Table 4.5 *Externalizing symptoms, universal programs.*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Connell et al 2007 [10] USA	*Design* RCT, randomised at individual level *Setting* Three middle schools in an ethnically diverse metropolitan district in the USA *Population* Sixth graders 90% consented n=998 (526 boys) *Follow-up time* Annually through age 18 (>6 years)	*Intervention* ATP multi level program, universal part (also see table 4.7 for description of the indicated part of the program), n=500 *Intensity* Six in-class lessons on life skills *Drop out rate* 20% by 6 years follow-up	*Control* no intervention (no information on controls, eg contagion), n=498 *Drop out rate* 20% by 6 years follow-up	*Self report on substance use and antisocial behaviour* No effect at any of the annual measurements *Arrest records* No effect during the follow-up period	Moderate Entire sample included in analysis (Complier Average Causal Effect, CACE)	*Competence of staff* Professionals from the Family Resource Center, established in the participating schools *Fidelity* Satisfactory *Attendance rate* Not reported *Gender analysis* No gender effect on universal level

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Table 4.5 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Grossman et al 1997 [4] USA	*Design* RCT. Pairs matched for district, reduced lunch cost and proportion minority students *Setting* 2 second and 2 third grade classrooms each from 12 elementary schools (total 49 classrooms) in 4 districts in State of Washington *Population* n=1 100 n=790 had parental consent (54% boys, 80% Caucasian) Mean age: 8.2 years All children participated in the curriculum *Follow-up time* 2 weeks and 6 months post intervention	*Intervention* Second Step: A Violence Prevention Curriculum, n=314 *Intensity* 30 lessons, 35 minutes once or twice a week. Empathy training, impulse control, anger management. Discussion, role plays, conceptual activities *Drop out rate* 8%	*Control* No intervention, n=372 *Drop out rate* 21%	*TRF Aggression and delinquency subscale)* No significant differences between groups *CBCL Aggression and delinquency scales* No significant differences between groups	Moderate	*Competence of staff* Teacher training 2 days *Fidelity* Twice during the intervention period, two investigators monitored and rated the quality of the implementation *Attendance rate* Not reported *Gender analysis* No gender analysis

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Table 4.5 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Ialongo et al 1999 [6] Ialongo et al 2001 [5] USA	*Design* RCT, randomised at classroom level, teachers at 5 year follow-up were blind to condition *Setting* 9 schools (27 classrooms) from five large urban areas in Baltimore. SES varied from very poor to moderate *Population* n=653 first grade students (51% male, 87% African-American, >60% entitled to free lunch) Mean age: 6.2 years *Follow-up time* 1 year and 5 year	*Intervention* Three terms Baltimore Project I1: Classroom intervention comprising GBG and learning support, n=not reported I2: FSP training for teachers and parents in communication skills with weekly home-school learning and communication activities 9 workshops for parents: Parental parenting practices *Drop out rate (both groups)* At 1 year follow-up: 11.5% At 5 years follow-up: 22%	*Control* Standard curriculum, n=not reported	At one year follow-up (second grade): *Teacher rating (TOCA-R)* (Factors concentration, accepting authority, social participation) I1 vs C Boys: ES 0.54 Girls: ES 0.73 Greater benefit for children with moderate problems at baseline I2 vs C Boys: ES 0.22 Girls: ES 0.34 For boys, benefit was larger for those with mild–moderate problems at baseline *Parent rating (POCA-R)* No significant effects At 5 year follow-up (sixth grade) *Teacher rating (TRCB CF)* I1 vs C: ES 0.39 I2 vs C: ES 0.29 No gender effects *Lifetime diagnosis of conduct disorder (DISC-IV)* Trend for lower probability of lifetime diagnosis for both groups compared to C	Moderate	*Competence of staff* Parent training: teachers and social workers/psychologists. Teachers underwent 60 hours training and were certified *Program integrity* Three-day seminars for teachers and videotape training. Monitoring of fidelity implementation *Program attendance* Parents attended on average 4.02 of the seven parenting sessions, 13% failed to attend any of the workshops. *Gender analysis* Separate analysis boys/girls

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Table 4.5 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Sawyer et al 1997 [3] Australia	*Design* CCT, schools matched for SES, not ITT *Setting* 2 primary schools 94% of mothers were married Evenly distributed SES from low to high/middle occupational class *Population* Mean age: 8.2 years *Follow-up time* Post intervention + 1 year post intervention	*Intervention* Rochester Social Problem Solving Training Program, n=102 (60% boys) *Intensity* Program taught to all children during regular school hours over a 20-week period, 34 lessons *Drop out rate* 30%	*Control* Standard curriculum, n=86 (54% boys) *Drop out rate* 29%	*Inventory of Problematic Social Situations for Children (IPSIC), CBCL and TRF* No significant differences between groups	Moderate	*Competence of staff* Teachers trained in the program *Program integrity* Fidelity was ensured by regular meetings with investigators. Teachers were observed three randomly selected occasions

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Table 4.5 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Vuijk et al 2007 [9] van Lier et al 2005 [8] The Netherlands	RCT *Setting* 13 elementary schools in Rotterdam and Amsterdam *Population* 90% of eligible children in first class n=666 consented (51% boys) Mean age: 6.9 years 69% Caucasians 36% from low SES families (representative of Dutch population) 10% constituted a high risk group (92% males) *Follow-up* 1 year and 4 years after end of intervention	*Intervention* GBG, n=371 *Intensity* Two years, three times weekly *Drop out rate* 25% for the full sample after 1 year 34% for the full sample after 4 years	*Control* No intervention, n=295 *Drop out rate* Not reported separately	*YSR at 1 year follow-up* Total sample Anxious/depressed: Cohen's d=0.20 No effect on YSR aggressive behavior High risk group Aggressive: Cohen's d=0.68 *Antisocial behaviour at 1 year follow-up* High risk group Cohen's d=1.2 Moderate and low risk groups No effect of intervention	Moderate No information on randomisation procedure, no blinding, completer analysis Drop out was related to higher levels of antisocial behaviour Loss to follow-up related to ethnicity and low SES	*Competence of staff* Teachers, who received three afternoons of training *Fidelity* Teachers were coached by advisors 10 hours annually. The program was modified to suit Dutch culture *Attendance rate* Part of regular curriculum *Gender analysis* Yes, effects not dependent on gender for YSR. Not performed on antisocial behaviour since virtually, all were boys

ATP = Adolescent Transition Program; CBCL = Child Behaviour Check List; C = Control; DISC-IV = Diagnostic Interview Schedule for Children; ES = Effect size; FSP = Family–school-partnership; GBG = Good Behavior Game; n = Number of patients; I = Intervention; ITT = Intention-to-treat; RCT = Randomised controlled trial; SES = Socio economic status; TOCA-R = Teacher Observation of Classroom Adaptation-revised; TRCB CF = Teacher Rating of Conduct Problems Checklist form; TRF = Teacher Report Form; YSR = Youth Self Report

Table 4.6 *Effects of selective programs to prevent mental problems in children.*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Bodenmann et al 2008 [26] Switzerland	*Design* RCT *Setting* Switzerland Recruitment via advertisements in newspapers *Population* n=150 families with children aged 2–12 years (mean 6.6 years, SD=2.83) Family income: 78% of families had between 40 000 and 80 000 USD Educational level: ≥50% of mothers had high school or university exam. Marital quality lower in the CCET-group *Follow-up* One year	*Intervention* Triple P, level 4 group version n=50 couples Baseline ECBI (mothers): 117.9 (23.4) *Intensity* 15 hours (12 hours workshop, 2 hours telephone contact, 1 hour autodidactic reading) *Drop out rate (mothers)* 4%	*Control* C1: CCET, marital distress prevention program, one weekend workshop and homework n=50 couples Baseline ECBI (mothers): 123.8 (23.8) C2: No intervention, n=50 couples Baseline ECBI (mothers): 118.4 (25.4) *Drop out rate (mothers)* C1: 8% C2: 20%	*ECBI (mothers) at 1 year follow-up* Triple P: 99.9 (28.0) No intervention: 112.4 (28.3) p<0.05 CCET: 107.5 (25.9) Cohen's d: 0.41 for comparison Triple P and no intervention 0.28 for comparison Triple P and CCET	Moderate	*Competence of staff* Accredited practitioners for both Triple P and CCET *Attendance rate* Not reported *Fidelity* Regular supervision and session checklists *Gender analysis* Gender analysis was performed on the parents: Fathers did not see any difference in child behaviour and their parental practice hardly changed

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Table 4.6 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Brotman et al 2008 [24] Brotman et al 2005 [23] USA	*Design* RCT, blinded observers, ITT *Setting* Families with youth in Family Court n=1 228 families (577 contacted) *Population* Child: Sibling of criminal offender in designated area (53% girls, mean IQ=83) Age: 33–63 months Family characteristics: 65% Afro American and 27% Hispanic. 55% had high school education. English speaking. High maternal psychopathology *Exclusion criteria* Caregivers with ongoing substance abuse or psychotic disorders. Child with pervasive developmental disorder or severe mental retardation *Follow-up* 8, 16 and 24 months after baseline measurement	*Intervention* Incredible Years adapted to limited parental education, parental depression, stressful life events and social adversity n=47 *Intensity* 6–8 months comprising: Parent training: 22 sessions. Child training: 22 sessions Home visits: 10 Booster sessions, 15 hours, 4 to 6 months after the end of the intervention *Drop out rate for total sample (C+I)* 13% at 8 months 23% at 16 and 24 months	*Intervention* None n=45 *Drop out rate* For total sample (see Intervention)	*Blinded home observation* *DPICS-R* C-group: 0 months: 0.19 6 months: 0.87 16 months: 0.78 24 months: 1.15 I-group: 0 months: 0.77 6 months: 0.66 16 months: 0.17 24 months: 0.16 SE 0.89 *Parental report* *NYPR-P* IC-group: 0 months: 0.17 6 months: 0.15 16 months: 0.14 24 months: 0.07 I-group: 0 months: 0.21 6 months: 0.21 16 months: 0.15 24 months: 0.11 ns	Moderate Remarkable pattern for observation data despite blinded observers	*Competence of staff* Psychologists or doctoral candidates, most of them trained by the program developers *Attendance rate* Mean: 12 of 22 (55%) 73% in at least one booster group *Fidelity* Standardised manuals and materials, comprehensive training, weekly monitoring and supervision of implementation. But, the components of this modified program were poorly described and the deviation from the manual is not reported Some economic compensation for participation in group sessions *Gender analysis* No gender analysis No analysis of sociodemographic differences between I and C groups

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Table 4.6 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
DeGarmo et al 2004 [95] USA Original sample Forgatch et al 1999 [96] Martinez et al 2001 [44] Patterson et al 2004 [97] DeGarmo et al 2005 [29]	*Design* RCT (unbalanced 64%/36%) *Setting* Medium sized city in Pacific North West, USA. Majority of family lower middle class SES *Inclusion criteria* Mother separated within prior to 3–24 months, resided with biological son in grades 1–3 *Exclusion criteria* Not cohabit with new partner *Follow-up time* 6, 12, 18 and 30 months	*Intervention* PMT applied on divorced single mothers *Population* n=153 *Intensity* Original version included 14–16 weekly topics, but two were combined with others (30% were exposed to 16-weeks version and 69% to 14-weeks version) *Drop out rate* 13% at 30 months	*Control* No intervention *Population* n=85 *Drop out rate* 11% at 30 months	*Externalising construct (based on CBCL-TRF, noncompliance computed from IPC-codes & aggression partly from IPC-codes)* SMD at 12 months –0.20 (95% CI –0.49 to 0.09) SMD at 18 months –0.13 (95% CI –0.42 to 0.16) SMD at 30 months –0.23 (95% CI –0.51 to 0.05)	Moderate	*Competence of staff* Trained leaders at the Oregon Social Learning Center *Fidelity* Standard materials, close monitoring and recurrent ratings by group leaders and co-leaders indicated adequate intervention integrity *Attendance rate* Mean=8.5 sessions, SD=5.7 *Gender analysis* Not reported

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Table 4.6 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Gross et al 2009 [22] USA	*Design* RCT, cluster randomsed at day care center level. Matched on size, ethnical composition, percent single-parent-households and median income, ITT analysis *Setting* Seven day care centers in Chicago with >60 children >90% of families eligible for child care subsidies *Population* 34% of the eligible population accepted to participate *Inclusion criteria* Child age 2–4 years. Only one child per parent. English speaking *Follow-up time* ”Post test”, 6 months and 1 year post intervention	*Intervention* CPP, ie Incredible Years modified to be relevant across racial/ethnic groups, n=156 *Intensity* 11 weekly sessions with parents *Drop out rate* n=13%	*Control* No intervention, n=136 *Drop out rate* 13%	*Parent report (ECBI)* No intervention effects when doses were not taken into account Scores on ECBI intensity scale but not on ECBI problem scale ($p<0.05$) were dependent on dose. Significant effects were seen at 6 months and maintained at 12 months for the group where parents attended >5 sessions *Aversive child behaviour during play (DPICS)* Significantly fewer aversive behaviours at 6 months and maintained at 12 months Effects were larger for the group where parents attended >5 sessions	Moderate Inter rater reliability for child observation was 0.73 Results for the high dose group may have been the results from regression to the mean	*Competence of staff* Graduate degree and trained by the study investigators *Fidelity* Weekly protocol check lists and random observations of parent groups by the investigators *Attendance rate* Mean: 4.3 sessions (SD=4.2) 1/3 of parents did not attend any sessions. 45.2% attended >5 sessions (“high dose”) Children in the high dose group had more baseline behaviour problems scores than children in the low dose group *Gender analysis* Not reported

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Table 4.6 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Gross et al 2003 [21] USA	*Design* Effectiveness study. Cluster randomised, matched by ethnicity, size, income, single parenthood. Randomisation not described in detail *Setting* Day care centers in a socially disadvantaged area in Chicago. 97% minority population. >90% of children had subsidized day care *Population* Age: 2–3 years *Follow-up time* "Post test", 6 and 12 months later	*Intervention* Incredible Years (BASIC) I1: Parent and teacher training, n=78 I2: Parent training, n=55 I3: Teacher training, n=75 *Intensity* 12 weekly sessions with parents *Drop out rate* 30% of parents in I1 and 9% in I2. 31% of teachers dropped out over all	*Control* No intervention, n=59 *Drop out rate* 9% of parents	*Parental report (ECBI)* No difference between groups *Teacher reported classroom behaviors (KPC, proportion that moved from high risk to low risk status)* From baseline to "post test": Parent training: 44% Teacher training: 100% (based on two children) Control: 18% From "post test" to 1 year follow-up Parent training: 66.7% Teacher training: 66.7% Control: 78.6% p<0.01 Note: none in the combined group improved whereas 14.3% got worse (p<0.05) *DPICS-R (blinded observer, free play situation)* No significant effects	Moderate Child classroom behaviour problem scores (KPC) were skewed. Therefore a cut off of 40 was used to create a high risk and a low risk group	*Competence of staff* Teachers. Note: 67% of teachers in the combined group were replaced but they were not trained *Fidelity* One day workshop and ongoing supervision including weekly protocol *Attendance rate* Not reported *Gender analysis* Not reported Selective dropout of parents with less coercive and harsh parenting strategies in parent groups

