

Chapter 2

Developmental and Social Prevention

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The main aim of this chapter is to assess systematic reviews of the effects of developmental and social prevention programs (hereafter shortened to developmental prevention programs) on offending outcomes. These programs are defined as community-based programs designed to prevent antisocial behavior, targeted on children and adolescents up to age 18, and aiming to change individual, family, or school risk factors. These programs can be distinguished from situational or physical prevention programs and from criminal justice prevention based on deterrence, rehabilitation, or incapacitation.

Over the past few decades, numerous developmental prevention programs have been implemented in families, kindergartens, schools, family education centers, child guidance clinics, and other contexts to reduce risk factors and strengthen protective factors in child development. *Universal* prevention programs target the whole population, or an age cohort, a neighborhood or a school, irrespective of who is at risk or not. *Selective* prevention includes programs that address specific risk groups such as single parent, lower-class families, or minority families in deprived neighborhoods. *Indicated* prevention programs address families whose children already reveal behavior problems. As with primary, secondary, and tertiary prevention, the categories partially overlap. For example, some “prevention” programs contain treatment for high-risk children and—as in public health care—universal prevention also serves some children or families who are at risk. In principle,

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universal prevention approaches are more easily implemented because they do not require risk assessment and selection and avoid potential problems of stigmatization. However, for financial reasons, universal programs must be less intensive and thus may not sufficiently meet the needs of high-risk groups.

Many programs focus on individual children or youth by providing training in social competencies, interpersonal problem solving, and other behavioral or cognitive skills. Other programs concentrate on the family by providing training in parenting skills, counseling on child rearing, or coping with family stress. School-oriented programs address issues of school and class climate, the origins of bullying, and authoritative teacher behavior. However, an increasing number of programs are multimodal and contain program components for children, parents, schools, and other social contexts such as peers or neighborhood (e.g. Hawkins, Brown, Oesterle, Arthur, Abbott, & Catalano, 2008; Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 2009). Developmental prevention programs also vary in numerous other characteristics (see, e.g. Farrington & Welsh, 2007; Lösel & Bender, 2012):

- Breadth of targets, e.g. general promotion of child development, focus on social behavior, or prevention of specific behavior problems such as violence;
- Children's age at intervention, e.g. pregnancy/postnatal, early or late childhood, and adolescence;
- Degree of program structure, e.g. unstructured counseling, semi-structured guidance, or detailed manuals for training in skills;
- Recruitment of participants, e.g. proactive contact with at-risk families, general offers to schools and families, and mandatory intervention for juveniles or families at risk;
- Format of delivery, e.g. individual counseling, group teaching, mixed approaches;
- Intensity and dosage, e.g. a handful of sessions, regular contact over a few months, long-lasting implementation over several years;
- Theoretical foundation, e.g. based on social learning, attachment theory, psychodynamic concepts, or an eclectic integration of different approaches; and
- Evaluation, e.g. no systematic evaluation at all, some methodologically weak process and/or outcome data, controlled evaluation studies, randomized controlled trials, and multiple replications.

Because of these and other issues the field of developmental prevention is extremely varied, and it is difficult to draw consistent conclusions across all areas. Therefore, we had to restrict our inclusion criteria and we excluded reports that may have some criminological relevance (e.g. on child externalizing behavior), but were not directly addressing a criminological topic.

The inclusion criteria for our review were as follows:

1. The report describes a systematic review and/or a meta-analysis. A systematic review has explicit inclusion/exclusion criteria and explicit information about searches that were carried out. A meta-analysis specifies effect sizes and reports a summary effect size. Systematic reviews that yielded no includable studies—so-called “empty” reviews (e.g. the Campbell Collaboration reviews by Fisher, Montgomery, & Gardner, 2008a, b)—were excluded.

