	Comparison: not relevant
MARTSCH2005	The study is not looking at individual outcomes but group outcomes.
MCTMAHON1981	Outcome: not relevant
MULTISITE2004	Method: not an intervention paper
MUNTZ2004	Control group is less than 10
MURIS2005	Design: non-RCT
MYERS2000	Design: non-RCT
NILES1986	Outcomes: none relevant
NILSEN2007	Method: not randomized
ONIEL2002	Method: n<10 in each group
PAINTER1999	Outcome: not validated
PATTERSON1982	Less than 10 persons per group
PATTERSON1990	Method: not an intervention paper
PEVSNER1992	Method: less than 10 participants in each group. Irrelevant outcomes.
PIFFNER1990	Method: less than 10 persons in each group
PIFFNER1997	Method: less than 10 people in each arm
PISTERMAN1989	Aim: main focus on ADHD
PISTERMAN1992	Aim: focus on ADHD
POWERS1995	Method: less than 10 persons per group
PRENTICE1972	Outcomes: not relevant
PRINZ1994	Outcomes: not relevant
PRINZ2000	Method: not an intervention paper
RAUE1985	Method: less than 10 in each arm
REARDON1977	Outcomes: none relevant
REID2004	Outcomes: not relevant
REYNOLDS1997	Method: 4 participants in total in the study; no control group.
RICHEL1983	Data: not extractable
RIMM1974	Method: less than 10 participants in each arm.
ROBINSON2001	Intervention: not relevant
ROHDE2004A	Aim: focus on depression
SANDERS1985	Method: less than 10 persons per group
SANDERS2001	Method: not an intervention paper
SANDERS2004	Aim: focus on child maltreatment
SCHUHMAN1998	Method: dropout > 50% in waitlist
SCHULTZ1980	Outcomes: not relevant

SCHWITZGEBEL1964	Design: non-RCT
SHAW2006	Insufficient follow-up
SHECHTMAN2006	Outcome: modified validated outcome
SHECHTMAN2006A	Outcome: modified validated outcome
SHORE1977	Method: less than 10 participants in each arm.
SIEGERT1980	Comparisons: not relevant
SMITH2004	Method: non-RCT
SPOTH2007	Research question/outcome: study does not focus on the effectiveness of interventions for behaviour problems
STANTON2004	Insufficient follow-up
STERN1999	Method: less than 10 participants per group
STRAND2002	Outcome: not relevant
SUKHODOLSKY2005	Comparison: not relevant
TANNER1988	Data: not extractable
TEGLASI2001	n<10 per group
TEGLASI2001	Method: n<10 per group
TWEMLOW2003	Method: not an intervention paper
VANDEWIEL2007	
WILMSHURST2002	Comparisons: not relevant
WINSBERG1980	Setting's paper
WOLCHIK1993	Data: not extractable
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Characteristics Table for The Clinical Question: What are the best interventions for adult offenders and/or individuals who have elevated levels of the ASPD construct?

Comparisons Included in this Clinical Question

Anger management vs control
VANNOY2004

Antidepressants vs placebo
COCCARO1997A

Group based cognitive and behavioural intervention versus control
--

Group based cognitive and behavioural interventions
ARMSTRONG2003
AUSTIN1997
FRIENDSHIP2003
JOHNSON1995
LIAU2004
PORPORINO1995
ROSS1988
VAN VOORHIS2004

Lithium vs placebo
SHEARD1976

Characteristics of Included Studies

Methods	Participants	Outcomes	Interventions	Notes
<p>ARMSTRONG2003</p> <p>Study Type: RCT</p> <p>Study Description: [Offender RCT juvenile reference list]</p> <p>Type of Analysis: Completers</p> <p>Blindness: Open</p> <p>Duration (days):</p> <p>Setting: US Institution (Prison)</p> <p>Notes: Details on randomisation not reported.</p> <p>Info on Screening Process: 129 randomized into the treatment arm and 127 into the control arm. In the treatment arm, 4 could not speak English, 4 refused treatment and 11 were released prior to transfer. In the control arm, 25 were exposed to treatment.</p>	<p>n= 212</p> <p>Age: Mean 20 Range 15-22</p> <p>Sex: all males</p> <p>Diagnosis:</p> <p>Exclusions: If the offender was not (a) between the ages of 15 and 22 (b) a resident of the jail and (c) if they could not speak English.</p> <p>Baseline: Significant group differences were found for the percentages of African Americans and Caucasians</p>	<p>Data Used</p> <p>Length of time until recidivism</p> <p>Number of recidivists (any time period)</p> <p>Notes: TIME PERIOD: from first release until the end of data collection. DROP OUTS: 15% (intervention); 20% (control); only report means for the 65/110 who received > 30 days of treatment.</p>	<p>Group 1 N= 110</p> <p>Moral reconnection therapy - 3 sessions per week, approximately 1 to 1 1/2 hours duration. Delivered by correctional counselors and officers. Targeted at moral development, self-control and reducing association with delinquent peers. Group therapy.</p> <p>Group 2 N= 102</p> <p>No treatment - Participants resided in the general population as opposed to the institutional facilities.</p>	<p>21% (N=54) had four or more prior arrests. Of these, 43% (N=110) for violence, 48% (N=123) for a property offense and 32% (N=82) for a drug offense.</p>
<p>Results from this paper:</p> <p>1.1 Well covered</p> <p>1.2 Not reported</p> <p>1.3 Not addressed</p> <p>1.4 Not addressed</p> <p>1.5 Poorly addressed</p> <p>1.6 Not addressed</p> <p>1.7 Adequately covered</p> <p>1.8 15% (intervention); 20% (control)</p> <p>1.9 Poorly addressed</p> <p>1.10 Not applicable</p> <p>2.1 +</p>				
<p>AUSTIN1997</p>				