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Table 4.6 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Heinrichs et al 2006 [27] Germany	*Design* RCT, cluster randomised, matched for SES and number of children in the day care centers *Setting* Recruitment at 17 public day care centers in Braunschweig Recruitment rate: 31% *Population* n=280 but only 219 families with two parents were evaluated (53.9% boys) Mean age of child: 4,5 years (SD=0.98) Sample of middle and upper SES (38% of families earned >3 000 euro/month) *Exclusion criteria* Siblings to the child *Follow-up time* One year	*Intervention* Triple P, level 4, n=129 *Intensity* Four sessions, opportunity for telephone contacts in between (15–20 minutes) *Drop out rate* Not explicitly stated but results were based on 128 mothers	*Control* No intervention, n=90 *Drop out rate* Not explicitly stated but results were based on 88 mothers	*CBCL 1 1/2–5 (German translation)* Internalizing problems (mother) Cohen's d: 0.28 Externalizing problems (mother) Cohen's d: 0.32 No changes in paternal assessments vs baseline	Moderate	*Competence of staff* Licensed trainers *Fidelity* The fidelity to the manual was >90% at all group sessions *Attendance rate* High for mothers. 88.4% of the mothers and 6.3% of the fathers participated in at least three workshops 68.8% of the fathers did not attend any of the sessions *Gender analysis* Not reported

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Table 4.6 *continued*

Author Year Reference Country	Study design Setting Population Inclusion criteria Exclusion criteria Follow-up time	Intervention Population Drop out rate	Control Population Drop out rate	Outcome	Study quality Comments	Competence of staff Fidelity Attendance rate Gender analysis
Kratochwill et al 2004 [38] Fisher et al 2003 [98] USA	*Design* Matched pairs randomly assigned to I or C group, blinded teachers and observers *Setting* Early elementary schools in 3 American Indian nations, rural Northern Wisconsin *Population* Children at risk for school problems and future drug abuse in families of American Indian descent *Follow-up* 9–12 months	*Intervention* FAST [99], n=50 *Intensity* 8–10 week curriculum, 40% mandatory content and 60% modified to suit group and context, each session lasting 2.5 hours Following graduation families participate in support meetings for two years, with gradually decreasing staff assistance *Drop out rate* 20% total for intervention and control	*Control* Curriculum as usual, n=50 *Drop out rate* See intervention group	*Parent rating (CBCL)* Intervention group less withdrawn, effect size 1.92 *Teacher rating (TR)* ns tendency favoring intervention group	Moderate Moderate relevance as culturally adapted manual based program	*Competence of staff* Certified FAST trainers *Attendance rate* 50–100% for each cycle (attendance unrelated to outcome) *Fidelity* Training and supervision part of program, certified observers attended 3/8 sessions in each group *Gender analysis* Not reported

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Table 4.6 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Reid et al 1999 [35] Eddy et al 2000 [34] Stoolmiller et al 2000 [36] Eddy et al 2003 [37] USA	*Design* RCT, randomisation at school level. Blinded observers *Setting* Public elementary schools in the Eugene-Springfield area (population: 200 000, Oregon, USA) *Population* 12 schools, 32 classrooms with first and fifth graders, 671 students consented (88% of eligible student), 51% female *Inclusion criteria* Schools in catchment areas with increased risk for youth delinquency, defined as above median (ie >9%) juvenile detainment. (After refusals one school just below the median was also included) *Follow-up time* Approximately 1 year and 3 years post intervention	*Intervention* LIFT, 3-months program, n=382 students in six schools *Intensity* Classroom skills training, 2 one hour sessions weekly for 10 weeks. Playground implementation of GBG, individual and class rewards. Parent group meetings for 6 weeks. Family involvement stressed *Drop out rate* <10% and mostly due to family mobility	*Control* n=289 in 6 schools *Drop out rate* See intervention	*Observer rating of physical aggression, IPC* Immediate effect size 0.36 for students scoring +1 SD at pretest; effect size 0.57 for students scoring +2 SD at pretest. Measurement not used at 3 years follow-up *Teacher rating of social competence and school adjustment at 1 year follow-up (Walker-McConell Scale)* Effect size 0.17 At 3 years follow-up: Fifth grade cohort 1.49 x more likely to patterned alcohol use; 1.55 x more likely to have been arrested; first graders claimed to show fewer symptoms of impulsivity, inattention and hyperactivity, compared to controls, but data is not clearly presented	Moderate Inconsistencies in reports	*Competence of staff* LIFT instructors were members of research center staff. (However, program intended to be taught by regular school personnel or trained and experienced laypersons.) *Attendance rate* 58% average attendance on any given parent session. 23% received information in the mail. 13% accepted a home visit. 5% refused participation *Fidelity* Assessment by routine checklists + independent observers in 15% of school sessions and group meetings; 90% of intended content was covered *Gender analysis* Not reported Effects on IPC interacted with pre-intervention scores

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Table 4.6 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Rotheram-Borus et al 2004 [41] USA	*Design* RCT, randomisation by computer, ITT *Setting* New York City, Division of AIDS Services, mostly Latino and African American families *Population* n=429 parents with AIDS and their adolescents. The final sample included 317 adolescents (loss due to informed consent and parental deaths) *Inclusion criteria* Financially needy persons with AIDS Age of parents: 25–70 years Age of child: 11–18 years *Exclusion criteria* Parent institutionalized at recruitment *Follow-up time* 1, 2 and 4 years post intervention (see Table 4.8 for long term follow-up at 6 years post intervention)	*Intervention* Coping skill intervention, based on social learning and behavioural principles, n=156 adolescents (126 parents) *Intensity* Module 1: 8 sessions >4 weeks for parents only. Module 2: 16 sessions >8 weeks for parents + adolescents. Module 3: Delivered to adolescents only if the parent had died *Retention of adolescents at 1, 2, 3 and 4 years follow-up* 86, 95, 92 and 90%, respectively	*Control* Standard care, within the same agency, n=161 adolescents *Retention of adolescents at 1, 2, 3 and 4 years follow-up* 82, 94, 92 and 91%, respectively	*Brief Symptom Inventory* 15 months: SMD –0.20 (95% CI 0.03 to –0.43) 24, 36, 48 months: ns but positive trend	Moderate Some inconsistencies in number of participants and attrition between publications Standard care also positive trend; controlled for together with baseline level	*Competence of staff* Social workers and graduate students in clinical psychology, who attended a 5-day training and received ongoing supervision *Fidelity* Sessions videotaped, fidelity rated and monitored by supervisor *Attendance rate* 75% of parents that lived at completion of study attended in average 15.2 of 24 sessions (range 1–24) 71% of their children attended in average 10.3 of 16 sessions (range 2–16) *Gender analysis* Not reported

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Table 4.6 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Sandler et al 2003 [33] USA	RCT *Setting* Phoenix metropolitan area *Population* 44% of 432 eligible families consented 67% non Hispanic Caucasians Mean age of children: 11.4 years Median income: 30 000–35 000 USD per year *Inclusion criteria* Death of a parent 4–30 months earlier. Child age 8–16 years *Exclusion criteria* Use of mental health service or bereavement service. Suicidal intent or current diagnosis of major depression in child or caregiver. Child diagnosed with ODD, CD or ADHD *Follow-up* 11 months after end of intervention	*Intervention* FBP, n=90 families with 135 children *Intensity* 12 sessions, 2 hours each for caregivers and children separately. Two individual family meetings to review their use of program skills *Components* Techniques that had been used in program for children of divorce [32] *Drop out rate* 13%	*Control condition* Self studies (one booklet per month during three months) n=66 families with 109 children *Drop out rate* 9%	*YSR* Girls: Cohen's d=0.28 ($p<0.05$) Boys: No significant differences *CBCL externalizing subscale* Girls: Cohen's d=0.30 ($p<0.05$) Boys: No significant effects Age of the child did not influence the results	Moderate Randomisation by computer at the level of family, ITT-analysis	*Competence of staff* 2 clinicians with master's degrees who received 40 hours of training plus 2 hours training per week during the program *Fidelity* 89%, rated by two independent raters from videotapes of five sessions *Attendance rate, FBP* Caregivers: Average 86% Children: Average 88% of sessions Self study: Caregivers: 42% had read at least half of the books 38% of adolescents and 71% of children had read at least half of the books

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Table 4.6 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Tolan et al 2009 [40] USA	*Study design* RCT *Setting* See Tolan et al [39] *Population* 50% of the intervention group of Tolan et al when the children were in fourth grade [39] *Follow-up* 12 months post intervention	*Intervention* SAFEChildren booster dose, 20 session multiple family groups with 4–6 families in each group *Population* n=95 *Drop out rate* 82% of original sample consented to participate in booster; drop out rate among booster participants was 2%	*Control* No intervention *Population* n=101 *Drop out rate* See intervention group	*POCA-R* Aggression: Cohen's d= –0.19 Impulsivity: Cohen's d= –0.29 *Additional booster effect on children from high risk families* Aggression: Cohen's d=–0.29	Moderate	*Competence of staff* See Tolan 2004 [39] *Fidelity* No information *Attendance rate* 80% attended >50% of sessions, 69% attended 90–100% of sessions *Gender analysis* Not reported

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Table 4.6 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Tolan et al 2004 [39] USA	*Design* Efficacy, RCT (unbalanced 55%/45%), cluster randomised per classroom *Setting* Poor urban high risk community in USA (inner city Chicago) with >40% of households below poverty level, crime rate > Chicago average *Population* 84% of eligible families accepted to participate 42.5% African-American 57.5% Latino 44% of the primary caregivers did not graduate from high school 85% had income <30 000 USD/year *Inclusion criteria* Families with first grade child *Follow-up time* 6 months	*Intervention* SAFEChildren *Population* n=217 *Intensity* Family component: 22 weeks sessions after school Academic tutoring, twice weekly 30 minutes during school hours for 22 weeks *Drop out rate* 3%	*Control* No intervention *Population* n=196 (aggression) n=197 and (hyper activity) *Drop out rate* 7%	*TOCA-R combined with POCA-R at 6 months* Aggression: SMD 0.18 (95% CI −0.02 to 0.38) Hyper activity: SMD 0.07 (95% CI −0.13 to 0.26) Larger effects in the 25% of children at highest risk	Moderate Randomisation not described, ITT-analysis	*Competence of staff* Not specified; trial initiated and run by university-based research group *Fidelity* No information *Attendance rate* 78% completed the program, 82% attended >50% of the sessions *Gender analysis* Not reported

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Table 4.6 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Webster-Stratton et al 2001 [20] USA	*Design* Quasi-experimental, random (by lottery) classroom 2:1 *Setting* 14 schools from two large urban Head start districts (>80% on welfare, high proportion minorities, single parents and parental substance abuse) *Population* 60% of eligible families consented Average family income: 11 600 USD 52% single mothers 63% from minorities Age of children: 3–7 years, mean 56 months *Follow-up* 1 year	*Intervention* Incredible Years in addition to Head start program, n=225 *Intensity* Parents: 12 week group sessions + 4 booster sessions 1 year later Kindergarten teachers: 6 days, once a month *Drop out rate* 15% dropped out during the intervention, 26% of those remaining were lost to follow-up at 1 year Total drop out rate: 38% at 1 year follow-up	*Control* Head start program as usual, n=103 *Drop out rate* 43% at 1 year follow-up	*Child conduct problems at home* (Construct based on ECBI and CBCL externalizing). Trend for effect of intervention (p<0.07) *Number of children below "at risk cut off" (<9 problems/ 30 min)* I: 80% C: 48% p<0.008	Moderate Observer reliability rate at least 75% at two occasions Blinded observers, completer analysis only Attrition analysis shows that children at higher risk tended to remain in the study in the intervention group, but not in the control group. This may lead to an underestimation of effects	*Competence of staff* Teachers and family workers trained by the investigators *Fidelity* One session for each group leader was monitored by project leader *Attendance rate* Low Mother attended mean 5.73 and fathers 3.34 sessions of first 12 sessions. 39% of mothers and 27% of fathers attended booster sessions *Gender analysis* Not reported *Incentive* Gift of 50 dollar for each assessment

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Table 4.6 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Webster-Stratton 1998 [19] USA	*Design* Quasi-experimental, random (by lottery) classroom 2:1. Same protocol as for Webster-Stratton 2001 [20] *Setting* See Webster-Stratton 2001 [20] *Population* Families socially disadvantaged (>80% on social welfare, >30% minorities, >50% single parents and 20–30% maternal substance use) *Follow-up* 12–18 months	*Intervention* Incredible Years (Partners version) n addition to Head Start program, n=345 (294 completed post assessment) *Intensity* Parents: 8 group sessions Teachers: 2 days work shop Same videotapes discussed in parent and teacher groups *Drop out rate* 21% dropped out shortly after randomisation because they left the Head start program. 8% dropped out during the intervention. 29% of those remaining were lost to follow-up. Total drop out from randomisation 45%	*Control:* Head start as usual, n=167 (130 completed post-assessment) *Drop out rate* 22% dropped out shortly after randomisation because they left the Head start program. 18% of those remaining were lost to follow-up. Total drop out from randomisation 36%	*CBCL Externalizing* Intervention Pretest: 55.29 1 year: 53.50 Control Pretest: 55.10 12–18 months: 53.40 ns ECBI Intervention Pretest: 10.04 12–18 months 7.99 Control Pretest: 9.56 12–18 months 8.54 ns *Blinded home observations* *DPICS-R* Intervention Pretest: 14.25 12–18 months: 9.84 Control Pretest: 9.66 12–18 months: 7.24 ANOVA F 3.67, p<0.05	Moderate Attrition analysis: Drop out had similar background characteristics and ECBI scores at pre and ”post test” as those that remained in the study	*Competence of staff* Not reported *Fidelity* High. Monitored by random videotapes of group sessions. 100% discussed all videotape vignettes *Attendance rate* Mother attended mean 5.91 and fathers 5.32 sessions *Gender analysis* Not reported Unbalanced control/intervention population probably explains some of the described effect (intervention group has more child behaviour problems at baseline)

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Table 4.6 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Wolchik et al 2000 [32] USA	*Design* RCT, unbalanced 68%/32% *Setting* Maricopa County, Phoenix, Arizona metropolitan area n=622 eligible, 240 randomised, 49% female *Inclusion criteria* Divorce decree granted within previous 2 years; Mothers primary residential parent ≥1 child 9–12 years spent ≥50% of the week with mother. Neither mother nor child in treatment for psychological problems. No plan for mothers to remarry during trial Sufficient in English language. Child not in special education program for mentally or learning disabled. *Exclusion criteria* CDI >17(child) endorsed an item about suicidal ideation, or above the 97th percentile on externalizing subscale on CBCL *Follow-up time* 6 months 6 years (see table 4.8)	*Intervention* New Beginnings: clinical methods based on social learning and cognitive behavioral principles for behavioral change I1: Mother plus child program, n=81 I2: Mother only program, n=83 *Drop out rate* 9%	*Control* Quasi placebo (self studies) *Population* n=76 *Drop out rate* 11%	*Externalizing problems* Mother-child reports showed a significant effect of the program Teacher data indicated a nonsignificant program effect on acting out behaviours at ”post test” but program effects had increased at follow-up Internalizing problems Neither mother-child nor teacher reports showed intervention effects	Moderate ITT analysis	*Competence of staff* Clinicians with master’s degrees, who received 30 hours training and continuos supervision *Fidelity* High (1) leaders knowledge of intervention content (2) completion of program segments *Attendance rate* Mothers 77% of sessions Children 83% of sessions *Homework completion* Mothers 54% Mothers and child program 55% *Gender analysis* Not reported