2. The report summarizes individual, family, or school programs targeted on children and adolescents up to age 18 and implemented in the community. We classified programs that targeted individual risk factors in schools as school-based programs. In the interests of including more reviews, this criterion was relaxed to include high-quality reviews targeting adolescents aged between 10 and 21 (Wilson & Lipsey, 2000; Wilson, Lipsey, & Soydan, 2003a). Clinic and institutional programs are excluded, but again the criterion was relaxed to include high-quality reviews including a minority of clinic or institutional programs (Sukhodolsky, Kassinove, & Gorman, 2004; Wilson et al., 2003a). Mentoring programs are excluded because they are included in Chap. 3.
3. The report summarizes effects on outcomes of delinquency, offending, violence, aggression, or bullying. Originally we included antisocial behavior, conduct disorder (CD), and conduct problems, but the number of reviews on these topics was too many to include. (Many reviews on these topics are listed in Table 2.1 as excluded reports.) In the interests of including more reviews, we included high-quality reviews that primarily focused on one or more of our outcomes but also included studies of other (disruptive or antisocial behavior) outcomes (Mytton, DiGuseppi, Gough, Taylor, & Logan, 2002; Park-Higgerson, Perumean-Chaney, Bartolucci, Grimley, & Singh, 2008; Wilson & Lipsey, 2000, 2007). We excluded reports focusing on substance abuse because these are included in Chap. 8.
4. We excluded earlier reviews that were superseded by later reviews (by the same authors), reviews not published in English, and reviews that did not report outcomes separately (e.g. for juveniles vs. adults, or for offending vs. antisocial behavior). We also excluded reviews of juvenile correctional treatment (see e.g. Garrett, 1985; Lipsey, 2009; Walker, McGovern, Poey, & Otis, 2008); reviews of adult correctional treatment are included in Chap. 7.

We searched Google Scholar and PsycINFO up to the end of 2012 using the following keywords: systematic review/meta-analysis, prevention, and delinquen*/offend*/violen*/aggress*/bully*.

Table 2.2 summarizes key features of included reviews, while Table 2.3 summarizes key results of included reviews. Table 2.1 summarizes some reviews that were screened and obtained but excluded, together with reasons for their exclusion. The most common reason was that they did not provide specific information about one of our outcomes of interest. Table 2.4 summarizes weighted mean effect sizes in each review, and their associated confidence intervals (CI). The aim was to convert each effect size into an odds ratio (OR), with OR values greater than 1, indicating an effective program. Where there were two or more effect sizes, a summary effect size was calculated by inversely weighting each effect size by its variance. This is based on the assumption of independence of effect sizes, which may not be true. To the extent that effect sizes are not independent, CI would be wider.

Since 2012, there have been additional systematic reviews of developmental prevention programs. For example, Evans, Fraser, & Cotter (2014) published a review of antibullying programs, and Leen, Sorbring, Mawer, Holdsworth, Helsing, & Bowen (2013) published a review of interventions for adolescent dating violence.

Table 2.1 Excluded reviews

Researchers (Date)	Intervention	Reason for exclusion
Babcock, Green, & Robie (2004)	Cognitive-behavioral therapy for domestic violence	Studies of adults
Baldry and Farrington (2007)	Antibullying programs in schools	Earlier version of Farrington and Tlofi (2009)
Barlow and Parsons (2009)	Parent training	Outcome measures were child problem behaviors
Barlow, Parsons, & Stewart-Brown (2005)	Parent training	Summarizes Barlow and Parsons (2009)
Beelmann, Pflingsten, & Lösel (1994)	Social competence training (SCT)	Outcome measures were social adjustment, social-cognitive skills, social interaction skills, etc.
Bennett and Gibbons (2000)	Cognitive-behavioral interventions	Outcome measures were antisocial behaviors
Brestan and Eyberg (1998)	Psychosocial treatment for conduct disorder	No relevant outcome measures
Cooper, Charlton, Valentine, & Muhlenbruck (2000)	Summer school prevention programs	No program with the stated goal of preventing juvenile delinquency was found. Programs focused on remedial or accelerated learning outcomes or on a positive impact on the knowledge and skills of participants
De Graaf, Speetjens, Smit, De Wolff, & Tavecchio (2008)	Triple P parent training program	Outcome measures were child problem behaviors
DiGiuseppe and Tafrate (2003)	Anger treatment	Studies of adults
Dretzke, Davenport, Frew, Barlow, Stewart-Brown, Bayliss, Taylor, Sandercock, & Hyde (2009)	Parenting programs for conduct disorder	No relevant outcome measures
Durlak, Fuhrman, & Lampman (1991)	Cognitive-behavior therapy	No relevant outcome measures
Durlak, Weissberg, & Pachan (2010)	After-school programs	Outcome measures were child problem behaviors (and other measures such as school performance)
Durlak, Weissberg, Dymnicki, Taylor, & Schellinger (2011)	Social and emotional learning (SEL) programs	Outcomes included improved social and emotional skills, attitude, behavior, and academic performance only

Table 2.1 (continued)