<p>Study Type: RCT</p> <p>Blindness: Open</p> <p>Duration (days): Mean 140</p> <p>Followup: 1-year</p> <p>Setting: US, San Francisco, San Jose, Oakland, Santa Rosa Community (Probation)</p> <p>Notes: Details on randomisation not reported.</p> <p>Info on Screening Process: Details not reported.</p>	<p>n= 135</p> <p>Age: Mean 36</p> <p>Sex: all males</p> <p>Diagnosis: 100% Offenders</p> <p>Exclusions: - Male offenders who were neither sentenced to probation or released from prison with the mandatory condition that they participate in drug treatment.</p> <p>Notes: Drug offenders; 41% for treatment and 44% for control had offenses for drug-related crimes with robbery as the second most common offense. Participants were mandated for drug treatment through testing rather than specific drug related offenses.</p> <p>Baseline: No significance test reported; participants similar at pre-assessment.</p>	<p>Data Used</p> <p>Recidivism (12-months)</p> <p>Notes: TAKEN AT: recidivism data collected 1-year termination from both programs. RECIDIVISM: number of arrests.</p>	<p>Group 1 N= 70</p> <p>Reasoning and Rehabilitation - Bi-weekly session for 20 weeks. Delivered by probation. Group therapy.</p> <p>Group 2 N= 65</p> <p>Drug treatment program - 3 phases each with a 4 month duration. Random urine tests. Weekly substance abuse counseling meetings. Individualized treatment plan.</p>	
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Results from this paper:

1.1 Well covered

1.2 Not reported

1.3 Not addressed

1.4 Not addressed

1.5 Adequately addressed

1.6 Not addressed

1.7 Well covered

1.8 Not applicable

1.9 Adequately covered

1.10 Poorly addressed

2.1 +

<p>COCCARO1997A</p> <p>Study Type: RCT</p> <p>Type of Analysis: ITT</p> <p>Blindness: Double blind</p> <p>Duration (days): Mean 84</p> <p>Setting: Outpatient</p> <p>Info on Screening Process: 64 entered 2-week, placebo lead-in phase; 40/64 (63%) met OAS-M criteria and were randomized.</p>	<p>n= 40</p> <p>Age: Mean 38</p> <p>Sex: 28 males 12 females</p> <p>Diagnosis: 100% Personality disorder by DSM-III-R</p> <p>100% Impulsive aggressive by OAS-M</p> <p>10% ASPD by DSM-III-R</p> <p>Exclusions: - no DSM-III-R diagnosis of PD - life history of mania, hypomania, schizophrenia, delusional disorder - current major depression - dependent on alcohol or other drugs - did not score sufficiently high on at least 1 anger, 1 aggression subscales of the self report Anger, Irritability and Aggression Questionnaire (AIAQ) - scored < 15 on OAS-M and < 6 on OAS-M Irritability subscale score during 2-week single-blind, placebo lead-in phase</p> <p>Baseline: No significant differences at baseline.</p>	<p>Data Used</p> <p>OAS-Modified (observer rated)</p> <p>Notes: TAKEN AT: baseline and weekly. DROP OUTS: TREATMENT - 48%; PLACEBO - 31%.</p>	<p>Group 1 N= 20</p> <p>Fluoxetine - Initial dose of fluoxetine - 20mg/day up to first 4-weeks. Could be raised to 40 mg if score on OAS-M did not decrease by 25%. Maximum dose of 60 mg/day.</p> <p>Group 2 N= 20</p> <p>Placebo</p>	
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Results from this paper:

1.1 Well covered

1.2 Not reported

1.3 Not addressed

- 1.4 Well covered
 - 1.5 Well covered
 - 1.6 Not addressed
 - 1.7 Well covered
 - 1.8 TREATMENT - 48%; PLACEBO - 31%
 - 1.9 Well covered
 - 1.10 Not applicable
- 2.1 +

FRIENDSHIP2003

Study Type: Non-Randomised Control Trial

Type of Analysis: Completers

Blindness:

Duration (days):

Setting: England and Wales
Institution (Prison)

Notes: Treatment and comparison groups
matched on: year of discharge.

n= 2557

Age:

Sex: all males

Diagnosis:
100% Offenders

Exclusions: Treatment group
- male offenders who had not been sentenced to prison for at least 4 years for a sexual offence
- had not voluntarily participated in and completed STOP between 1992 and 1994
- had not subsequently been discharged and spent at least two years in the community

Comparison group
- Male offenders not serving a prison sentence of 4 years or more for a sexual offence

Baseline: Treatment and comparison group were equal at baseline on risk as measured by Static-99.

Data Used
Reconviction (2-years)

Group 1 N= 647

Cognitive skills - Sex Offender Treatment Programme (SOTP). Low risk - 263 (41%), medium-low risk - 225 (35%), medium-high risk - 109 (17%), high risk - 50 (7%). Group therapy.

Group 2 N= 191

Matched control - Low risk - 969 (50%), medium-low risk - 655 (34%), medium-high risk - 229 (12%), high risk - 57 (4%).

Results from this paper:

- 1.1 Adequately covered
- 1.2 Well covered
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 [Information could not be provided due to reporting in official records]
- 1.6 Not addressed
- 1.7 Adequately covered
- 1.8 Not addressed
- 1.9 Not addressed
- 1.10 Poorly addressed
- 1.11 Adequately covered
- 1.12 Not addressed
- 1.13 Adequately covered
- 1.14 No

2.1 +

GOTTSCHALK1973

Study Type: RCT

Blindness: Double blind
Duration (days): Mean 180

Setting: US, Maryland
Institution (prison)

Notes: Details on randomisation not reported.
Info on Screening Process: Details not

n= 42

Age: Mean 25

Sex: all males

Diagnosis:
100% Offenders

Exclusions: - inmates who had not reported violations of discipline rules in the previous 6-months

Notes: OFFENDERS AND ASPD CONSTRUCT (rule

Data Used
Hostility outward scale (from speech sample)
Notes: TAKEN AT: baseline and 1-,2-,3-,4-,5-,6-months.