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Table 4.6 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Zubrick et al 2005 [28] Australia	*Design* CCT *Setting* Universal prevention in socially deprived areas in Western Australia. Recruitment via local media, professional referral and participant recommendation *Inclusion criteria* A child within the age range 3–4 years. The program reached about 66% of the eligible children *Follow-up time* 12 and 24 months after post assessment	*Intervention* Triple P level 4 group intervention (8 hours) n=804 families in Eastern Metropolitan Health Region. Child age: Mean 43.9 months (58.7% male). Mothers with no post school qualifications: 45.2% ECBI intensity score in clinical range: 41.5% (mean score 121.6 (27.7)) *Intensity* 8 hours *Drop out rate at 24 months* 27%	*Control* Health care and family support services as usual n=806 families in Southern Metropolitan Health Region Child age: 45.6 months (54.7% male). Mothers with no post school qualifications: 37.9% ECBI intensity score in clinical range: 21.5% (mean score 107.1 (26.5)) *Drop out rate at 24 months* 14.3%	*ECBI reported by one parent (normally the mother)* Cohen's d at 24 months follow-up: 0.47	Moderate Groups were not balanced Mixed linear modelling post-stratification performed plus sensitivity analyses addressing non-random attrition	*Competence of staff* 16 community and child health nurses, social workers, health promotion officers and psychologists who had been trained during a 3-day intensive program *Fidelity* Detailed manual, structured training, performance criteria to assess integrity of learning. Case manager for the project. Debriefing sessions *Program attendance* High 81.8% completed all four workshops. Parents received on average 7.8 hours (SD 1.9) of program exposure *Gender analysis* Not reported

ADHD = Attention-Deficit Hyperactivity Disorder; ANOVA = Analysis of variance; C = Control; CBCL-TRF = Child Behaviour Check List Teacher Report Form; CCET = Marital distress prevention program; CCT = Controlled clinical trial; CD = Conduct Disorder; CDI = Children's Depression Inventory; CI = Confidence interval; CPP = Chicago Prevention Program; DPICS-R = Dyadic Parent-Child Interaction Coding System revised; ECBI = Eyberg Child Behavior Inventory; FAST = Families and Schools Together; FBP = Family Bereavement Program; I = Intervention; IPC = Interpersonal Process Code; ITT = Intention-to-treat ; KPC = Teacher Reported Classroom Behaviours; LIFT = Linking the Interest of Families and Teachers; NYPR-P = New York Parent Rating Scale; ODD = Oppositional Defiant Disorder; POCA-R = Parent Observation of Child Adaptation - revised; RCT = Randomised controlled trial; RR = Risk ratio; SD = Standard deviation; SES = Socio economic status; SMD = Standard mean difference; TOCA-R = Teacher Observation of Classroom Adaptation-revised; TR = Teacher rating; YSR = Youth Self Report; n = Number; ns = Not significant

Table 4.7 *Effects of indicated prevention programs on mental health in children and adolescents.*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
August et al 2001 [69] USA August et al 2002 [71] USA Bernat et al 2007 [72] USA	RCT, efficacy study *Setting* 20 schools (10 intervention and 10 controls). Two regional sites located in a semi-rural, Midwestern area primarily characterized by Caucasian families of low to low-middle socioeconomic status *Population* Kindergarten children, where 95% of them were screened *Inclusion criteria* CBCL-TRF T-score >58 or ≥55 and ≥85th percentile for their school *Exclusion criteria* IQ <80. Presence of pervasive developmental disorder or severe emotional disorder that required special education placement *Observation times* 24 months 36 months 72 months (ie 12 months follow-up after termination of the program)	*Intervention* Early Risers, 5 year program *Population* n=124 (64% boys) Mean age: 6.6 years No baseline data on distal outcomes *Components* CORE (skill building and mentoring). FLEX (proactive family support based on home visitations) *Intensity* 6 week summer school. Biweekly program with parent training and child social skills training (Dinosaur school) *Drop out rate* 24 months: 18% 36 months: 19% 72 months: 41%	*Control* No intervention *Population* n=121 (74% boys) Mean age: 6.74 years No baseline data on distal outcomes *Drop out rate* 24 months: 18% 36 months: 18.8% 72 months: 35%	*Parent/Teacher construct measure based on TOCA, POCA, BASC at 24 months* No differences between groups *Aggression at 36 months* Cohen's d=0.37 *Impulsivity, 36 months* Cohen's d=0.31 Program favoured highly aggressive children *Hyperactivity, 36 months* ns *Self report at 72 months* ODD symptom count: Cohen's d=0.47 No significant differences in diagnos for ODD or CD. No significant difference in CD symptom count *Parent report at 72 months* ODD symptom count: Cohen's d=0.34 No significant differences in ODD or CD diagnosis. No significant difference in CD symptom count	Moderate No significant differences at baseline	*Staff competence* Program consultants. Compentence not reported *Fidelity* A variety of procedures employed to insure fidelity. No specific analysis reported *Attendance* Approximately 60% participated in the intensive phase. 93% participated in the booster session and 67% participated in three or more components offered during this phase *Gender analysis* No analysis reported

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Table 4.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
August et al 2003 [73] August et al 2004 [74] USA	*Study design* RCT, effectiveness study with inactive control *Setting* Economically disadvantaged urban neighbourhoods in a large Mid-western metropolitan city. Large representation of African-Americans (81%) *Population* n=327 (185 boys) *Inclusion criteria* Children with a T-score ≥55 on aggression scale on CBCL-TRF *Exclusion criteria* Children and parents with insufficient understanding of English language. Pervasive developmental disorder or serious emotional-behavioural disorder that required special education placement *Follow-up* Post intervention (24 months) 12 months post intervention	*Intervention* Early Risers, n=218 Mean age: 6.3 years I1: CORE Early Risers I2: CORE + FLEX Early Risers *Intensity* Two years CORE: Summer program for the children Parent education and skills training program Dinosaur school Mentoring FLEX: Multisystemic therapy added *Drop out rate (I+C)* Year 1: 19% Year 2: 13% Year 3: 14 %	*Control* Standard service, n=109 Mean age: 6.3 years	*BASC-PRS* Neither group improved significantly at posttest and at 1 year follow-up and no difference between groups *BASC-TRS* No significant differences between groups at posttest and 1 year follow-up Children with more severe problems benefitted more during the intervention but no significant difference at 1 year follow-up	Moderate Note: No significant differences between I1 and I2. Numbers were collapsed during analyses	*Competence of staff* Family neighbourhood centers. Competence not reported *Fidelity* Analyses reported and show proper adherence *Attendance rate* 50% of children participated at least 48% of the days offered by summer program and 43% of the days offered by Dinosaur school Average amount of contact CORE + FLEX attendance per family: 9.6 hours *Dosage analysis* Higher attendance correlated to reduction in teacher rated externalizing behaviour among severely aggressive children in intervention group at 36 months compared to control *Gender analysis* High attendance correlated to reduction in parent rated externalizing behaviour among girls compared to boys

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Table 4.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Barrera et al 2002 [54] USA Smolkowski et al 2005 [55] USA	*Design* RCT *Setting* Three communities with high proportions Hispanics *Population* 3 284 children in kinder-garten to third grade *Inclusion criteria* >95th percentile of CBCL-T aggression scale (T-score of >67) (43.4% of the population) or lowest 5% on reading score (56.6% of the population) *Exclusion criteria* Not reported *Follow-up time* 1 year (Barrera 2002) 2 years (Smolkowski 2005)	*Intervention* SHIP, 2 year intervention *Population* n=141 (n=162 in Smolkowski, whereof 51% Hispanic [55]) *Intensity* Parent training. The Incredible Years, 12–16 weekly sessions, 2.25 hours For the children: 3 components, CLASS [100] designed to reduce acting-out behaviours + Dinosaur School to teach appropriate classroom and social behaviour + learning support *Drop out rate* 15% at 1 year follow-up (control and intervention groups) 27% at 2 year follow-up	*Control* No intervention *Population* n=143 (n=165 in Smolkowski, whereof 52% Hispanic [55])	*TRF, externalizing* No differences between the groups at posttest and follow-up at 1 and 2 years *TRF, internalizing* Girls = 0.24 ($p<0.027$) for European-American children at follow-up at 1 year *CBCL externalizing* No differences between groups at posttest and follow-up at 1 or 2 years *CBCL internalizing* No significant differences between groups	Moderate quality for Barrera [54] Smolkowski adds 45 more families in order to increase power and reanalyses data	*Competence of staff* Masters or higher in relevant fields and were trained by the program developers *Attendance rate* 42% of parents participated in the training. 74% of children participated in CLASS *Gender analysis* Not reported

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Table 4.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Cavell et al 2000 [56] USA	*Design* RCT. Randomisation in clusters by grade, teachers blind at follow-up *Setting* 7 public schools in a school district in south central Texas. Diversified ethnic population. Sociodemografic condition not reported *Population* n=90 second- and third grade students were nominated by their teacher based on level of aggression *Inclusion criteria* Score above 84th percentile on CBCL-TRF aggressive behaviour scale *Follow-up* 12 months after end of intervention	*Intervention* Prime Time (16 months) *Population* n=31 (55% African-American and 16% Hispanic) Mean age: 7.5 years *Intensity* Two 30 minute sessions in problem solving skills per week for 46 weeks *Components* Teacher and parent consultation to enhance emotionally supportive relationships Problem solving skills training for the students during school hours *Drop out* In total 5 students dropped out	*Control* Only mentoring by mentors not supervised and trained by the investigators *Population* n=29 (41% African American and 7% Hispanic) Mean age: 7.5 years *Drop out* See intervention group	*CBCL aggressive scale (T-scores)* Both groups improved by time, no difference between groups *TRF aggressive scale (T-scores)* Both groups improved by time, no difference between groups *Self reports* Children in both groups rated themselves as less competent and less supported by others at follow-up. Children in the I-group had an increased positive belief about aggression	Moderate Completer analysis only Randomisation procedure not described	*Competence of staff* Undergraduate psychology or education students as mentors, educated for 18 hours Consultants and PSST trainers were doctoral students, supervised by the authors *Fidelity* Adequate check (manuals, supervision) *Attendance rate* Low number of parent visits *Gender analysis* Not reported

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Table 4.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Connell et al 2007 [10] USA	*Design* RCT, participants allocated to intervention or control condition *Setting* Three middle schools in an ethnically diverse metropolitan district *Population* All sixth graders, n=998 (526 boys/472 girls) Consented (90%) *Follow-up time* Annually through age 18 (>6 years, see table 4.8)	*Intervention* ATP – multilevel program with universal and indicated components, n=115 received the indicated part (FCU) *Indicated intervention* Family Check-up (FCU), three sessions + access to Family Resource Center and individually tailored support *Drop out rate* 21%	*Control* No information on controls, eg contagion, n=498 *Drop out rate* 20% by 6 year follow-up	*Arrest records* No effect *Annual self report* Less growth in engagers in FCU as compared to non-engagers, in substance use and antisocial behaviours between 11–17 years	Moderate	*Competence of staff* Professional therapists *Attendance rate* Not applicable *Fidelity* Not reported. FCU follows a standard format, after which individually tailored services are offered as needed *Gender analysis* Reported; families with girls slightly more likely to use FCU

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Table 4.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Conduct Problems Prevention Research Group (CPPRG) 2007 [61–63,65, 68,101] USA	*Design* RCT, schools were matched for demographics and one of each pair was randomly assigned to intervention *Setting* 54 public elementary schools in high risk areas of Durham, Nashville, Seattle and rural central Pennsylvania n=9 594 kindergarteners were assessed for eligibility *Population* n=891 (69% boys, 51% African-American and 47% European American) Mean age: 6.5 years Skewed towards SES disadvantage. 76% of children scored in the clinical range (TRF T-scores ≥60). Extreme high risk: Defined as most severe 3% of the normative sample *Inclusion criteria* Composite score of TOCA and CBCL. Children were selected based on the score, moving from the highest score downward until desired sample sizes were reached. 95% of the sample scored in the top 20% on both teacher and parent screenings *Measurement times* After grades 3, 4, 5 and 6 After grade 9 (see table 4.7, long term effects)	*Intervention* Fast Track universal (PATHS) and indicated prevention program, 10 year program, n=445 *Intensity* During grades 1–6 Standard level offered to all during first grade. Subsequently dosage was individualized. Parent and child training with home visits Weekly group meetings (grade 1: 22 sessions grade 2: 14 sessions and 9 sessions thereafter) During grades 7–10 Individualized plans based on triennial assessments *Drop out rate* n=18% in grade 10 (Drop out rate 2% per year)	*Control* Service as usual, n=446 *Drop out rate* n=23% in grade 10	*Psychiatric diagnosis grade 3* No significant differences in whole sample *Psychiatric diagnosis grade 6* No significant difference *Extreme high risk sample, grade 3* I: 38% (27–51%) C: 53% (41–65%) p<0.05 *Extreme high risk sample, grade 6* I: 32% (22–45%) C: 0.48 (36–60%) p<0.1	Moderate Powered to detect a main effect size of 0.26 Randomisation not described	*Competence of staff* Universal prevention provided by classroom teachers in collaboration with Fast Track Educational Coordinators (ECs). Indicated prevention provided by ECs and Family Coordinators, with master's degrees in counseling or social work *Fidelity* Manualisation of all components, regular training, clinical supervision *Attendance rate* 79% of parents and 90% of children attended at least 50% of the training in grade 1. On average parents attended 15/36 groups and children 21/36 during grades 3–6. 86% of parents and children received individual sessions in grades 7–9 Results not dependent on sex, ethnicity, cohort or site