Researchers (Date)	Intervention	Reason for exclusion
Eyberg, Nelson, & Boggs (2008)	Psychosocial treatment for child disruptive behavior	No relevant outcome measures
Fabiano, Pelham, Coles, Gnagy, Chronis-Tuscano, & O'Connor (2009)	Behavioral treatments	Effectiveness of behavior modification for children with attention deficit hyperactivity disorder (ADHD). Mostly clinic studies
Faggiano, Federica Vigna-Taglianti, Burkhardt, Bohm, Cuomo, Gregori, Panella, Scatigna, Siliquini, Varona, van der Kreeft, Vassara, Wiborg, & Galanti, & the EU-Dap Study Group (2010)	School-based prevention of drug use	Outcome measures included drug use and drug knowledge but not offending
Farahmand, Grant, Polo, & Duffy (2011)	School-based mental health and behavioral programs	The meta-analysis did not target any of the desired outcomes
Fisher, Montgomery & Gardner (2008a)	Cognitive-behavioral for gang involvement	No evaluations found
Fisher, Montgomery & Gardner (2008b)	Opportunities provision for gang involvement	No evaluations found
Forness and Kavale (1996)	Social skills training for learning disability	No relevant outcome measures
Furlong, McGilloway, Bywater, Hutchings, Smith, & Donnelly (2012)	Cognitive-behavioral parenting programs	Clinic samples
Gansle (2005)	School-based anger interventions	Outcome measures were child anger and externalizing behaviors
Garrard and Lipsey (2007)	Conflict resolution education in schools	Outcomes were antisocial behaviors
Gilliam and Zigler (2000)	State preschool programs	Outcomes included developmental competence, improving later school attendance and performance, and reducing subsequent grade retention
Gottfredson and Wilson (2003)	Individually focused interventions effective for reducing alcohol and other drug (AOD) use; cognitive-behavioral and behaviorally based interventions	The meta-analysis examined only alcohol or other drug use outcomes
Huey and Polo (2008)	Psychosocial treatments for ethnic minority youth	Outcome measures were not relevant to the current meta-analysis

Table 2.1 (continued)

Researchers (Date)	Intervention	Reason for exclusion
Kaminski, Valle, Filene, & Boyle (2008)	Parent training programs to treat ADHD and conduct problems	The meta-analysis did not examine any of the desired outcomes. It focused on conduct problems, issues of communication, child development, problem solving, etc.
Lauer, Akiba, Wilkerson, Aphorp, Snow, & Martin-Glenn (2006)	Out-of-school time (OST) programs	Outcomes focused on reading and mathematics student achievement and larger positive effect sizes for programs with specific characteristics such as tutoring in reading
Littell, Winswold, Bjorndal, & Hammerstrom (2007)	Certified functional family therapy programs compared with usual services, alternative services, or no treatment	Campbell Collaboration protocol only
Lösel and Beelmann (2003)	Child skills training	Earlier version of Lösel and Beelmann (2006)
Luke and Banerjee (2012)	Studies on emotion recognition and understanding	Outcome measures focus on social understanding (including emotion recognition and understanding, perspective taking, false belief understanding, and attributional biases). The article did not include any of the outcome measures relevant to the current meta-analysis
Lundahl, Risser, & Lovejoy (2006)	Parent training	Outcome measures were disruptive child behaviors and parental behavior and perceptions
McCart, Priestler, Davies, & Azen (2006)	Cognitive-behavioral interventions and parent training	Outcome measures were antisocial behaviors
Maggin, Chafouleas, Goddard, & Johnson (2011)	Classroom token economies	No relevant outcome measures
Maggin, Johnson, Chafouleas, Roberto, & Bergren (2012)	School-based group contingency interventions	No relevant outcome measures
Maughan, Christiansen, Jensen, Olympia, & Clark (2005)	Behavioral parent training	Clinic samples
Montgomery, Bjornstad, & Dennis (2007)	Media-based behavioral treatments	No relevant outcome measures
Nowak and Heinrichs (2008)	Triple P parent training program	Outcome measures were child problem behaviors

Table 2.1 (continued)