Group 1 N= 24

Diphenylhydantoin. Mean dose 300mg - (DPH) Daily by mouth for a 6-month period.

Group 2 N= 18

Placebo - 24mg of DPH daily to avoid informing participants that a placebo was given. Uniform in taste and appearance, individually coded at a hospital pharmacy.

<p>provided.</p>	<p>breaking) Baseline: Statistical test at baseline not conducted but groups had similar hostility scores at baseline.</p>			
<p>Results from this paper:</p> <p>1.1 Adequately addressed 1.2 Not reported 1.3 Not addressed 1.4 Well covered 1.5 Adequately addressed 1.6 Not addressed 1.7 Adequately addressed 1.8 [None reported] 1.9 Not addressed 1.10 Not applicable</p> <p>2.1 +</p>				
<p>HOLLANDER2003</p>	<p>Study Type: RCT</p> <p>Type of Analysis: not-ITT</p> <p>Blindness: Double blind</p> <p>Duration (days): Mean 84</p> <p>Setting: Outpatient (19 sites)</p>	<p>n= 233</p> <p>Age: Mean 27 Range 19-67</p> <p>Sex: 169 males 64 females</p> <p>Diagnosis: 100% Impulsive aggressive by OAS-M</p> <p>41% Personality disorder by DSM-IV</p> <p>4% ASPD</p> <p>Exclusions: - not 18-65 - no DSM-IV diagnosis of PD, intermittent explosive disorder or PTSD - does not have (on average) 2 physical/verbal aggressive outbursts per week for last month - aggressive behaviour is premeditated or for tangible objective - < 15 on OAS-M aggressive subscale - receiving psychotherapy but without a stable psychotherapy schedule for last 3-months - bipolar disorder - major depressive disorder - history of schiophrenia/psychotic disorder - symptoms of dementia - homicidal/suicidal - impulsive aggression from head trauma or other medical condition - pregnant or lactating females - unstable medical conditions</p> <p>Notes: Baseline severity of OAS-M (Agression): TREATMENT - 43.7 (66.7); CONTROL - 33.7 (66.5)</p> <p>Baseline: No significant differences between groups at baseline on the OAS-M Aggression score.</p>	<p>Data Used OAS-Modified (observer rated) Notes: TAKEN AT: baseline, weekly, telephone visits at weeks 5 and 7. DROP OUTS: total = 5.3%</p>	<p>Group 1 N= 116 Divalporex - Initiated at 500 mg/day, twice daily, increased by 250mg every 3-7 days during the first 3 weeks of treatment.</p> <p>Group 2 N= 117 Placebo</p>
<p>Results from this paper:</p> <p>1.1 Adequately addressed 1.2 Not reported 1.3 Not addressed 1.4 Not addressed 1.5 Well covered 1.6 Well covered 1.7 Well covered</p>				

1.8 Total = 5.6%
 1.9 Not addressed
 1.10 Not addressed
 2.1 +

JOHNSON1995

Study Type: RCT
 Blindness: Open
 Duration (days):
 Followup: 4-months
 Setting:
 Probation

n= 134
 Age:
 Sex: all males
 Diagnosis:
 Exclusions: - those not referred after initial drug screening for ASI diagnosis whose Drug problem score was not 5+

Data Used
 Revocations/absconsions
 Notes: TAKEN AT: 8-months, average (includes intervention time i.e. since intake into program).

Group 1 N= 47
 Cognitive skills - Specialized Drug Offender Program = drug offenders probation program with max caseload of 50 + cognitive model that followed R&R (group therapy, 35 sessions x 2H).
Group 2 N= 51
 Specialized drug offender program - Specialized Drug Offender Program = drug offenders probation program with max caseload of 50. No additional training.
Group 3 N= 36
 TAU - Regular probation services; caseload of 160.

Results from this paper:
 1.1 Well covered
 1.2 Adequately covered
 1.3 Not addressed
 1.4 Not addressed
 1.5 Adequately addressed
 1.6 Not addressed
 1.7 Adequately addressed
 1.8 [Not reported]
 1.9 Not addressed
 1.10 Not applicable
 2.1 +

LIAU2004

Study Type: RCT
 Study Description: [Offender search]
 Type of Analysis: Completers
 Blindness: Open
 Duration (days): Mean 60
 Followup: 6-months
 Setting: US
 Halfway house
 Notes: Details on randomisation not reported.
 Info on Screening Process: 43/359 (12%) referred clients declined participation resulting in 316 offenders.

n= 316
 Age: Mean 30 Range 18-61
 Sex: 224 males 92 females
 Diagnosis:
 100% Offenders
 Exclusions: None reported.
 Baseline: There were no significant differences between the treatment and comparison groups on any of the pretest measures.

Data Used
 Recidivism (6-months)
Data Not Used
 Young Adult Self-Report Form - only 67/276 collected at post-assessment
 Institutional misconduct - incident reports - do not report SD
 Notes: TAKEN AT: pre- and post-assessment and recidivism at 6-months post-release. DROP OUTS: 19/163 (12%, treatment); 132/153 (14%, control); recidivism data for 250/276 completers.

Group 1 N= 163
 Psychoeducational - EQUIP: psychoeducational group therapy including sessions on thinking errors, anger management + social skills. Homework. 1 x 1H sessions/week (approx for 2-months).
Group 2 N= 153
 Control - Received all programming available at the facility except for the EQUIP psychoeducational i.e. employment services, substance-abuse education, academic skills development, case management and life skills education.

The community correctional facility does not accept sexual offenders, arsonists or any offender who has committed a violent offense in the past 3 years; 48% drug offences, 33% property offences, 4% public offences and 2% family offences.