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Table 4.7 continued

Author Year Reference Country	Study design Setting Population Inclusion criteria Exclusion criteria Follow-up time	Intervention Population Drop out rate	Control Population Drop out rate	Outcome	Study quality Comments	Competence of staff Fidelity Attendance rate Gender analysis
Cunningham et al 1995 [47] Canada	*Design* RCT. Matched by sex, number of problems, single parents *Setting* Junior Kindergarten in all public and private schools in Hamilton, Ontario, Canada *Population* Mean age: 54 months *Inclusion criteria* >1.5 SD on Home Situations Questionnaire (=top 10%) *Exclusion criteria* None described *Follow-up* 6 months	*Intervention* COPE 1. Individual (Clinic), n=48 2. Group (Community), n=46 *Intensity* 11–12 weekly sessions *Drop out rate* 25%	*Intervention* None n=56 *Drop out rate* 23%	*CBCL (parent)* Scores not reported by group. All groups improved by time *Home observations questionnaire (Z-scores)* Clinic: 0.37 Community 1.16 (p=0.03 vs control) Control: 0.51 *Home observations* Parent-child interaction: ns	Moderate Randomisation procedure not well described, poor presentation and analysis of outcomes	*Competence of staff* Early childhood educators and a behaviour therapist. Leaders participated in a 15 week training program *Fidelity* The execution of every session was monitored and were periodically observed by the investigators *Attendance rate* Not reported *Gender analysis* Not reported
Dishion et al 1995 [50] USA	*Design* RCT, no information on blinding *Setting* No information n=158, 47% girls Age: 11–14 years *Inclusion criteria* At least 4 risk factors according to screening instrument: closeness to parents [102], emotional adjustment, academic engagement, involvement in positive attitudes, experience seeking, problem behaviours, the child's substance abuse history, and stressful life events *Follow-up time* 12 months	*Intervention* Adolescent Transitions Program (ATP) *Population* n=89 I1: Parent focus (n=26) I2: Teen focus (n=32) I3: Parent and teen focus (n=31) *Intensity* 12 weekly 90 min sessions completed in 3–4 months *Drop out rate* 11%	*Control* C1: Quasi placebo, self-directed change (6 newsletters & 5 brief videotapes from ATP) (n=29) C2: Non-random quasi control (no information on content) (n=39) *Drop out rate* 21%	*Mother ratings, CBCL Externalizing* I1 vs C1: SMD 0.18 I1 vs C2: SMD 0.16 I2 vs C1: SMD –0.16 I2 vs C2: SMD –0.12 I3 vs C1: SMD –0.06 I3 vs C2: SMD –0.05 *Teacher ratings, CBCL Externalizing* I1 vs C1: SMD 0.36 I1 vs C2: SMD 0.30 I2 vs C1: SMD 0.36 I2 vs C2: SMD 0.33 I3 vs C1: SMD 0.22 I3 vs C2: SMD 0.20	Moderate	*Staff competence* Professional therapists *Attendance rate* Parents attended 69% of groups sessions, teens 71% 45% of parents in C1 watched videotapes *Fidelity* Not reported *Gender analysis* Not reported

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Table 4.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Dishion et al 2008 [49] USA	*Design* RCT (blinded computerised randomisation) *Setting* National family Nutrition and Health program (WIC) *Population* n=879 eligible Age: 2–3 years at baseline *Inclusion criteria* >1 SD on at least two out of three domains: 1: Outacting child behaviour (CBCL, ECBI) 2: Family problems (maternal depression, daily parental challenges, substance use, teen parents status) 3: Sociodemographic risk (low education and low income) *Exclusion criteria* None described *Follow-up time* 2 years	*Intervention* Family Check-up, n=364 *Intensity* 2.5 hour home visit for baseline assessment, including video. At least two more visits: 1: Interview about parental concerns 2: Feedback summarizing assessment results by using motivational interview strategies. Exploration of parental willingness to change problematic parental practices and to identify services appropriate to family needs Offer of further follow-up *Drop out rate* 15% at 2 years follow-up	*Control* 2.5 hour home visit for baseline assessment, n=317 *Drop out rate* 14% at 2 years follow-up	*CBCL externalising scale at two years follow-up* Cohen's d=0.41 ECBI at 2 years follow-up Only significant changes in children with high scores at baseline: –0.16, SE 0.44. beta-16, p<0.05	Moderate	*Competence of staff* Service workers on PhD or Master's level *Fidelity* Consultants trained for 2.5–3 months. Certification established by reviewing video of feedback *Attendance rate* Not reported and not relevant because of the nature of the intervention *Gender analysis* Gender balanced, 49.5% female. The effect of gender on intervention effect was analyzed in mediation model. Effects were similar in boys and girls Money (100, 120, 140 USD) was handed out to participants at each data collection Apart from the FCU intervention many families received further interventions as a consequence of the FCU. The nature and extent of these interventions were not reported

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Table 4.7 *continued*

Author Year Reference Country	Study design Setting Population Inclusion criteria Exclusion criteria Follow-up time	Intervention Population Drop out rate	Control Population Drop out rate	Outcome	Study quality Comments	Competence of staff Fidelity Attendance rate Gender analysis
Gardner et al 2007 [48] USA Shaw et al 2006 [103] USA Pilot study to Dishion 2008 [49]	*Design* RCT (blinded computerized) *Setting* See Dishion 2008 *Population* n=120 (boys only) Age: 2 years at baseline *Inclusion criteria* See Dishion 2008 [49] *Exclusion criteria* See Dishion 2008 [49] *Follow-up time* 12 months	*Intervention* Family Check-up, see Dishion 2008 [49], n=60 *Drop out rate* 8% at follow-up	*Control* WIC + 2.5 hour home visit for baseline assessment, n=60 *Drop out rate* 5% at follow-up	*CBCL externalizing scale* Cohen's d=0.46	Moderate	*Competence of staff* Master students trained by skilled therapists and supervised weekly *Fidelity* Consultants trained for 2.5–3 months. Certification established by reviewing video of feedback *Attendance rate* Not reported and not relevant because of the nature of the intervention *Gender analysis* Study included only boys 10 USD was handed out to participants at each data collection Apart from the FCU intervention many families received further interventions as a consequence of the FCU. The nature and extent of these interventions were not reported

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Table 4.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Lochman, et al 2003 [51] USA Coping Power Program	*Study design* RCT (effectiveness) *Setting* 17 elementary schools *Population* 1 540 children were screened by teachers, 475 fulfilled criteria (moderate–high risk) Sample: n=245 (61% African-American, 68% boys) *Inclusion criteria* Top 33% most aggressive (physical, verbal aggression, disruptiveness) *Exclusion criteria* Participating in a prevention study *Follow-up time* 1 year	*Interventions* I1: CMST and Coping Power, n=61 I2: Coping Power, n=59 I3: CMST, n=62 *Intensity* Coping with the Middle School transition (CMST) Parent component: 3 sessions year 1 and 1 booster year 2 (promote parent involvement in school and the study skills of the child) Teacher component: 6 meetings with staff members Child Coping Power Component: 22 group sessions for children in fifth grade, 12 group sessions in sixth grade Parent Component: 16 parent group sessions over the 16 months *Drop out rate* 34%	*Control* Service as usual, n=63 *Drop out rate* 45% in the full sample	*TOCA-R, Aggressive subscale* Cohen's d=0.35 *Self reported delinquency* Cohen's d=0.27	Moderate No ITT-analysis. High drop out rate	*Competence of staff* Ordinary teachers *Gender analysis* The same effect boys/girls *Ethnic analysis* Same effect for African, American and Caucasian children *Attendance rate* 21% at least one classroom meeting. Child program: mean attendance 84%. Parent 26%, 62% at least one session *Integrity* Detailed intervention manuals. Weekly supervision

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Table 4.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Lochman et al 2004 [52] USA	*Study design* RCT (efficacy study), blind evaluation *Setting* 11 schools *Population* Two annual cohorts of boys (n=1 578) in fourth and fifth grades were screened by teachers (aggression, cognitive ability). Top 22% highest risk screened according to inclusion criteria n=183 randomised (61% African-American) *Inclusion criteria* Teachers TRF (T-Score >60) Parents CBCL (T-Score >55) *Exclusion criteria* Not participating in a prevention study *Follow-up time* 1 year	*Intervention* Coping Power I1: Child component only, n=60 I2: Child and parent component, n=60 *Intensity* Child component 8 group sessions during first year and 25 times second year Parent component 16 parent group sessions over the 15 months intervention period *Drop out rate* 30% for the full sample	*Control* No intervention, n=63 *Drop out rate* See intervention group	*TOCA-R, Aggressive subscale* Cohen's d=0.38 *Self reported delinquency* No significant differences between groups Parent component influenced delinquency but not school behaviour	Moderate No ITT-analysis, randomisation procedure not described	*Competence of staff* School counsellors, who had received a 10 hours training program *Gender analysis* Effects not dependent on age, gender or baseline level of aggression *Fidelity* Intervention staff received weekly scheduled supervision. Rated the level of accomplishment of each child/parent. Sessions videotaped *Attendance rate* Child sessions: 83% Parent groups: 49%

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Table 4.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Prinz, et al 1994 [53] USA	*Design* RCT, blinded follow-up *Setting* 6 public elementary schools in Columbia, South Carolina, Denver *Population* 25 first- through third-grade classes. Screening according to inclusion criteria, n=196 *Inclusion criteria* Group 1 CBCL T-score >65 on the CBCL Aggression scale Group 2 CBCL T-score <60 on the Aggression scale *Follow-up time* 6 months post intervention	*Intervention* PCS + universal program for prosocial behaviour (reward based), n=48 aggressive and 52 non-aggressive children *Intensity* Mean 22 weekly sessions (9–24). Built on group activities, roleplays, group rewards (tokens) etc Four aggressive and four competent-non-aggressive children (matched by sex and ethnicity) formed a PCS-training group *Drop out rate* 19%	*Control* Minimal classroom intervention + universal classroom intervention, n=47 aggressive and 49 non-aggressive children *Drop out rate* 20%	*Teacher rated aggression* Significant effect for aggressive children Cohen's d=0.6 No changes for non-aggressive children	Moderate Completer analysis only. Results adjusted for baseline score	*Competence of staff* Team manager and team assistant (clinical psychologists, doctoral students) *Fidelity* Different procedures used *Attendance rate* Not reported *Gender analysis* Not reported

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Table 4.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Stewart-Brown et al 2004 [45] Patterson et al 2002 [46] United Kingdom	*Design* Block randomized controlled trial. Blind randomisation by block after matching on ECBI score, sex, social class and ethnicity, by tossing a coin *Setting* General Practice based parent group *Population* Respondents in a postal survey (response rate 70%) Age: Mean 4.6 years (2–8 years) *Inclusion criteria* ECBI score >100 (the upper half) *Exclusion criteria* Children already receiving treatment for behavourial problems and children with learning difficulties *Follow-up time* 6 and 12 months	*Intervention* Incredible Years, "Parents and Children", n=60 *Intensity* 2.5 hours x 10 weeks parent groups run by health visitor *Drop out rate* At 6 months: 20% At 12 months: 28%	*Control* No intervention n=56 *Drop out rate* At 6 months: 18% At 12 months: 22%	*ECBI* Both groups improved significantly. The intervention group improved significantly more by 6 months. No significant difference between groups at 12 months *CBCL (total score)* Both groups improved significantly but no significant difference between groups at 6 and 12 months follow-up	Moderate Clinical range in consenters 39.4%, in non-consenters 29.5%	*Competence of staff* Health visitors and nursery nurses attended a 3-day training and received weekly supervision *Attendance rate* 34 of 60 attended at least 50% of meetings *Fidelity* Weekly supervision meetings *Gender analysis* Not reported *Problems* Low attendance, possible contamination of control group, fidelity sufficient?

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Table 4.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Tremblay et al 1991 [57] McCord et al 1994 [59] Vitaro et al 1994 [60] Canada (French speaking)	*Design* RCT. Participants were randomly allocated to group before additional selection criteria were applied *Setting* Kindergartens in Montreal *Population* Boys screened for being at risk for later antisocial behaviour *Inclusion criteria* Above 70th percentile on SBQ disruptive behavior scale, rated by teacher *Exclusion criteria* Parents not Canadian-born, first language other than French, parents had 15 years of schooling or more *Follow-up time* 2 and 3 years after intervention (see table 4.7 for long term follow-up)	*Intervention* Montreal Prevention experiment, 2 year intervention *Population* n=68 met selection criteria, 46 participated (67.6%) *Components and intensity* Parents: Training in effective child rearing; home-based and individualized. Mean numbers of sessions 17.4, range 0–46 Children: Social skills training in small groups with prosocial peers. Nine sessions year 1 and ten sessions year 2 Children: Fantasy play training, twelve sessions received by 25 children and their siblings *Drop out rate* 8.7% at 3 years follow-up	*Control* C1: Observation (placebo) group, subject to longitudinal study, n=123 met selection criteria, 84 consented (68.3%) C2: Control group, n=58 met selection criteria, 42 consented (72.4%) *Drop out rate* 4.8% at 3 years (observation) and 9.5% (control)	*Teacher SBQ* Effects ns and warning over time *School competence (construct of class placement and behaviour)* I: 43% C: 23% p=0.02 Favouring intervention at 2 and 3 years follow-up, then waning *Maternal SBQ* Significant negative effect post-treatment, which had disappeared by 2 years follow-up *Self-report of antisocial behaviour* Chi-square significant favouring intervention – 6 years after treatment	Moderate	*Competence of staff* University-trained case workers working full time in the project *Attendance rate* Variable for family intervention. Maximum 46 sessions, mean 17 sessions *Fidelity* Good; team of case workers were coordinated by a fifth professional, educated at the Oregon Social Learning Center *Gender analysis* Boys only

ATP = Adolescent Transition Program; BASC-PRS = Behavior Assessment System for Children Parent Rating Scale; BASC-TRS = Behavior Assessment System for Children Teacher Rating Scale; C = Control; CBCL-TRF = Child Behaviour Check List Teacher Report Form; CBCL = Child Behaviour Check List; CD = Conduct Disorder; CLASS = Contigencies for Learning Academic and Social Skills; CMST = Coping with the Middle School transition; COPE = Community Parent Education Program; CORE = Early Risers program; a child-focused intervention; ECBI = Eyberg Child Behavior Inventory; ECs = Educational Coordinators; FCU = Family Check-up; FLEX = Family-focused support and empowerment program; I = Intervention; IQ = Intelligence quotient; ns = Not significant; ODD = Oppositional Defiant Disorder; PATHS = Promoting Alternative Thinking Strategies; PCS = Peer coping skills; PSST = Problem solving skills training; RCT = Randomised controlled trial; SBQ = Social Behavior Questionnaire; SD = Standard deviation; SES = Socio economic status; SMD = Standard Mean Difference; TOCA = Teacher Observation of Classroom Adaptation; TRF = Teacher Report Form; USD = US dollar; WIC = National family Nutrition and Health program

Table 4.8 *Long term (>5 years) effects of programs for externalizing behaviour.*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Tremblay et al 1995 [58] Canada (French speaking)	*Design* Follow-up of RCT for Tremblay [57] *Setting* Kindergartens in Montreal *Population* Boys that participated in the Montreal Prevention experiment, scoring above 70th percentile on teacher rated Social Behaviour Questionnaire n=166 (of 259 invited) *Long term follow-up* 6 years after intervention	*Intervention* Montreal Prevention experiment, 2 year intervention *Population in the RCT* n=43 *Drop out rate* 4% at 6 year follow-up	*Control* n=41 *Observation group* n=82 *Drop out rate* 4% at 6 year follow-up	*Teacher SBQ* Effects ns *School adjustment* ns *Self-report of anti-social behaviour* Chi-square significant favouring intervention	Moderate	*Competence of staff* University-trained case workers working full time in the project *Attendance rate* Variable for family intervention. Maximum 46 sessions, mean 17 sessions *Fidelity* Good; team of case workers were coordinated by a fifth professional, educated at the Oregon Social Learning Center *Gender analysis* Boys only

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Table 4.8 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Hawkins et al 1999 [76] Hawkins 2005 [75] Hawkins et al 2008 [77] USA	*Design* Follow-up of RCT for selected intervention *Setting* Public schools in high crime areas Seattle, USA *Sample* n=667 (327 boys/340 girls) *Follow-up* 6, 9, 12 and 15 years	*Intervention* Seattle social development project *Full intervention* n=156 *Late intervention* n=267 *Drop out rate* 6 years Full intervention=4.5% Late intervention=9.0% 9 years 6% (not presented on group level) 12 years Full intervention=8.3% Late intervention=5.2% 15 years Full intervention=6.4% Late intervention=6.0%	*Control* Service as usual, n=220 *Drop out rate* 6 years 6.4% 9 years 6% (not presented on group level) 12 years 10.9% 15 years 8.6%	*6 year follow-up* Significant reduction in "lifetime violence" Difference in reports of misbehaviours (ns) *9 year follow-up* Significant differences between full intervention and control for anxiety symptom count, social phobia symptom count and suicide thoughts Few differences in outcomes of crime and substance use *15 year follow-up (age 27 year)* Proportion fulfilling ≥1 of 4 DSM-IV diagnoses: Full intervention: 15% Late intervention: 22% Control: 26% $p<0.03$ for difference between full intervention and control. No significant differences in crime or substance use	Moderate Baseline values systematically missing Consistency in implementation difficult to assess Attrition rates are based on sample sizes non-randomly assigned to full intervention, late intervention and control condition 4 years after initial RCT	Dose response seen at 9 and 12 and 15 years follow-up Largest improvement in children from the poorest families *Gender analysis* No gender differences at 6 year follow-up Girls had better effects on GAD symptoms than boys at later follow-ups

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Table 4.8 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Conduct Problems Prevention Research Group (CPPRG) 2007 [65] USA	*Design* RCT for indicated program *Setting* Public elementary schools in high risk parts of four areas *Population* Risk children defined as scoring in the top 10% on a combined screening measure for conduct problems (TOCA-R, CBCL, Revised Problem Behaviour Check List) n=891 Extreme high risk: Defined as scoring in the top 3% *Late results* 5 and 10 years after intervention started	*Intervention* Fast Track, n=445 *Drop out rate* 18% in grade 10	*Control* Service as usual, n=446 *Drop out rate* 23% in grade 10	*Total sample* The only significant difference was self rated antisocial behaviour *Extreme high risk sample, grade 9* Diagnosis of CD I: 5% C: 21% Diagnosis of ODD No difference Any psychiatric diagnosis I: 26% C: 46%	Moderate	Results not dependent on sex, ethnicity, cohort or site

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Table 4.8 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Rotheram-Borus et al 2004 [41] USA	*Design* Follow-up of RCT [43] *Setting* New York City, Division of AIDS Services *Population* Parents with AIDS and their adolescents *Long term follow-up of children* 6 years post intervention	*Intervention* Coping skill intervention, based on social learning and behavioral principles n=156 adolescents (126 parents) *Drop out rate* 20% at 6 years follow-up	*Control* Standard care, within the same agency n=161 adolescents *Drop out rate* 17% at 6 years follow-up	*Brief Symptom Inventory* ns *Proportion in school or employed* I: 82.6% C: 68.9% RR 2.17 (95% CI 1.24 to 3.78) *Proportion on welfare* I: 25.7% C:36.7% RR 0.56 (95% CI 0.34 to 0.93) *Already parents* I: 34.6% C: 44.1% RR 0.67 (95% CI 0.43 to 1.06) Higher life expectations in intervention group	Moderate Some inconsistencies in number of participants and attrition between publications	*Gender analysis* Not reported

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Table 4.8 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Wolchik et al 2000, 2002 [31,32] USA	*Design* Follow-up of RCT [32] *Setting* Arizona metropolitan area *Population* Divorced mothers and their children, 9–12 year *Long term follow-up* 6 years	*Intervention* New Beginnings; clinical methods based on social learning and cognitive behavioural principles for behavioural change *Population* I1: Mother + child program, n=81 I2: Mother only program, n=83 *Drop out rate* 9%	*Control* Quasi placebo *Population* n=76 *Drop out rate* 11%	*YSR + CBCL Externalizing subscale* I1 vs C: SMD –1.51 (95% CI –1.88 to –1.13) I2 vs C: SMD –0.32 (95% CI –0.65 to 0.01) *Prevalence of mental disorder (DISC)* I1: 11% (95% CI 3.8% to 18.2%) I2: 19.7% (95% CI 10.8% to 28.6%) C: 23.5% (95% CI 13.8% to 33.2%) I1 vs C sign I2 vs C ns No effect on internalizing problems	Moderate	*Gender analysis* Not reported

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Table 4.8 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Exclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance rate** **Gender analysis**
Connell et al 2007 [10] USA	*Design* RCT, participants allocated to intervention or control condition *Setting* Three middle schools in an ethnically diverse metropolitan district *Population* All sixth graders n=998 (526 boys/472 girls). Consented (90%) *Follow-up time* At age 18 years	*Intervention* ATP – multilevel program with universal and indicated components n=115 received the indicated part (FCU) *Indicated intervention* Family Check-up (FCU), three sessions + access to Family Resource Center and individually tailored support *Drop out rate at 6 years* 20%	*Control* No information on controls, eg contagion, n=498 *Drop out rate* 20% by 6 year follow-up	*Arrest records* No effect *Annual self report* Less growth in engagers in FCU as compared to non-engagers, in substance use and antisocial behaviours between 11–17 years	Moderate	*Competence of staff* Professional therapists *Attendance rate* Not applicable *Fidelity* Not reported. FCU follows a standard format, after which individually tailored services are offered as needed *Gender analysis* Reported; families with girls slightly more likely to use FCU

ATP = Adolescent Transition Program; C = Control; CBCL = Child Behaviour Check List; CD = Conduct Disorder; CI = Confidence interval; DSM-IV = Diagnostic and Statistical Manual version IV; FCU = Family Check-up; GAD = Generalized Anxiety Disorder; I = Intervention; ODD = Oppositional Defiant Disorder; RCT = Randomised controlled trial; RR = Relativ risk; SBQ = Social Behaviour Questionnaire; SMD = Standard Mean Difference; TOCA-R = Teacher Observation of Classroom Adaptation; ns = Not significant

Table 4.9 *Cost effectiveness studies.*

Author Year Reference Country	**Study question**	**Study design**	**Patient population**	**Intervention Participants**	**Outcome**	**Costs**	**Study quality** **Comments**
Foster et al 2007 [104] USA	Cost-effectiveness of the Fast Track intervention	CEA of a RCT	891 children	Fast Track	Diagnosis of conduct disorder. Acts of interpers violence avoided. Index criminal offense avoided. (Measured in grade 9)	Direct costs (payer per-spective)	Moderate The intervention probably costeffective for those most at risk

CEA = Cost Effectiveness Analysis; RCT = Randomised controlled trial

Tabell 4.10 *Utagerande, metaanalyser.*

Författare År, referens Land	Program, urval och antal inkluderade studier	Inklusions kriterier	Kvalitetskriterier	Resultat ”post test” för effekter på barnet	Långtidseffekter på barnet	Kommentarer
Lundahl et al 2006 [105] USA	Föräldrastöd PsycInfo, ERIC från 1974–2003 63 inkluderades	Disruptive child behaviour Minst en experiment- och en kontrollgrupp från samma population >5 deltagare/grupp Engelskspråkig	Endast ”peer-reviewed” tidskrifter Varje studie kvalitetsgraderades på en sjugradig skala	Cohen’s d=0,42 (95% KI 0,35 till 0,49)	Cohen’s d = 0,21 vid varierande uppföljningstider Studier som inte följde upp kontrollgruppen användes i analysen	Manual inget krav Förefaller vara en blandning av tidig behandling och prevention Barn med ADHD inkluderades
Lösel et al 2003 [106] Tyskland	”Social skills training” för att förebygga antisocialt beteende PsycInfo, PubMed, ERIC, Dissertation Abstracts Engelsk- och tysk-språkiga studier publicerade senast år 2000 85 RCT inkluderades	0–18 år Ungdomar med CD eller ODD inkluderades Inga krav på uppföljning men drygt 20% av studierna hade uppföljning på minst 3 månader	Ej redovisat	Cohen’s d=0,38 totalt Cohen’s d=0,17 för antisocialt beteende, ”fixed model” och 0,26 för ”random model”	Cohen’s d=0,28 totalt Cohen’s d=0,06 för antisocialt beteende med ”fixed model” och 0,22 för ”random model”	Mindre effekt sågs i större studier och i nyare studier
Mytton et al 2006 [107] England	Skolprogram för att förebygga våld Pubmed, ERIC, PsycInfo, IBSS m fl till 2003 36 av 56 RCT ingick i metaanalyserna	Studier som syftade till att minska problembeteenden exkluderades om inte det framgick att målet med programmet var att minska aggression eller våldsamt beteende	Cochranes kriterier	SMD –0,41 (95% KI –0,56 till –0,26) och hög heterogenitet	Den metaanalys som finns är inte korrekt	Mycket små studier, med undantag av en

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Tabell 4.10 *fortsättning*

Författare År, referens Land	Program, urval och antal inkluderade studier	Inkl kriterier	Kvalitetskriterier	Resultat ”post test” för effekter på barnet	Långtidseffekter på barnet	Kommentarer
Barlow et al 2003 [108] England	Gruppbaserat föräldrastöd, för att förebygga utagerande beteende PubMed, EMBASE, Psychlit, ASSIA, ERIC m fl. Ingen språk-begränsning. Publicerat mellan januari 1970 och juli 2001 Av 141 studier kunde 5 inkluderas	Barn 0–3 år	Guyatts kriterier (Gyuatt GH, Sackett DL, Cook DJ. Users guides to the medical literature. II. How to use an article about therapy or prevention. A: are the results of the study valid? JAMA 1994;270:2598–601)	Föräldraskattning: SMD –0,44 (95% KI –0,95 till 0,07) Oberoende observatör: SMD –0,55 (95% KI –0,86 till –0,25)	Oberoende observatör: SMD –0,23 (95% KI –0,55 till 0,10)	”Random effects” enbart i metaanalyserna
Kaminski et al 2008 [109] USA	Föräldrastöd för att minska utagerande problem 1990–September 2002. PsycInfo och Medline. Rapporterat på engelska i artiklar eller böcker 77 studier inkluderade	Barn 0–7 år. Förebyggande eller tidig behandling. Varken föräldrar eller barn skulle ha någon utvecklingsstörning. Standardavvikelse skulle vara rapporterad. Inga krav på uppföljningstid	Formellt sett ingen kvalitetsgradering	Medelvärde (SE): 0,25 (0,03) för utagerande beteende och baserat på 48 studier	Inte angivet	

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Tabell 4.10 *fortsättning*

Författare År, referens Land	Program, urval och antal inkluderade studier	Inkl kriterier	Kvalitetskriterier	Resultat ”post test” för effekter på barnet	Långtidseffekter på barnet	Kommentarer
Wilson, SJ 2007 [78] USA	Skolbaserade program för att förebygga utagerande beteenden 249 studier inkluderade Publicerat från 1950. Senaste datum framgår inte	Utfall: Aggressivt eller våldsamt beteende (slagsmål, mobbning etc), disruptive eller bådadera. Rapporterade på engelska	Ingen kvalitets-granskning	Universella program: SMD 0,21 för aggressivt/ ”disruptive” beteende, skattat av lärare Selektiva/indikerade program: SMD 0,29 Multimodala program: SMD 0,05	Beräknades inte	1/4 av studierna rörde program utan manual. 40% av studierna härrörde från avhandlingar och annat, icke-publicerat material. Analys med ”random effects” enbart. Breda KI som inte kvanti-fieras i texten
Hahn et al 2007 [79] USA	Universella, skol-baserade program för att förebygga våld och aggressivt beteende. PubMed, EMBASE, ERIC, ASSI, Psych Info m fl. Böcker och myndighetsrap-porter inkluderades också. Publicerat före december 2004 53 studier inklu-derades	Utfall: Våld eller ”proxy för våld” (CD, mått på exter-naliserat beteende, utagerande beteende, ”delinquency”). Studierna skulle ha >20 deltagare per grupp	Kvalitetsgraderat enligt Community guide’s normer. Studier med god eller måttlig kvalitet inklu-derades; studier med <1 års uppföljning fick ”straffpoäng”. Effekt beräknades på resultat när bortfallet var <30%. Effekten mättes som relativ ändring (%)	Medianeffekt över alla åldrar var 15% relativ minskning i våldsamt uppförande	Effekten avtog med tiden	12 studier mätte effekt med ”proxymått”

CD = Conduct Disorder; ODD = Oppositional Defiant Disorder; RCT = Randomised Controlled Trial, Randomiserad kontrollerad undersökning; SMD = Standard Mean Difference, Standardavvikelse

Table 5.5 *Universal programs for prevention of depression and anxiety in children.*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Fidelity** **Attendance** **Gender analysis**
Aune et al 2009 [26] Norway	*Design* Cluster randomisation, one cluster per condition *Setting* Two counties in central Norway, similar in sociodemographic parameters. All 6th to 9th grade children *Population* n=1 748 (49% boys) signed informed consent. Representative of Norwegian population. 97% Caucasian Age: 11–14 years (mean 12.6) *Follow-up* 8 months (consolidation phase of the program)	*Intervention* NUPP-SA, targeting social anxiety. Lectures based on CBT, n=961. n=112 had syndromal social anxiety at baseline *Intensity* Broad 4 months program: psychoeducative meetings for parents, health nurses, teachers, community and welfare workers. Information in the local newspaper. Three sessions for children, conducted in class. Website and booklets for self education *Drop out rate* 17%	*Control* No intervention, n=789. n=78 had syndromal social anxiety at baseline *Drop out rate* 19%	*Total sample* SPAI-C Cohen's d: 0.20 (95% CI 0.90–0.30) SCARED Cohen's d: 0.21 (95% CI 0.11–0.31) Neither intervention nor control group changed in SMFQ and SDQ *Syndromal subjects* SPAI-C Cohen's d: 0.83 (95% CI 0.52–1.12) SCARED Cohen's d: 0.44 (95% CI 0.15–0.73) *Number of individuals with social anxiety at follow-up* I: 34% of syndromal group C: 41% of syndromal group *New cases of social anxiety at follow-up* I: 4.6% C: 5.8%	Moderate	*Competence of staff* The program developer *Adherence* Measured by scoring three videotapes of lectures. Rated as high adherence *Attendance rate* 80–100% of the target groups attended in the intervention *Gender analysis* Not reported

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Table 5.5 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Fidelity** **Attendance** **Gender analysis**
Gillham et al 2007 [4] USA	RCT, randomised at individual level after stratification for age, gender and baseline CDI *Setting* Three schools in a suburban metropolitan area *Population* 718/4 000 students consented to participate. Predominantly Caucasian (60–88%), children from lower and higher SES levels Mean age: 12.13 years (1.03). Mean CDI: 8.45 (7.35) where students in one school reported lower levels of depression at baseline *Inclusion criteria* CDI <13 and not depressive as measured by DICA *Follow-up* Every 6 month up to three years	*Intervention* PRP n=232 *Drop out rate at 3 years* 55% *Intensity* Groups met after school, once a week for 90 minutes sessions during 12 weeks	*Control* C1: PEP, n=231 *Drop out rate at 3 years* 48% PEP focuses on stressors. It is designed to control for adult attention, group cohesion and social support *Intensity* Groups met after school, once a week for 90-minutes sessions during 12 weeks C2: No intervention, n=234 *Drop out rate at 3 years* 55%	*CDI* No significant differences between group at "post test" or at any of the follow-up measurements *CDI >13* PRP prevented elevated symptoms relative to control but not relative to PEP Note: Intervention effects differed by school, no variable examined could explain the difference	Moderate Randomisation by computer generated random numbers sequence Children with CDI ≥13 at follow-up were assessed by blinded interviewers Powered to detect effect sizes, d ≥0.30 ITT-analysis	*Group leaders* Teachers, school counsellors and graduate students not affiliated with the research team. They participated in 30 hours training and biweekly group supervision *Program integrity* PRP: 80% PEP: 68% *Attendance (mean)* PRP: 6.71 sessions PEP: 7.11 sessions ns 15% did not attend any session *Gender analysis* Not reported