Results from this paper:
 1.1 Well covered
 1.2 Not reported
 1.3 Not addressed
 1.4 Not addressed
 1.5 Well covered
 1.6 Well covered

1.7 Adequately addressed
 1.8 12% (treatment); 14% (control)
 1.9 Not addressed
 1.10 Not applicable
 2.1 +

MATTES2005

Study Type: RCT
 Study Description: * last observation carried forward for all participants who had baseline scores; 2 participants did not have baseline scores.
 Type of Analysis: *non-ITT
 Blindness: Double blind
 Duration (days): Mean 70
 Setting: Outpatient
 Notes: Details on randomisation procedure not reported
 Info on Screening Process: 376 - 214 decided not to participate, 94 did not meet inclusion criteria. 48 randomized; 45 had had an adequate trial.

n= 45
 Age: Mean 42
 Sex: 36 males 9 females
 Diagnosis:
 33% ADHD by DSM-IV
 22% Intermittent Explosive Disorder by DSM-IV
 Exclusions: - schizophrenia, bipolar, epilepsy, dementia, mental retardation, substance abuse (prior 6-months)
 - need for treatment with antipsychotics, anticonvulsants or psychotropic medication
 - antidepressants other than anxiolytics, stimulants or hypnotics
 - significant risk of severely injuring others/self
 - current psychiatric or neurological conditions which required specific treatment unless adequately treatment and clinically stable unless current clinical symptom = impulsive aggression
 Baseline: Differences between groups on verbal aggression at baseline where the placebo group scored higher.

Data Used
 OAS-Modified (observer rated)
 Notes: DROP OUTS: 24/ 48 completed study (14 TREATMENT; 10 PLACEBO); 45/48 completed 4-weeks of treatment (analysis on these participants)

Group 1 N= 21
 Oxcarbazepine - Initial dose = 150mg/day, increased by 150-300 mg/d after 2-4 days to at least 1200 mg/day (if tolerated) with a maximum of 2400 mg/day.
Group 2 N= 24
 Placebo

Results from this paper:
 1.1 Adequately addressed
 1.2 Not reported
 1.3 Not addressed
 1.4 Well covered
 1.5 Poorly addressed
 1.6 Poorly addressed
 1.7 Well covered
 1.8 TOTAL: 53.3%
 1.9 Not addressed
 1.10 Not applicable
 2.1 +

MATTES2008

Study Type: RCT
 Study Description: * last observation carried forward for all participants who had baseline scores; 2 participants did not have baseline scores.
 Type of Analysis: non-ITT*
 Blindness: Double blind
 Duration (days): Mean 70
 Setting: Outpatient
 Notes: Details on randomisation not reported.
 Info on Screening Process: Details not

n= 40
 Age: Mean 45 Range 21-64
 Sex: 35 males
 Diagnosis:
 32% ADHD by DSM-IV
 100% Impulsive aggressive
 Exclusions: - no recurrent incidents of aggression
 - aggressiveness is not grossly out of proportion to the provocation or precipitating psychosocial stressors
 - aggressiveness is premeditated or for tangible objective
 - causes neither marked distress in the individual nor

Data Used
 OAS-Modified (observer rated)
 Notes: DROP OUTS: 34/40 completed four-weeks of trial; 19/40 completed full trial.

Group 1 N= 20
 Levetiracetam. Mean dose 1738mg - Initial dose: 250 mg/day, increased by 250 mg/day after 1-week to at least 1000 mg/day, with a maximum of 3000 mg/day by week 6.
Group 2 N= 20
 Placebo

provided.	impairment in occupational/interpersonal functioning - aggressiveness is accounted for by another mental disorder, medical condition or direct physiologic effects of a substance - not 18-65 - women of childbearing potential who do not practice effective contraception - lifetime history of schizophrenia, bipolar, epilepsy, demential, mental retardation, autism, substance abuse in prior 6-months - need for treatment with antipsychotics, anticonvulsants, mood stabilizers or a revent change in psychotropic medication - patients on antidepressants other than anxiolytics, stimulants or hypnotics - current psychiatric or neurologic conditions that required specific treatment unless adequately treated and with clinically stable symptoms unless unstable symptom is impulsive aggression Notes: ASPD CONSTRUCT: impulsive aggression Baseline: No significant differences between groups on aggression ratings			
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Results from this paper: 1.1 Poorly addressed 1.2 Not reported 1.3 Not addressed 1.4 Well covered 1.5 Well covered 1.6 Poorly addressed 1.7 Well covered 1.8 TOTAL: 47.5% 1.9 Not addressed 1.10 Not applicable 2.1 +				
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NICKEL2005B Study Type: RCT Type of Analysis: Completers Blindness: Double blind Duration (days): Mean 54 Setting: GERMANY Outpatient Notes: Randmoisation procedure not detailed Info on Screening Process: Details not given	n= 42 Age: Mean 29 Sex: all males Diagnosis: 100% Borderline Personality Disorder by DSM-IV 100% Anger problems Exclusions: - less than 18 y/o - not perceived excessive burdens caused by their life situations that produced feelings of constatnly increasing anger - acute psychosis - severe major depression - bipolar - current use of topiramate or other psychotropic medication - participation in psychotherapy - somatically ill - suicidal - addictive illness Notes: ASPPD CONSTRUCT: anger Baseline: No significant differences	Data Used State Trait Anger Expression Inventory (Self) Notes: TAKEN AT: baseline and weekly. DROP OUTS: TREATMENT - 0; PLACEBO -2/24 (8.3%).	Group 1 N= 22 Topiramate - Beginning - 50 mg/day; 6-th week - titrated to 250mg/day and then stayed constant. Group 2 N= 22 Placebo - Identical capsules	Not funded.
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Results from this paper:				
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<p>1.2 Not reported 1.3 Not addressed 1.4 Well covered 1.5 Well covered 1.6 Poorly addressed 1.7 Adequately addressed 1.8 REATMENT - 0; PLACEBO -2/24 (8.3%) 1.9 Not addressed 1.10 Not addressed</p> <p>2.1 +</p>
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<p>PORPORINO1995</p> <p>Study Type: RCT</p> <p>Study Description: Those who could be tracked at follow-up; includes non-completers</p> <p>Type of Analysis: Completers*</p> <p>Blindness:</p> <p>Duration (days):</p> <p>Followup: 6-months</p> <p>Setting: Institution (Prison)</p>	<p>n= 757</p> <p>Age: Mean 31</p> <p>Sex:</p> <p>Diagnosis: 100% Offenders</p> <p>Exclusions: - not randomised to treatment/WLC - not released under community supervision of at least 6-months had elapsed</p> <p>Baseline: Significant difference such that more time passed for those cases actually assigned to treatment as compared to control.</p>	<p>Data Used</p> <p>Readmission to prison</p> <p>Notes: DROP OUTS: 446/757 completed treatment (19% dropout). FOLLOW-UP: 6-month</p>	<p>Group 1 N= 550</p> <p>Reasoning and Rehabilitation - Up to 8 per group.</p> <p>Group 2 N= 207</p> <p>Waitlist</p>
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<p>ROSS1988</p> <p>Study Type: RCT</p> <p>Type of Analysis: Unclear</p> <p>Blindness: Open</p> <p>Duration (days):</p> <p>Followup: 5-months</p> <p>Setting: CANADA, Ontario Community (Probation)</p> <p>Notes: Randomisation process not reported.</p> <p>Info on Screening Process: Details not reported.</p>	<p>n= 62</p> <p>Age:</p> <p>Sex: all males</p> <p>Diagnosis: 100% Offenders</p> <p>Exclusions: - if probationers did not have a Level of Supervision Inventory (LSI) classification as a high-risk offender.</p> <p>Notes: High-risk probationers</p> <p>Baseline: Cognitive group had a slightly lower LSI score than other and a higher number of previous convictions.</p>	<p>Data Used</p> <p>Recidivism</p> <p>Notes: TAKEN AT: 9-months (since admission to treatment i.e. during intervention) RECIDIVISM: that resulted in conviction.</p>	<p>Group 1 N= 22</p> <p>Cognitive skills - R&R. Group therapy. 80 hours. Run by probation officers.</p> <p>Group 2 N= 17</p> <p>Life Skills Training - 80H. Training in areas such as money management, leisure activities, family and criminal law, employment-seeking skills, alcohol & drug education. Run by probation officers.</p> <p>Group 3 N= 23</p> <p>TAU - Regular probation services without extra interventions.</p>
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<p>Results from this paper:</p> <p>1.1 Not addressed 1.2 Not reported 1.3 Not addressed 1.4 Not addressed 1.5 Adequately addressed 1.6 Not addressed 1.7 Well covered 1.8 [Details not provided] 1.9 Not addressed 1.10 Not addressed</p> <p>2.1 +</p>