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Table 5.5 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Fidelity** **Attendance** **Gender analysis**
Horowitz et al 2007 [24] USA	*Design* RCT, efficacy *Setting* Suburban-rural high schools serving predominantly working and middle classes *Population* n=380 (53% of possible 600 students that gave informed consent), 54% females Predominantly Caucasian (79%), SES-levels: na Age: Mean 14.43 years (0.70) *Follow-up* "Post test" and 6 months	*Interventions* I1: CBT, n=112 CDI pretest: Mean 8.68 (6.65) *Intensity* Eight weekly 90 minutes group sessions with active guidance and use of an exercise workbook outside the group *Drop out rate* 21% I2: IPT-AST, n=99 CDI pretest: Mean 9.18 (7.37) *Intensity* Two individual pre-sessions and eight weekly 90 minutes group sessions divided into 3 phases *Drop out rate* 15%	*Control* Wellness classes as usual with the ordinary teachers, n=169 CDI pretest: 10.50 (8.18) *Drop out rate* 16%	*CDI* Post intervention CBT: Mean 8.19 (6.86) IPT-AST: Mean 9.47 (7.30) C: Mean 11.78 (9.69) p<0.01 6 month follow-up CBT: Mean 8.23 (7.68) IPT-AST: Mean 9.67 (8.10) C: Mean 10.08 (8.55) ns	Moderate Blinded assessments Powered to detect small main effect sizes on a composite of CDI and CES-D (Cohen's d=0.16) Sub group analysis for high versus low risk students showed no significant effects at follow-up for either of the groups	*Group leader training* Master's level clinical psychology graduate students or PhDs, who had received prior therapy training *Fidelity* Training workshops and weekly supervision meetings. The schools did not permit audiotaping the sessions *Attendance rate* Not described *Gender analysis* No gender differences

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Table 5.5 *continued*

Author Year Reference Country	Study design Setting Population Inclusion criteria Follow-up time	Intervention Population Drop out rate	Control Population Drop out rate	Outcome	Study quality Comments	Fidelity Attendance Gender analysis
Lock et al 2003 [10] Barrett et al 2005 [15] Barrett et al 2006 [7] Australia	*Design* RCT, randomised at school level *Setting* Seven socioeconomically diverse schools in the metropolitan area of Brisbane. Majority of white, working to middle class students. Average SES for Australia *Population* 78.1% of grade 6 students (9–10 years) and 76.9% of grade 9 students (14–16 years) n=977 consented to participate Participants were stratified into "at risk" and "healthy" based on the SCAS (cut off score 42.48) *Follow-up* Post intervention and 12, 24 and 36 months later	*Intervention* FRIENDS for children or for adolescents, n=545 *Drop out rate at 12 months* 19%	*Control* Standard curriculum, n=388 *Drop out rate at 12 months* 31%	*CDI at 12 months* Grade 6 I: 5.18 (5.34) C: 7.86 (6.70) ns Grade 9 I: 9.76 (7.66) C: 9.19 (7.57) ns *SCAS at 12 months* Grade 6 I: 9.53 (0.88) C: 17.07 (2.61) p<0.01 Grade 9 I: 18.54 (13.28) C: 16.40 (11.84) ns *SCAS at 36 months* Grade 6 I: 7.55 (7.73) C: 13.46 (11.74) Grade 9 I: 15.14 (11.45) C: 13.33 (15.11)	Moderate Analysis based on the 737 children that completed the study The 24 and 36 months follow-up was based on 668 students, one school withdrew (n=68) Skewed drop out in the control group. Significantly more children at risk at pre intervention dropped out	*Group leaders* Psychologists or doctoral candidates, extensively trained by one of the authors *Integrity* Group leaders completed a check list *Attendance rate* Very low parent attendance *Gender analysis* 2003 and 2006 studies: significant time x intervention x gender effect on anxiety after 12 and 25 months, but not at 36 months follow-up 2005: No report

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Table 5.5 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Fidelity** **Attendance** **Gender analysis**
Lowry-Webster 2001, 2003 [11,12] Australia	*Design* RCT, randomised at school level *Setting* Seven Catholic schools in the Brisbane metropolitan area. No information on SES *Population* n=594 students in grades 5 to 7. Age: 10–13 years. Stratified in high and low risk based on pre treatment SCAS-score (cut off 42.48) *Follow-up* 12 months	*Intervention* FRIENDS for children, n=432 (234 girls) SCAS at baseline: 28.09 (18.45) CDI at baseline: 9.74 (8.59) CDI for high risk group at baseline: 18.26 (8.44) *Intensity* 10 weekly group sessions, 75 minutes each, part of class room curriculum. Two booster sessions, 1 and 3 months later Parent component: three sessions separate from the child program *Drop out rate* 21%	*Control* Waitlist, n=162 (80 girls) SCAS at baseline: 31.45 (14.76) CDI at baseline: 12.42 (8.18) CDI for high risk group at baseline: 16.65 (5.71) *Drop out rate* 21%	*Self rating, SCAS* I: 16.66 (13.91) C: 27.54 (20.06) p<0.05 *CDI (high risk group)* I: 11.84 (7.26) C: 15.78 (8.72) p<0.05 No significant difference on CDI for the total sample *Risk status* I: 3.8% C: 12.2% p<0.01 *Parental CBCL* No significant differences *Proportion diagnosis free (ADIS-C)* I: 85% C: 31.2% p<0.01	Moderate The control group had significantly higher baseline on RCMAS and CDI	*Group leader* Ordinary teachers trained during a two day workshop *Integrity* Teachers met regularly with the program leader for review. Random video-taping of the sessions was conducted *Attendance rate* Not reported *Gender analysis* No differences between the sexes in treatment outcomes

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Table 5.5 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Fidelity** **Attendance** **Gender analysis**
Pössel et al 2005 [28] Pössel et al 2004 [22] Germany	*Design* RCT, randomisation between classes within schools *Setting* All middle schools in the area of Tubingen invited six schools consented. No information on SES *Population* 8th graders, stratified for initial risk status (minimal, subsyn-dromal depression, clinically relevant depressive symptoms) *Follow-up* Post intervention, 3 months and 6 months	*Intervention* LISA *Participants* n=200 (87 girls) Mean age: 13.82 years (0.71) *CES-D at baseline* Minimal group: 8.54 (2.87) Subsyndromal: 16.64 (4.87) *Intensity* 1.5 hours weekly for 10 weeks. Training was divided per sex *Drop out rate* 6.6% in the I + C groups	*Control* Curriculum as usual *Participants* n=142 (79 girls) Mean age: 14.18 years (0.78) *CES-D at baseline* Minimal group: 8.76 (3.01) Subsyndromal group: 17.10 (4.01) *Drop out rate* 6.6% in the I + C groups	*CES-D at 3 months follow-up (mean (SD)* I: Minimal group: 11.59 (7.59) C: Minimal group: 13.13 (7.55) ns I: Subsyndromal group: 13.85 (7.01) C: Subsyndromal group: 17.17 (8.55) *CES-D at 6 months follow-up* I: Minimal group: 10.59 (8.19) C: Minimal group: 14.29 (8.48) ns I: Subsyndromal group: 13.99 (7.79) C: Subsyndromal group: 18.07 (9.21)	Moderate Completer analysis only Powered to detect effect size d=0.31	*Group leaders* One trainer and one co-trainer per group (psychologists or graduate students) *Fidelity* Video recordings rated by independent observers, 1.5 hour weekly training with a supervisor *Attendance rate* 12% left ahead of schedule due to relocation *Gender analysis* No

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Table 5.5 *continued*

Author Year Reference Country	Study design Setting Population Inclusion criteria Follow-up time	Intervention Population Drop out rate	Control Population Drop out rate	Outcome	Study quality Comments	Fidelity Attendance Gender analysis
Pössel et al 2008 [23] Germany	*Design* RCT, randomisation between classes within schools *Setting* Four middle schools in the area of Tubingen representing economically different regions. No information on SES *Population* Eight graders stratified for sex and level of depressive symptoms (lower, higher) *Follow-up* Post intervention, 3 months and 6 months	*Intervention* LARS&LISA n=163 (72 girls) Mean age: 13.73 years (0.63) *Intensity* 1.5 hours weekly for 10 weeks. Training was divided per sex *Drop out rate* 10%	*Control* Curriculum as usual n=138 (68 girls) Mean age: 13.63 years (0.58) *Drop out rate* 10%	Girls benefitted independently of their level of depressive symptoms at baseline Boys with less severe depressive symptoms at baseline benefitted from the program ($p<0.05$)	Moderate	*Group leaders* One trainer and one co-trainer per group (psychologists or graduate students) *Fidelity* Video recordings rated by independent observers, 1.5 hour weekly training with a supervisor *Attendance rate* Not stated *Gender analysis* Yes, girls benefitted more

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Table 5.5 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Fidelity** **Attendance** **Gender analysis**
Sawyer et al 2009 [25] Australia	*Design* RCT, effectiveness study, randomisation at school level (matched pairs). Concealed allocation *Setting* 25 pairs of secondary schools covering a demographically diverse spectrum matched for SES status and with >100 students each, in 3 Australian states *Population* n=8 873 students were eligible and 5 634 (47% boys) consented Mean age: 13.1 year >80% had at least one parent in full time employment *Follow-up* Assessments annually during the 3 year study. No formal follow-up after end of intervention	*Intervention* BeyondBlue, n=3 037 *Intensity* 3 years. Curriculum intervention: 10 classroom-sessions per year. Program to enhance school climate. Improvement in care pathways. Community Forum *Drop out rate* Year 1: 9,7% Year 2: 20%	*Control* Community forum component only, n=2 597 *Drop out rate* Year 1: 9.5% Year 2: 19.8%	*Total sample* CES-D No significant differences between groups Average scores increased by time *Subgroup with depressive symptoms at baseline* Both groups improved. No differences between groups	Moderate Powered to detect a 5% difference in depressive symptoms ITT-analysis Schools self selected	*Group leaders* Regular teachers with comprehensive training and support from supervisors *Fidelity* Monitored through project facilitators and evaluations from staff and students. Maybe not sufficient *Gender analysis* No differences between girls and boys

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Table 5.5 *continued*

Author Year Reference Country	Study design Setting Population Inclusion criteria Follow-up time	Intervention Population Drop out rate	Control Population Drop out rate	Outcome	Study quality Comments	Fidelity Attendance Gender analysis
Sheffield et al 2006 [20] Australia	*Design* RCT, Cluster, stratified *Setting* 36 schools from two Australian states were selected to broadly represent the Australian population. Two schools dropped out before start of invention *Population* n=2 479 (54% female) Mean age: 14.34 years (0.45) High symptoms students scored in the top 20% on the combined scores of CDI and CES-D n=521 (69% girls) Mean age: 14.34 (0.46) *Follow-up* "Post test" and 12 months	*Intervention* Program with universal and/or indicated components, consistent with PSFL (for indicated component see Table 5.7) n=621 *Intensity (universal part of study)* One session, 45–50 minutes weekly in 8 weeks during one term. Part of school curriculum *Drop out rate* 15%	*Control* Standard curriculum, n=605 *Drop out rate* 14%	*CDI and YSR* There was no significant difference between the groups (measured as CDI and YSR)	Moderate The study was designed to detect small effect sizes (0.10) from the universal prevention	*Group leaders* Ordinary teachers *Fidelity (high)* The mean number of program elements completed. Each session was 85% for the universal program *Attendance rate universal program* >90% *Gender analysis* Not reported

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Table 5.5 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Fidelity** **Attendance** **Gender analysis**
Shochet et al 2001 [16] Australia	*Design* CCT, efficacy *Setting* Ninth grade students in a secondary school in Brisbane, low-middle class SES *Population* The 1996 cohort (n=144) served as the control group The 1997 cohort (n=151) served as the intervention group 260 students (53% girls) consented to participate Mean age: 13.49 (0.54) *Follow-up* 10 months	*Interventions* I1: RAP-A, n=68 *Intensity* Eleven weekly group (8–12 participants) sessions, 40–50 minutes during school class time *Drop out rate* 22% I2: RAP-F, n=56 *Intensity* RAP-A combined with parent education (3 parent group 3 hours sessions at 3 week intervals during RAP-A) *Drop out rate* 9%	*Control* Normal school curriculum, n=118 *Drop out rate* 23.7%	*CDI* Pre test RAP-A: 7.25 (4.96) RAP-F: 7.92 (5.45) C: 8.50 (6.81) "Post test" RAP-A:5.82 (4.80) RAP-F: 5.84 (4.42) C: 8.90 (7.87) Follow-up RAP-A: 5.74 (4.80) RAP-F: 5.84 (4.42) C: 7.82 (7.14) Significant differences between RAP-A and control ($p<0.05$) and between RAP-F and control ($p<0.01$)	Moderate Significant effects for both intervention groups 10 months follow-up – lower levels of depressive symptoms and hopelessness Students (n=4) with learning disabilities and students with signs of depression (n=9) were excluded from the analysis	*Group leaders* Psychologists with 25 hours training *Program integrity* Self rating completed on 57% of sessions. High (approximately 90%) and fidelity *Attendance rate* Adolescents: All attended at least 9/11 sessions Parents: 36% attended at least one session *Gender analysis* No gender effects

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Table 5.5 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Fidelity** **Attendance** **Gender analysis**
Spence et al 2005 [21] Spence et al 2003 [19] Australia	*Design* RCT, randomisation at level of matched pairs of schools *Setting* 16 high schools in Brisbane. Average SES rating representative for Australia *Population* n=1 500 students in eighth grade gave consent (66%) Mean age: 12.82 years (0.54) High symptom students: BDI score ≥13 or endorsed the suicide question on the BDI or endorsed the dysthymia questions *Follow-up* Annually for 4 years	*Intervention* PSFL. n=751 (52.5% female) High symptoms group: n=204 *Intensity* One session, 45–50 minutes weekly in 8 weeks *Drop out rate* 41.3% (4-year follow-up)	*Control* No intervention n=749 (51% females) High symptoms group: n=195 *Drop out rate* 37.5% (4-year follow-up)	*BDI score* The difference between groups at post "test" had vanished at 12 months follow up. Thereafter there were no significant differences between groups neither for the full sample or for the high symptom subgroups *Incidence of depression* No significant differences at any time	Moderate The study was powered to detect a small effect size (0.10)	*Group leader competence* Teachers *Fidelity* High (self-reported by the teachers) *Attendance* Not reported (part of school curriculum) *Gender analysis* Not reported

ADIS-C = Anxiety Disorders Interview Schedule for DSM-IV; BDI = Beck Depression Inventory ; C = Control; CBCL = Child Behaviour Check List; CBT = Cognitive behavioural therapy; CCT = Control Clinical Trial; CDI = Children´s Depression Inventory; CES-D= Center for Epidemiologic Studies Depression Scale; CI = Confidence interval; DICA = Diagnostic Interview for Children and Adolescents; I = Intervention; IPT-AST = Interpersonal Psychotherapy-Adolescent Skills Training; ITT = Intention-to-treat; NUPP-SA = Norwegian Universal Preventive Program for Social Anxiety; PEP = Penn Enhancement Program; PRP = Penn Resilience Program; PSFL = Program Solving for Life; RAP-A = Resourceful Adolescent Program – Adolescents; RAP-F = Resourceful Adolescent Program – Parents; RCMAS = Revised Childrens Manifest Anxiety Scale; RCT = Randomised controlled trial; SCARED = Screen for Child Anxiety Related Emotional Disorders; SCAS = Spence Children's Anxiety Scale; SDQ = Strengths and Difficulties Questionnaire; SES = Socio economic status; SMFQ = The Short Mood and Feelings Questionnaire; SPAI-C = Social Phobia and Anxiety Inventory for Children; YSR = Youth Self Report; ns = Not significant

Table 5.6 *Selective prevention programs.*

Author Year Reference Country	**Study design and setting Population Inclusion and exclusion criteria Follow-up time**	**Intervention Participants Program description Drop out rate**	**Control Participants Drop out rate**	**Outcome**	**Study quality Comments**	**Fidelity Attendance Gender analysis**
Cardemil et al 2002 [29] Cardemil et al 2007 [30] USA	*Design* RCT, randomised at student level *Setting* Two middle schools located in low-income urban parts of Philadelphia. One school had 77% Latino children, the other 99% African-American children n=1 805 *Population* Students in grades 5–8. 173 children gave consent and 168 were Latino or African-Americans (84 girls). Mean age: 11.12 years (0.94) *Follow-up time* Postintervention, 3, 6, 12 and 24 months later	*Intervention* PRP Latino: n=25 African-American: n=50 *Intensity* Weekly 90 minutes sessions for 12 weeks plus homework. Content was adapted for low income minority populations *Drop out rate* At 24 months follow-up: 17%	*Control* Normal curriculum Latino: n=28 African-American: n=65 *Drop out rate* At 24 months follow-up: 42%	*CDI for Hispanic sample* The PRP group CDI had decreased at postintervention but not the control group The difference was maintained during 24 months follow-up ($p<0.001$). Children that were symptomatic at baseline benefitted the most *CDI for African-American sample* Both PRP and control groups improved during the intervention and their scores remained similar during 24 months follow-up	Moderate Results were based on ITT-analysis	*Group leaders* Master's level graduate student, assisted by an undergraduate psychology student. All group leaders received at least 20 hours training *Integrity* Biweekly supervision, which consisted of evaluation of audiotapes to ensure adherence and assistance in problem solving *Attendance* Analysis showed marginal correlation between attendance rate and CDI score up to 12 months follow-up. The difference was not significant at 2 years follow-up *Gender analysis* Not reported

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Table 5.6 *continued*

Author **Year** **Reference** **Country**	**Study design and setting** **Population** **Inclusion and exclusion criteria** **Follow-up time**	**Intervention** **Participants** **Program description** **Drop out rate**	**Control** **Participants** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Fidelity** **Attendance** **Gender analysis**
Roberts CM et al 2009, [31] Australia	*Design* RCT effectiveness study, randomised at level of matched pairs of schools *Setting* Random sample of public elementary schools in Western Australia, serving the lowest decile of SES n=12 schools *Population* Seventh grade students. 88% consented to participate Mean age: 11.99 (SD=0.33) *Follow-up time* 6 and 18 months postintervention	*Intervention* Aussie Optimism Program (social skills and optimistic thinking skills), n=274 (55% girls) *Intensity* Social skills training: 10 sessions (60 minutes) for the whole class during school time Optimistic thinking skills training: 10 sessions (60 minutes) during school time One module per week in 20 weeks *Drop out rate at follow up* 29%	*Control* Health education relating to self-management and interpersonal skills, n=222 (53% girls) *Intensity* 20 lessons with similar learning outcomes as in the intervention group *Drop out rate at follow-up* 20% (significant difference compared to intervention group)	*CDI at 6 and 18 months* No significant differences *RCMAS at 6 and 18 months* No significant differences *Incidence of depression* No significant differences The means for both groups declined by time	Moderate Students who dropped out had higher pretest symptoms Skewed at baseline, higher level of symptoms in the intervention group	*Group leader competence* Ten group teachers had 16 hours of training plus eight 60 minute coaching sessions The control group teachers had 30 minutes training *Program integrity* High. Assessed form teacher logbooks, student workbook samples and blind independent observations of three randomly selected lessons per teacher *Attendance rate* High *Gender analysis* Not reported

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Table 5.6 *continued*

Author **Year** **Reference** **Country**	**Study design and setting** **Population** **Inclusion and exclusion criteria** **Follow-up time**	**Intervention** **Participants** **Program description** **Drop out rate**	**Control** **Participants** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Fidelity** **Attendance** **Gender analysis**
Sandler et al 2003 [32] USA	RCT *Setting* Phoenix metropolitan area *Population* 44% of 432 eligible families consented 67% non Hispanic Caucasians. Mean age of children: 1.4 years. Median income: 30 000–35 000 USD per year *Inclusion criteria* Death of a parent 4–30 months earlier. Child age 8–16 years *Exclusion criteria* Use of mental health service or bereavement service. Suicidal intent or current diagnosis of major depression in child or caregiver. Child diagnosed with ODD, CD or ADHD *Follow-up* 11 months after end of intervention	*Intervention* FBP, n=90 families with 135 children *Intensity* 12 sessions, 2 hours each for caregivers and children separately. Two individual family meetings to review their use of program skills *Components* Techniques that had been used in program for children of divorce [60] *Drop out rate* 13% Improve relations in the family and promote the child's resilience	*Control condition* Self studies (one booklet per month during 3 months), n=66 families with 109 children *Drop out rate* 9%	*CDI and RCMAS composite* Girls with higher baseline score benefitted more (Cohen's $d+_{1SD}=0.61$) Boys: No significant effects Age of the child did not influence the results *CBCL internalizing subscale* Girls: Cohen's d=0.24 ($p<0.05$) Boys: No significant effects	Moderate Randomisation by computer at the level of family, ITT-analysis	*Competence of staff* Two clinicians with master's degrees who received 40 hours of training plus 2 hours training per week during the program *Fidelity* 89%, rated by two independent raters from videotapes of five sessions *Attendance rate, FBP* Caregivers: Average 86% Children: Average 88% of sessions. Self study Caregivers: 42% had read at least half of the books. 38% of adolescents and 71% of children had read at least half of the books

ADHD = Attention Deficit Hyperactivity Disorder; CBCL = Child Behaviour Check List; CD = Conduct Disorder; CDI = Children's Depression Inventory; FBP = Family Bereavement program; ITT = Intention-to-treat; ODD = Oppositional Defiant Disorder; PRP = Penn Resiliance Program; RCMAS = Revised Children's Manifest Anxiety Scale; RCT = Randomiserad controlled trial; SD = Standard deviation; SES = Socio economic status

Table 5.7 *Indicated prevention programs to prevent depression and anxiety.*

Author Year Reference Country	**Study design Setting Population Inclusion criteria Follow-up time**	**Intervention Population Drop out rate**	**Control Population Drop out rate**	**Outcome**	**Study quality Comments**	**Competence of staff Fidelity Attendance Gender analysis**
Beardslee et al 2007 [43] USA Beardslee et al 2003 [42] USA	RCT *Setting* Boston. A mixture of patients from a HMO (53%), clinician referrals and self referrals Mainly white, middle class. All had health insurance *Population* Families with children 8–15 years where at least one parent had a mood disorder the last 18 months *Exclusion criteria* Parents in family therapy. Parents with drug abuse, schizophrenia. Children had been treated for mood disorder *Follow-up time* Assessment pre, post, every 9–12 months (T3–T6) up to 4.5 years	I: Clinician-facilitated, n=46 families and 60 children *Intensity* 6–10 sessions (mean 6.7; SD=1.3) plus phone contacts/refresher meetings every 6–9 months. Sessions directed to parents only, child only and family. The psycho-educational material was linked to the individuals' life experiences *Drop out rate (4.5 years)* 18% children (14% adults)	C: Lectures, n=59 families and 78 children *Intensity* 2 lectures (parents), not relating to family situation. Consultation as requested by parents *Drop out rate (4.5 years)* 9% children (19% parents)	*YSR/YASR rating scale* Both groups improved by time No significant differences between the interventions	Moderate Intention-to-treat analysis, based on 156 youths in intervention group and 161 controls	*Competence of staff* Facilitated intervention: Licensed social workers or clinical psychologists trained in the method. Lectures: One of the authors *Attendance* High Fidelity High (95%) *Gender analysis* Girls scored on average 3.7 points higher on YSR than boys did

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Table 5.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance** **Gender analysis**
Clarke et al 2001 [39] USA	*Design* RCT *Setting* Members in Kaiser Permanente HMO in Oregon *Population* Adolescents in 2 995 families. Parents were identified to have depression via the HMO database. 481 families consented and participated in baseline interview. Predominantly white, employed parents *Inclusion criteria* Adolescents, 13–18 years, with subdiagnostic levels of depressive symptoms (CES-D >24) *Follow-up time* 14 and 24 months	*Intervention* CWS with parent component, n=45 CES-D at baseline: 25.2 (8.7) *Intensity* Adolescents: 15 group sessions, 1 hour each Parents: 3 information meetings in the beginning, middle and end of the intervention *Drop out rate at 24 months* 17% for the total sample. No systematic bias in drop out	*Control* Usual care, n=49 CES-D at baseline: 23.8 (10.3)	*CES-D at 14 months* I: 15.1 (10.0) C: 21.5 (13.6) p=0.006 *CES-D at 24 months* I: 19.5 (9.8) C: 19.9 (10.4) ns *CBCL depression* No significant differences *Incidence of episodes of MDD* At 14 months I: 9.3% C: 28.8% p=0.003 At 24 months I: 23% C: 34% “Still significant”	Moderate Blinded evaluators ITT analysis	*Competence of staff* Therapist with a master’s degree, who was trained in the approach *Integrity* Mean therapist compliance was 95.9% (audiotaping and rating of 2–3 sessions) *Attendance rate* Average 9.5 sessions and 46% of the homework assignments *Dose response* No significant dose effects could be detected *Gender analysis* Not reported

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Table 5.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance** **Gender analysis**
Clarke et al 1995 [38] USA	*Design* RCT *Setting* Three suburban schools in USA *Population* Adolescents in grade 9 and 10, screened for elevated depressed symptoms. n=1 652. n=172 (105 girls) fulfilled criteria and consented Mean age: 15.3 years (0.7) Predominantly white lower-middle class students *Inclusion criteria* CES-D >24 *Exclusion criteria* Current DSM-III affective disorder *Follow-up time* Post, 6 months and 12 months	*Intervention* CWS, n=76 CES-D at baseline: 24.29 (9.6) *Intensity* Three 45 minutes sessions per week for five weeks *Drop out rate at 12 months* 27.6%	*Control* Care as usual, n=74 CES-D at baseline: 21.88 (9.2) *Drop out rate at 12 months* 5.4%	*CES-D at postintervention* I: 17.88 (9.3) C: 21.67 (12.3) p<0.05 *At 6 months follow-up* I: 19.35 (10.0) C: 18.55 (11.2) ns *At 12 months follow-up* I: 18.40 (9.3) C: 18.34 (11.0) ns No significant differences were found for HDRS or GAF *Cumulative incidence of MDD or dysthymia at 12 months* I: 14.5% C: 25.7% p<0.05	Moderate Skewed drop out rate. More participants in the I-group dropped out (p<0.001). The remaining subjects reported higher depression scale scores than those who were lost Completers analysis only (125 participants)	*Competence of staff* School psychologists and counselors. 40 hours of training *Integrity* 93.9% compliance with the manual (range 77 to 100%) *Attendance* Average 72% (SD 22%) *Gender analysis* Yes

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Table 5.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance** **Gender analysis**
Dadds et al 1997 [9] Dadds et al 1999 [8] Australia	*Design* RCT, randomised at school level *Setting* Eight primary schools in Brisbane. Schools were selected to represent the three levels of SES n=1 786 children in grades 3 to 7 (7 to 14 years) *Population* At-risk children identified through a four step screening phase. Mean age: 9.4 years *Inclusion criteria* Met criteria for a DSM-IV anxiety disorder with a severity rating ≤5 or had features of an anxiety disorder or a nonspecific sensitivity *Exclusion criteria* Primarily externalizing behaviours *Follow-up time* "Post test", 12 months and 24 months	*Intervention* The Coping Koala, n=61 Proportion with anxiety diagnosis: 68.9% *Intensity* Children: 10 group sessions, once a week, 1–2 hours each. Parents: 3 sessions *Drop out rate* 6 months: 3.2% 24 months: 22.3%	C: Standard curriculum, n=67 Proportion with anxiety diagnosis: 79.1% *Drop out rate* 6 months: 4.5% 24 months: 22.3%	*Proportion meeting criteria for anxiety* At 6 months (ADIS-P) I: 27% C: 56% p<0.001 At 12 months I: 37% C: 42% At 24 months I: 20% C: 39% p<0.05 *Proportion of children that were diagnosis free at preintervention and had an anxiety diagnosis* At 6 months I: 54% C: 16% p<0.05 At 24 months I: Approximately 10% C: Approximately 17%	*Study quality* Moderate Clinicians conducting the ADIS-P were blinded	*Competence of staff* Clinical psychologists trained in delivering the program *Integrity* Therapists met with the program leaders to review and discuss issues *Attendance rates* Children: 80% Mothers: 58% Fathers: 30% *Gender analysis* No significant gender-related effects

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Table 5.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance** **Gender analysis**
Garber et al 2009 [40] USA	*Design* RCT *Setting* Four cities n=2 494 families recruited from several sources (eg HMO) *Population* n=316 (59% girls) Mean age: 14.8 years (1.4). Predominantly white middle-class (25% ethnical, racial minority) *Inclusion criteria* 1) At least 1 parent with a history of major depression or dysthymia 2) Current sub-syndromal depression (>20 CES-D) or prior episode of depressive disorder *Follow-up* 9 months	*Intervention* CBT prevention program, n=159 CES-D at baseline: 15.5 (9.4) *Intensity* 8 weekly sessions, 90 minutes followed by 6 monthly booster sessions Parent meetings week 1 and 8 *Drop out rate at 9 months* 11.3%	*Control* Care as usual, n=157 CES-D at baseline: 15.8 (10.0) *Drop out rate at 9 months* 8%	*CDRS* No difference between groups *Incidence of depression at 9 months* I: 21.4% C: 32.7% p=0.03 *CES-D at 9 months* I: 10.9 (8.4) C: 13.5 (8.3) p=0.03	Moderate Methodologically high but too short follow-up for high quality ITT-analysis Blinded evaluation Inter rater reliability level: κ=0.80 required before start	*Competence of staff* Therapists with at least a master's degree in a mental health field, trained and supervised by an experienced clinician *Integrity* All sessions were audio-taped and 12% of the sessions were randomly chosen for evaluation. Therapist compliance ranged from 88 to 96% *Attendance rate* Adolescents: Average 6.5 acute sessions and 3.8 booster sessions Parents: >70% attended the sessions *Gender analysis* Not reported