<p>SHEARD1976</p>

<p>Study Type: RCT</p> <p>Blindness: Double blind</p> <p>Duration (days): Mean 90</p> <p>Setting: Institution (Prison)</p> <p>Notes: Details on randomisation not reported.</p> <p>Info on Screening Process: 159 referrals, 101 suitable, 80 remained in study long enough to receive medication, 14 dropped out; final sample = 66.</p>	<p>n= 66</p> <p>Age: Mean 19</p> <p>Sex: all males</p> <p>Diagnosis: 100% Offenders</p> <p>Exclusions: - not convicted for serious aggressive crime - no history of chronic assaultive behaviour and/or chronic impulsive antisocial behaviour - poor physical health with renal, cardiac or organic brain disease - inability to comprehend the written material - sentence insufficient to complete trial - no termination of psychoactive medication</p> <p>Notes: OFFENDERS AND ASPD CONSTRUCT: offending history is assaultive and antisocial in nature.</p> <p>Baseline: Baseline statistics are not examined.</p>	<p>Data Used</p> <p>Minor institutional infractions</p> <p>Major institutional infractions</p> <p>Notes: DROP OUTS: TOTAL = 16/80 (20%)</p>	<p>Group 1 N= 34</p> <p>Lithium - Goal to maintain 24-H serum lithium levels in the range: 0.6-1.0 mEq/liter. 5 capsules/day with carrying doses.</p> <p>Group 2 N= 32</p> <p>Placebo</p>	
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<p>Results from this paper:</p> <p>1.1 Poorly addressed</p> <p>1.2 Not reported</p> <p>1.3 Not addressed</p> <p>1.4 Well covered</p> <p>1.5 Poorly addressed</p> <p>1.6 Not addressed</p> <p>1.7 Adequately addressed</p> <p>1.8 TOTAL = 16/80 (20%)</p> <p>1.9 Not addressed</p> <p>1.10 Not applicable</p> <p>2.1 +</p>				
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<p>STANFORD2005</p>				
<p>Study Type: RCT</p> <p>Study Description: *Blind was broken at final visit to discuss effectiveness of drug.</p> <p>Type of Analysis: Completers</p> <p>Blindness: Double blind*</p> <p>Duration (days): Mean 42</p> <p>Setting: US</p> <p>Notes: Randomly assigned using a random number table.</p> <p>Info on Screening Process: 43/183 met inclusion criteria; 57 refused to participate; 29 completed full trial.</p>	<p>n= 29</p> <p>Age: Mean 33</p> <p>Sex: all males</p> <p>Diagnosis: 100% Impulsive aggressive by BDHI</p> <p>59% ASPD</p> <p>Exclusions: - women - in the past 6-months, did not fail to resist aggressive impulses that resulted in serious assaultive acts or destruction of property - the degree of assaultiveness was not grossly out of proportion to an precipitating psychosocial stressors - 2 such episodes occurred during the month prior to entering the study - did not score 8+ on the Irritability subscale of the Buss-Durkee Hostility Inventory (BDHI) - verbal IQ < 80 - diagnosis of bipolar or thought disorder - use of psychactive medication - history of medical/neurologic problems - nonnative English speaker - liver enzymes not within normal limits</p> <p>Notes: ASPD CONSTRUCT: impulsive aggression</p> <p>Baseline: No differences at baseline on aggression measures</p>	<p>Data Used</p> <p>Overt Aggression Scale (OAS; observer-rated)</p> <p>Notes: TAKEN AT: 2-,4-,6-weeks. DROP OUTS: 3/11 PLACEBO; 2/9 PHT; 2/9 CBZ; 2/9 VPA.</p>	<p>Group 1 N= 7</p> <p>Phenytoin. Mean dose 300mg - (PHT)</p> <p>Group 2 N= 7</p> <p>Carbamazepine. Mean dose 450mg - (CBZ)</p> <p>Group 3 N= 7</p> <p>Valporate - (VPA)</p> <p>Group 4 N= 8</p> <p>Placebo - Dextrose. Administered in identical, unamrked capsules obtained from a local pharmacy.</p>	

Results from this paper:

- 1.1 Well covered
- 1.2 Adequately addressed
- 1.3 Not addressed
- 1.4 Adequately addressed
- 1.5 Well covered
- 1.6 Poorly addressed
- 1.7 Well covered
- 1.8 3/11 (27.3%) PLACEBO; 2/9 (22.2%) PHT; 2/9 (22.2%) CBZ; 2/9 (22.2%) VPA.
- 1.9 Not addressed
- 1.10 Not applicable

2.1 +

<p>VAN VOORHIS2004</p> <p>Study Type: RCT</p> <p>Study Description: [Offender search]</p> <p>Type of Analysis: Completers and drop out</p> <p>Blindness: Open</p> <p>Duration (days): Mean 245</p> <p>Followup: 9-month</p> <p>Setting: US, Georgia Community (Probation)</p> <p>Notes: Details on randomisation not reported.</p> <p>Info on Screening Process: Details not reported.</p>	<p>n= 468</p> <p>Age: Mean 30 Range 18-62</p> <p>Sex: all males</p> <p>Diagnosis:</p> <p>Exclusions: -Parolees with IQ scores lower than 80 and with a history of sex offenses or severe substance abuse. Note: despite screening, 27 parolees (6%) had an IQ below 80</p> <p>Baseline: There was no significant differences between the groups on level or risk of reoffending, number of prior incarcerations, prior felony convictions or prior violent offences.</p>	<p>Data Used</p> <p>Technical violations at 9-months</p> <p>Technical violations at 6-months</p> <p>Technical violations at 3-months</p> <p>Re-arrest/revocation at 9-months</p> <p>Notes: TAKEN AT: 3-, 6- and 9-months after intervention. DROP OUTS: 60% completed R&R recidivism data on 100% of sample. Note: I only listed the outcomes that we have data for, need to contact authors as there is an error downloading their online report.</p>	<p>Group 1 N= 232</p> <p>Reasoning and Rehabilitation - R&R consists of 35 lessons that cover: problem solving, creative thinking, social skills, management of emotions, negotiation skills, values enhancement and critical reasoning. Manual with detailed lesson plans. Group therapy.</p> <p>Group 2 N= 236</p> <p>TAU - No further details on control group; regular probation services. All participants could engage in other psychosocial programs in both groups; no significant differences in groups on additional program attendance.</p>	<p>All participants had at least one prior felony on record with: (a) at least one violent offense (51%) and (b) at least one prior prison sentence (46%).</p> <p>Classification of risk: 47 (10%) at high risk; 365 (78%) at medium risk; and 56 (12%) as low risk</p>
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Results from this paper:

- 1.1 Adequately covered
- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Well covered
- 1.6 Well covered
- 1.7 Well covered
- 1.8 40% in treatment arm did not complete treatment; data for 100% of sample
- 1.9 Not addressed
- 1.10 Not applicable

2.1 +

<p>VANNOY2004</p> <p>Study Type: RCT</p> <p>Study Description: [Offender search]</p> <p>Type of Analysis: Completers</p> <p>Blindness: Open</p> <p>Duration (days): Mean 84</p> <p>Setting: US Institution (Prison)</p> <p>Notes: Details on randomisation not reported.</p> <p>Info on Screening Process: Details not reported.</p>	<p>n= 29</p> <p>Age: Mean 35 Range 21-50</p> <p>Sex: all males</p> <p>Diagnosis: 100% Offenders</p> <p>Exclusions: None reported.</p> <p>Notes: Low security prison</p> <p>Baseline: None reported.</p>	<p>Data Used</p> <p>State Trait Anger Expression Inventory (Self)</p> <p>Notes: TAKEN AT: pre- and post-intervention. DROP OUTS: 5/15 (treatment arm) Report only state-anger and trait anger; report the mean difference for pre- and post-test-scores and the standard deviation of means differences for each group (Table 1).</p>	<p>Group 1 N= 15</p> <p>Anger Control Training - 12 weekly group meetings, 1.5 hours per week. Completion of treatment was considered as attending 9/12 sessions. Therapy based on Buddhist principles.</p> <p>Group 2 N= 14</p> <p>Waitlist</p>	<p>No details on prior offenses reported.</p>
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Results from this paper:

- 1.2 Not reported
- 1.3 Not addressed
- 1.4 Not addressed
- 1.5 Not addressed
- 1.6 Not addressed
- 1.7 Adequately addressed
- 1.8 33% (treatment arm)
- 1.9 Not addressed
- 1.10 Not applicable
- 2.1 +