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Table 5.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance** **Gender analysis**
Hunt et al 2009 [37] Australia	*Design* RCT, randomised at school level, effectiveness trial *Setting* Metropolitan area, 19 secondary (catholic) schools *Population* n=260 after screening of 1 120 students (43% girls) and parental consent. Mean age: 12 years *Inclusion criteria* At-risk for developing anxiety disorder, CDI cut-off >11. Teacher – nominating of prominent anxious students. English speaking	*Intervention* FRIENDS with parent component, n=136 Baseline CDI: 14.3 (8.2) Baseline RCMAS: 15.9 (5.0) *Intensity* 10 weekly 50 minutes group sessions and two booster sessions after 1 and 3 months (including parent sessions). Sessions were run during school hours *Drop out rate* 2 years: 18.4% 4 years: 24.3%	*Control* No intervention, n=124 Baseline CDI: 12.6 (5.0) Baseline RCMAS: 14.5 (5.6) *Drop out rate* 2 years: 5.6% 4 years: 30.6%	*CDI at 2 years* I: 11.6 (8.3) C: 11.4 (8.3) ns *CDI at 4 years* I: 10.2 (8.1) C: 10.8 (8.5) ns *RCMAS at 2 years* I: 11.3 (6.8) C: 11.3 (6.1) ns *RCMAS at 4 years* I: 10.2 (6.5) C: 10.9 (6.5) ns *Cumulative incidence of anxiety or mood disorder at 4 years* I: 34.2% C: 22.1% ns	Moderate Treatment integrity data incomplete CIDI interviewer blind to condition	*Competence of staff* School counsellor assisted by a support teacher, both attending a 2 day training workshop *Fidelity* Moderate/high *Attendance rate* Parent participation is unclear *Gender analysis* Not reported

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Table 5.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance** **Gender analysis**
Jaycox et al 1994 [3] USA Gillham et al 1995 [36] Gillham et al 1999 [35]	*Design* Prospective 5-year efficacy study, RCT randomisation within matched pairs of children *Setting* Schools in two districts in sub-urban Philadelphia. >90% of parents had high school or college education *Population* Children in 5th and 6th grades (n=1 600). Informed consent: n=262 *Inclusion criteria* At risk (depres-sive symptoms and parental conflict). All children with a z-score CDI + CPQ above >0.50 were invited to partici-pate. Some children with lower score were also invited. At risk: n=149 *Follow-up* Every 6 months up to 36 months is published	*Intervention* PPP, n=69 Girls: 34 Boys: 35 Mean age: 11.36 years 79.7% Caucasian *Intensity* Group sessions once a week for 1.5 hours. 12 weeks, the program included homework *Drop out rate* 6 months: 20% 24 months: 28% 36 months: 42%	*Controls* Waitlist, n=24 Non-participation, group: n=50 The two groups were combined Girls: 32 Boys: 42 Mean age: 11.5 years 85.3% Caucasian *Drop out rate* 6 months: 15% 24 months: 33% 36 months: 36% (combined control group) The control group had significantly higher levels of education and family income	*CDI* (Mean, SD) No significant differences between groups at ”post test” and 6 months Significantly lower levels of CDI in the intervention group at 18 and 24 months. The significance disappeared at 30 and 36 months *Proportion of children with CDI >15 at 6 months follow-up* I: 14% C: 25% *Parents (CBCL at 6 months)* No treatment effect when initial level of problems and school group effects were controlled (drop out rate 60%)	Moderate No ITT analysis Risk for self-selection bias	*Competence of staff* The intervention was conducted by doctoral students in clinical psychology *Fidelity* Detailed training manual, pilot-testing and supervising *Gender aspects* No main gender related effects

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Table 5.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance** **Gender analysis**
Roberts et al 2003 [34] Roberts et al 2004 [33] Australia	*Design* RCT, cluster randomisation, matched pairs of schools, effectiveness *Setting* 18 primary rural schools in Western Australia, selected to be representative for the region *Population* n=720. Seventh grades whereof 369 consented to screening *Inclusion criteria* The 13 children with the highest CDI-scores in each class were invited to participate. In classes with <13 students all were invited *Follow-up* "Post test", 6, 18 and 30 months	*Intervention* PPP adapted for Australian language *Participants* n=90 (51% girls) Age: 11.91 years (0.34) Ethnicity: 70% Australian *Intensity* 12 sessions run by educated psychologists or nurses as facilitators *Drop out rate* 18 months: 16.5% 30 months: 55%	*Control* School as usual + symptom monitoring (parents were given advice for children who were above cut off for depression or anxiety) n=99 (49% girls) Ethnicity: 79% Australian *Drop out rate* 18 months: 14% 30 months: 49%	*CDI* Both groups improved. There were no differences between groups at any of the measurements *RCMAS* Both groups improved. PPP was significantly more effective than the control ($p<0.01$) at "post test", 6 and 30 months. There was no difference between groups at 18 months *Proportion that received mental health help during follow-up* I: 9.3% C: 10.4% ns *CBCL Internalising SCORE* Both groups improved over time. PPP was more effective than the control at "post test" but not at follow up ($p<0.05$)	Moderate for 18 months follow-up Low for 30 months follow-up	*Competence of staff* Group facilitators were school psychologists and nurses who had received 40 hours training from the PPP developers *Program integrity* High (two independent raters reviewed sessions audiotapes) *Attendance rate* High (87–99%) *Gender analysis* Not reported

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Table 5.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance** **Gender analysis**
Sheffield et al 2006 [20] Australia	*Design* RCT, Cluster, stratified (also see Table 5.5 for universal prevention) *Setting* 36 schools from 2 Australian states were selected to broadly represent the Australian population. Two schools dropped out before start of invention *Population* n=2 479 (54% female) High symptoms students scored in the top 20% on the combined scores of CDI and CES-D. n=521 (69% girls) Mean age: 14.34 years (0.46) *Follow-up* "Post test" and 12 months	*Intervention* Program consistent with PSFL, part of school curriculum, n=246 high risk population *Intensity of indicated part of program* I1: Indicated prevention One session (90 min) weekly for eight weeks, in small groups, n=134 I2: Universal + indicated: Combined I1 and universal program over two terms, n=112 *Drop out rate* 15%	*Control* Standard curriculum, n=149 high risk population *Drop out rate* 19%	*Effect on high-risk population* There was no significant difference between any of the four groups (measured as CDI and YSR)	Moderate The study was powered to detect medium effect sizes for the indicated prevention	*Competence of staff* Ordinary teachers *Fidelity (high)* The mean number of program elements completed each session was 92% for the indicated program *Attendance rate* 75% *Gender analysis* Not reported

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Table 5.7 *continued*

Author **Year** **Reference** **Country**	**Study design** **Setting** **Population** **Inclusion criteria** **Follow-up time**	**Intervention** **Population** **Drop out rate**	**Control** **Population** **Drop out rate**	**Outcome**	**Study quality** **Comments**	**Competence of staff** **Fidelity** **Attendance** **Gender analysis**
Stice et al 2008 [41] USA	*Design* RCT *Setting* Recruitment from 6 high-schools. Setting: unclear *Population* n=341 (44% boys) Mean age: 15.6 years (SD 1.2) Mixed ethnical (46% Caucasian, 33% Hispanics, 21% other) and SES composition (26% high school or less, 53% college or more), representative of the population *Inclusion criteria* CES-D >20 *Exclusion criteria* Adolescents showing symptoms of major depression at interview *Follow-up* 6 months	*Interventions* I1: CB (adapted from Clarke 1995) [38]. Six weekly 1 hour-sessions, n=89 Drop out rate: 8 (9%) I2: Supportive-expressive (GSE). Six weekly 1 hour-sessions, n=88 Drop out rate: 6 (7%) I3: Bibliotherapy. Self-help book, n=80 Drop out rate: 4 (5%)	*Control* Assessment only, n=84 Drop out rate: 7 (8.3%)	*Self report (BDI) at follow-up* I1: Mean: 12.18 (SD 9.56) I2: Mean: 13.10 (SD 10.25) I3: Mean: 15.73 (SD 10.36) Control: Mean: 17.22 (SD 10.93) Significant differences between control group and active treatments: I1: p=0.002 I2: p=0.021 I3: p=0.036	Moderate	*Competence of staff* CB and supportive-expressive intervention: Clinical graduate students and assisting undergaduate *Attendance rate* 55% *Gender analysis* No

ADIS-P = Anxiety Disorder Interview Schedule for Children Parent version; BDI = Beck Depression Inventory; C = Control; CBCL = Children's Behaviour Check List; CBT = Cognitive behavioural therapy; CDI = Children's Depression Inventory; CDRS = Children's Depression rating scale; CES-D = Center for Epidemiologic Studies Depression Scale; CIDI = Composite International Diagnostic Interview; CPQ = Children's Persionality Questionnare; CWS = Coping with Stress; DSM = Diagnostic and Statistical Manual of Mental Disorders; GAF = Global Assessment of functioning; GSE = Supportive expressive group treatment; HMO = Health Maintenance Organization; I = Intervention; ITT = Intention-to-treat; MDD = Major depressive disorder; PPP = Penn Prevention Program; PSFL = Program Solving for Life; RCMAS = Revised Children's Manifest Anxiety Scale; RCT = Randomised controlled trial; SD = Standard Deviation; SES = Socio economic status; YASR = Young Adult Self Report; YSR = Youth Self Report; ns = Not significant

Tabell 5.8 *Sammanställning av systematiska översikter, internaliserade problem.*

Författare År, referens Land	Program, urval och antal inkluderade studier	Inklusionskriterier	Kvalitetskriterier	Resultat ”post test” för effekter på barnet	Långtidseffekter	Kommentarer
Kavanagh et al 2009 [61] England	Skolbaserade KBT-baserade program för att förebygga depression, ångest och självmordsbeteende 17 RCT	Ålder: 11–19 år	Nej	Depressiva symtom SMD –0,16 (95% KI –0,26 till –0,05)	Universella: Ingen effekt efter 4 veckor Indikerade: SMD –0,25 (95% KI –0,42 till –0,08) efter 6 månader	4/13 inkluderade studier om depression ingick i vår granskning och hade medel-hög kvalitet
Cuijpers et al 2008 [62] Nederländerna	Prevention av depression 1966–juni 2007 MEDLINE, PsycInfo, EMBASE, Cochrane Central Register Digital dissertations Inga språkbegränsningar 19 RCT	Alla åldrar Alla preventionsnivåer Standardiserad diagnostisk intervju vid baseline för att utesluta individer som uppfyllde kriterier för depression	Enligt Cochranes handbok (randomisering, blindning, bortfall)	*Incidence risk ratio* Ungdomar (9 studier) IRR 0,77 (95% KI 0,57 till 1,04) Skola (6 studier) IRR 0,83 (95% KI 0,61 till 1,12)	Effekterna minskade med tiden	Effekterna sammanslagna för alla preventionsnivåer
Stice et al 2009 [52] USA	Prevention av depression 1980–2008 PsychInfo, Medline, Dissertation abstracts 46 kontrollerade studier	Barn och ungdom	Ej rapporterat	r=0,14 (medelvärde)	r=0,11 (medelvärde)	

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Tabell 5.8 *fortsättning*

Författare År, referens Land	Program, urval och antal inkluderade studier	Inklusionskriterier	Kvalitetskriterier	Resultat ”post test” för effekter på barnet	Långtidseffekter	Kommentarer
Merry et al 2004 [63] Nya Zeeland	Prevention av depression 1966–2002 Medline, PsycInfo, ERIC, EmBase 21 RCT varav 13 hade data som kunde poolas i metaanalys	Barn och ungdom, 5–19 år Ingen diagnos på depression vid inklusion	Moncrieffs kriterier. Känslighetsanalys gjordes med enbart studier som hade hög eller måttlig kvalitet	*Depressions-score* Universell SMD –0,21 (95% KI –0,48 till 0,06) ”Targeted” SMD –0,26 (95% KI –0,40 till –0,13) *Diagnos på depression* Universella Riskminskning –0,08 (95% KI –0,15 till –0,01) Selektiva + indikerade Riskminskning –0,13 (95% KI –0,22 till –0,05)	Ingen effekt på depressionspoäng eller diagnos	Inget krav på uppföljning
Calear et al 2009, [57] Australien	Skolbaserade program för att förebygga depression Medline, PsycInfo, Cochrane Library 1998–2008 ”Peer – reviewed” tidskrifter på engelska enbart 42 RCT uppfyllde inklusionskriterierna varav 29 hade någon form av uppföljning	Barn och ungdom, 5–19 år Minska eller förebygga symtom på depression	Jadads kriterier (randomisering, blindning, bortfall)	*Universella program* 9/23 studier visade effekt: Cohen’s d=0,30–1,40 medan 14/23 inte såg effekt *Indikerade program* 6/10 visade effekt: Cohen’s d=0,25–1,35) 4/10 fann ingen signifikant effekt	*Universella program* 4/16 studier såg effekt Cohen’s d=0,21–0,66 12/16 såg ingen signifikant effekt (–0,05–0,73) *Indikerade program* 6/9 rapporterade signifikanta effekter Cohen’s d=0,33–1,00	Långtidseffekter räknat från 3 månader Effektstorlekarna är inte rättvisande eftersom de enbart beräknas på studier med positivt resultat Studierna med störst effekt hade låg kvalitet i SBU-granskningen

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Tabell 5.8 *fortsättning*

Författare År, referens Land	Program, urval och antal inkluderade studier	Inklusionskriterier	Kvalitetskriterier	Resultat ”post test” för effekter på barnet	Långtidseffekter	Kommentarer
Neil et al 2009 [58] Australien	Skolbaserade program för prevention eller tidig behandling av ångest Medline, PsycInfo, Cochrane Library 1987–2008 ”Peer–reviewed” engelskspråkig tidskrift 27 RCT uppfyllde inklusionskriterierna varav 12 hade någon form av uppföljning	Barn och ungdom, 5–19 år Minskad symtom och incidens av ångest	Jadads kriterier	*Universella program* 11/16 studier visade effekt, Cohen’s d varierade mellan 0,31–1,37 *Indikerade program* 4/8 visade effekt; Cohen’s d varierade mellan 0,20–0,76	*Universella program* 6/16 studier hade uppföljning och 3 visade effekt, Cohen’s d varierade mellan 0,22–0,70 *Indikerade program* 6/8 hade uppföljning och 5 visade effekt, Cohen’s d varierade mellan 0,22–0,70	Långtidseffekter räknade från en månad Effektstorlekarna är inte rättvisande eftersom de enbart beräknas på studier med positivt resultat

IRR = Incidence risk ratio; RCT = Randomised controlled trial; SMD = Standard Mean difference