Characteristics of Excluded Studies

Reference ID	Reason for Exclusion
ANDERSON2002	Design: non-RCT
BARKWELL1976	Intervention/comparisons: not relevant [matching vs not matching offender to probation officer]; Data: not extractable
BARO1999	Design: non-RCT
BARRATT1997	Data: does not report pre-crossover data
BELLUS1999	Design: non-RCT
BONTA2000	Design: non-RCT
BRICK1962	Outcomes: not relevant
BUCKLEY2007	Population: bipolar disorder
BURKE2003	Method: drop out > 50% in treatment group
BURNETTE2003	Design: no comparison group
BURNETTE2004	Design: no comparison group
BURNETTE2004A	Design: no comparison group
BURNETTE2005	Design: non-RCT
CAHILL2003	Population: Not elevated levels of anger
CANN2003	Design: non-RCT
CANN2006	Design: non-RCT
CHEREK2002	Design: not a clinical trial
COOPER2006	Intervention/comparison: not relevant
CORTONI2006	Design: non-RCT
CRAFT1987	Population: learning disability (<70)
DAVIS1976	Design: non-RCT
DEMARET1991	Method: looks at implementation but not the effects of implementation
DOWDEN1999	Data: no. of non-completers unclear so cannot do ITT analysis
FALSHAW2003	Design: non-RCT
FERGUSON1993	Quality: no information on comparison group
FINN1998	Data: none reported
FLECK2001	Data: none on post-intervention
FOSTER1989	Population: frontal lobe dysfunction; Design: non-RCT
FRIENDSHIP2002	Design: non-RCT
FRIENDSHIP2003A	Population = sex offenders
GERRA2006	Design: non-RCT
HAGILASSIS2005	Population: has significant physical impairment
HALL2004	Design: non-RCT

HARENKO1992	Population: Alzheimer's disease
HEDDERMAN1996	Design: non-RCT; Comparison: no attempt to match for risk
HENNING1996	Design: non-RCT
HOLLIN1986	Method: N is equal or less than 10 in group
HOLLIS2007	Comparison: no useable group
HOMANTB1976	Comparison: not relevant
HUGHEY1996	Data: not extractable
JOHNSON2001	Intervention: not relevant
KOWNACKI1995	Method: number of participants in intervention and/or control = 10 or less
LAMBIE2003	Population: not all offenders
LARSON1989	Method: N<10
LION1979	Data: none reported
LITTLE1993	Design: non-RCT
MANN2004	Comparison: not untreated
MARQUES2005	Population: sex offenders
MARQUIS1996	Data: not reported for intervention/comparison
MARTIN1995A	Method: number of participants in intervention and/or control = 10 or less
MARTIN1995BC	Method: number of participants in intervention and/or control = 10 or less
MATTES1990	Data: reported for both randomised and non-randomised patients
MAYFIELD2008	Intervention: unclear; Population: unclear (may be SMI).
MONNELLY2003	Data: not extractable
MONTGOMERY	Quality: no information on comparison group
MOTUIK1996	Method: number of participants in intervention and/or control = 10 or less
PALAMARA1986	Design: non-RCT
PELLISSIER2001	Outcome: data reported as estimates and no details are given on how they were derived.
PHIPPS2003	Comparison: none
POLASCHEK2005	Data: non-RCT
PORPORINO1991	Design: non-RCT
PORPORINO2002	Design: non-RCT
PUGH1993	Outcomes: not relevant; Data: not extractable
RATEY1992	Population: includes schizophrenia
RAYNOR1995	Design: non-RCT
REIST2003	Design: non-RCT
ROHDE2004	Data: data not relevant
SCHLICHTER1981	Data: not relevant
SHEARD1971	Data: missing
SOHANPAL2007	Population: learning disability (<70)
SONG1994	Data: only estimated not observed
SORGI1992	Population: chronic psychotics; outcomes: not relevant
STANFORD2001	Data: does not report pre-crossover data
STERMAC1986	Data: not extractable

TENNANT1998	Comparison group: none
VOLAVKA1990	Population: includes schizophrenia
WALTERS1999	Data: not extractable
WATT1998	Design: non-RCT
WHITE1985	Population: <18 y/o; learning disability ranging from moderate to predominant
WORMITH1984	Data: not extractable
ZARCONE2001	Population: mixed child and adult population; learning disability (<70)
ZISOOK1978	Population: does not have elevated ASPD construct

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Characteristics of Included Studies

Methods	Participants	Outcomes	Interventions	Notes
<p>POWELL1995</p> <p>Study Type: RCT</p> <p>Study Description: *DATA NOT EXTRACTABLE</p> <p>Type of Analysis: Completers</p> <p>Blindness: Double blind</p> <p>Duration (days): Mean 186</p> <p>Setting: USA Inpatient (21 days) & outpatient</p> <p>Notes: Details of randomisation not reported</p> <p>Info on Screening Process: 216 were recruited but info only provided on the 99 completers</p>	<p>n= 99</p> <p>Age: Mean 41</p> <p>Sex: all males</p> <p>Diagnosis: 30% Alcoholics without other Axis I disorder or ASPD by DSM-III-R</p> <p>40% Alcoholics with axis I disorder without ASPD by DSM-III-R</p> <p>30% Alcoholics with ASPD with OR without axis I disord by DSM-III-R</p> <p>Exclusions: -Presence of a medical condition contraindicating the use of tricyclic antidepressant drugs or bromocriptine. -Receiving other psychotropic medications. -Lived >150 miles from the medical centre.</p> <p>Notes: Participants were analysed according to their diagnosis.</p> <p>Sub-gp analysis for ASPD</p> <p>Baseline: No significant differences were found between medication groups on any of the demographic, alcohol, or psychiatric variables.</p>	<p>Data Used</p> <p>Problem Behaviour CL (from PDI-R)</p> <p>Symptom CL-90 (general severity index)</p> <p>Symptom CL-90 (anxiety)</p> <p>Symptom CL-90 (depression)</p> <p>Beck Anxiety Inventory</p> <p>Beck Depression Inventory</p> <p>Global Assessment Scale</p> <p>Severity of Alcohol Dependence Questionnaire</p> <p>Clinical Rating of Drinking</p> <p>Patient Rating of Drinking</p> <p>Alcohol Severity Scale</p> <p>Notes: TAKEN AT: Posttreatment & follow-up (6 months). At wks 2, 4, 6 and months 2, 3, 4 & 5 foollow vists took place where: blood samples, pill counts, medication side effects, & other medical info obtained.</p> <p>DROP OUTS: 54% of original sample of 216.</p>	<p>Group 1 N= 34</p> <p>Bromocriptine (dopamine receptor agonist) - The first 21 days were inpatients, hospitalisation: educational & remotivational treatment program. The rest of the treatment was outpatients. 2.5mg x 3 p/day. Dosage increased to 5mg from months 4-6.</p> <p>Group 2 N= 34</p> <p>Nortriptyline (tricyclic antidepressant) - The first 21 days were inpatients, hospitalisation: educational & remotivational treatment program. Then outpatients. 25-75mg at bedtime. Blood levels obtained monthly: dosages were adjusted to therapeutic levels (50-150mg/ml plasma).</p> <p>Group 3 N= 31</p> <p>Placebo</p>	<p>Funding: supported by a grant from the National Institute of Alcohol Abuse and Alcoholism.</p>
<p>Results from this paper:</p> <p>1.1 Well covered</p> <p>1.2 Not reported</p> <p>1.3 Not reported</p> <p>1.4 Well covered</p> <p>1.5 Well covered</p> <p>1.6 Adequately addressed</p> <p>1.7 Well covered</p> <p>1.8 54% of original sample of 216</p> <p>1.9 Poorly addressed</p> <p>1.10 Not applicable</p> <p>2.1 +</p> <p>Secondary Reference: Penick et al. (1996) reanalysed the data to explore why the ASPD gp's drinking outcomes improved when medicated with nortriptyline. Discovered that it was a sub-gp of individuals with ASPD and a current mood/anxiety disorder that improved significantly. Whereas ASPD alone participants did not improve.</p>				

References of Included Studies

POWELL1995 (Published Data Only)

Powell, B. J., Campbell, J. L., Landon, J. F., Liskow, B. I., Thomas, M., Nickel, E. J., Dale, T. M., Penick, E. C., Samuelson, S. D., & Lacoursiere, R. B. (1995). A double-blind, placebo-controlled study of nortriptyline and bromocriptine in male alcoholics subtyped by comorbid psychiatric disorders. *Alcoholism: Clinical and Experimental Research*, 19, 462-468.

Characteristics of Included Studies

Methods	Participants	Outcomes	Interventions	Notes
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Comparisons Included in this Clinical Question

TC versus control
NIELSEN1996
SACKS2004
WEXLER2004

Characteristics of Included Studies

Methods	Participants	Outcomes	Interventions	Notes
NIELSEN1996				
Study Type: RCT Type of Analysis: Did not included LTF Blindness: Open Duration (days): Mean 180 Followup: 12 months Setting: US Institution (Prison)	n= 689 Age: Sex: 544 males 144 females Diagnosis: 92% Substance Abuse Exclusions: - not in prison or eligible for release - no history of drug use	Data Used incarceration	Group 1 N= 248 Therapeutic Communities - CREST 1 month orientation; 2 months treatment (individual and group counselling); 3 months work release. Continual group meetings. Group 2 N= 441 Control - Standard care with outpatient conventional work release programme	
Results from this paper: Study Quality: +				
SACKS2004				
Study Type: RCT Type of Analysis: ITT Blindness: No mention Duration (days): Setting: US Institution (Prison) Notes: Details on randomisation not reported. Info on Screening Process: 236 male inmates randomly assigned to modified TC or mental health treatment; 51 crossover cases excluded from analysis.	n= 139 Age: Mean 34 Sex: Diagnosis: 100% Substance Abuse by DSM-III-R 37% ASPD Exclusions: - Not an inmate with a dual diagnosis - Inmates who presented a clear danger to themselves or others Notes: non-alcohol substance misuse	Data Used incarceration	Group 1 N= 92 Therapeutic Communities - psycho-education, cognitive behavioural, medication. 12-months, 5 days per week, 4-5 hours per day. Plus aftercare: 3-7 days per week, 305 hours per day over 6-months. Bi-weekly supervision. Group 2 N= 93 Control - Standard care: medication, individual therapy and counselling, substance misuse services.	
Results from this paper: Study Quality: +				
WEXLER2004				
Study Type: RCT Type of Analysis: ITT Blindness: No mention Duration (days): Followup: 12 months Setting: US Institution (Prison) Info on Screening Process: 715 male inmate volunteers	n= 715 Age: Mean 31 Range 30-31 Sex: all males Diagnosis: 95% Substance Abuse by DSM-III-R 52% ASPD by DSM-III-R Exclusions: Inmates convicted of arson or sexual crimes involving minors	Data Used Incarceration, any (12-months)	Group 1 N= 425 Therapeutic Communities - 3-phases: 1. orientation, planning, treatment goals; 2. counselling; 3. strengthening plan for return to community. Plus after-care + provided services for wives and children. Group 2 N= 290 Control - Waitlist	

Characteristics of Excluded Studies

Reference ID	Reason for Exclusion
GRANT2003	Design: non-RCT
LAMB1974	Design: non-RCT (participants given choice after randomisation)
MARCUS2001	Design: non-RCT; comparison: not relevant
MARSHALL1997	Design: non-RCT
MARTIN1999	Design: non-RCT
ORTMAN2000	Design: non-RCT
RICE1992	Design: non-RCT; Participants: includes schizophrenia

References of Included Studies**NIELSEN1996** (Published Data Only)

Nielsen, A.L., Scarpitti, F.R. & Inciardi, J.A. (1996) Integrating the therapeutic community and work release for drug-involved offenders: the CREST program. *Journal of Substance Abuse Treatment*, 13, 349-358.

SACKS2004 (Published Data Only)

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WEXLER2004 (Published Data Only)

Wexler, H., DeLeon, G., Thomas, G., et al. (1999) The Amity prison TC evaluation: reincarceration outcomes. *Criminal Justice and Behaviour*, 26, 147-167.

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Lamb, R.H. & Goentzel, V. (1974) Elsworth house: a community alternative to jail. *American Journal of Psychiatry*, 131, 64-68.

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