Researchers (Date)	Intervention	Reason for exclusion
Payton, Weissberg, Durlak, Dymnicki, Taylor, Schellinger, & Pachan (2008)	Social and emotional learning programs (indicated)	Outcomes were conduct problems
Piquero, Farrington, Welsh, Tremblay, & Jennings (2008)	Parent training with children up to age 5	Outcome measures were antisocial behaviors
Prout and Prout (1998)	School-based studies of counseling and psychotherapy	Outcome measures focused on depression, self-esteem/concept, anxiety, social skills/status, attitude, and performance
Reddy, Newman, De Thomas, & Chun (2009)	School-based prevention and intervention programs for children and adolescents with emotional disturbance (ED)	Outcomes were externalizing behaviors and academic skills, internalizing behaviors, etc.
Reyno and McGrath (2005)	Predictors of parent training efficacy for child externalizing behavior problems	This meta-analysis focused on predictors of treatment response and indicators that lead to behavior problems (i.e. low education/occupation, more severe child behavior problems pretreatment, maternal psychopathology). The outcome measures are irrelevant to those in the present review
Serketich and Dumas (1996)	Behavioral parent training (BPT)	Outcome measure was child antisocial behavior which included aggression, temper tantrums, and noncompliance; eventually an overall child outcome was provided which included all the aforementioned. The researchers did not report aggression separately
Shadish and Baldwin (2003)	Marriage and family therapy interventions	Outcomes included drug abuse, marriage and family enrichment, emotional focused therapy, behavioral marital therapy, family therapy for alcoholism, child presenting problems, schizophrenia, and parent effectiveness training

Table 2.1 (continued)

Researchers (Date)	Intervention	Reason for exclusion
Solomon, Klein, Hmitze, Cressey, & Peller (2012)	School-wide positive behavior support (SWPBS)	Outcomes focused on school-wide discipline, positive behavior, better class attendance, less expulsions, etc. None of the outcome measures required in our meta-analysis was found
Stanton and Shadish (1997)	Studies on treatment of drug abuse	Outcome examined was prevention of drug abuse based on family and couples treatment. Family therapy appears to be an effective and cost-effective adjunct to methadone maintenance. None of the present outcome measures was found
Stoltz, Londen, Deković, Orobio de Castro, & Prinzie (2012)	School-based interventions for externalizing behavior	No relevant outcome measures
Thomas and Zimmer-Gembeck (2007)	Triple P and parent-child interaction training	Outcome measures were child and parent behavior only
Tong and Farrington (2006, 2008)	Reasoning and rehabilitation	No separate results for adults and juveniles
Weisz, Jensen-Doss, & Hawley (2006)	Psychotherapy	Mostly clinical samples
Welsh and Farrington (2006)	Family-based programs	This article was a somewhat updated but shorter version of Farrington and Welsh (2003)
Wilson, Lipsey, & Derzon (2003b)	School-based programs	Earlier version of Wilson and Lipsey (2007)
Wilson, Rush, Hussey, Puckering, Sim, Allely, Doku, McConnachie, & Gillberg (2012)	Triple P parent training program	This meta-analysis focused on the effects of the Triple P programs on child behaviors. It did not analyze specific outcomes

Table 2.2 Characteristics of included reviews

Researchers (Date)	Intervention	Comparison group	Outcome	Design	Searches	Time period
<i>(A) General prevention programs</i>						
Deković, Slagt, Asscher, Boendermaker, Eichelsheim, & Prinzie (2011)	Early prevention programs (p. 535); Nurse-Family Partnership; Infant Health and Development Program; Abecedarian program; Chicago Child-Parent Center program; High/Scope Perry Preschool Program; Seattle Social Development Project; The Good Behavior Game; Montreal Longitudinal-Experimental Study; Cambridge-Somerville Youth Study (pp. 537–538)	Control group who did not receive the intervention (p. 535)	Delinquency or criminal offending (p. 535)	Experiments or quasi-experiments (p. 535)	Online databases, Web of Science, PsycINFO, ERIC, PubMed, Sociological Abstracts, Criminal Justice Abstracts, OpenSIGLE, and USA Government Publications; Reviewed bibliographies of several other meta-analyses in the domain of crime prevention; Websites presenting prevention programs were consulted; Emailed the resulting list of eligible studies to leading scholars knowledgeable in the field of crime prevention research to find published and unpublished work. (p. 535)	Up to February 2010 (p. 535)

Table 2.2 (continued)

Researchers (Date)	Intervention	Comparison group	Outcome	Design	Searches	Time period
Manning, Homel, & Smith (2010)	Early developmental prevention (age 0–5)	Control group with no treatment (p. 508)	Relevant outcome measures: juvenile arrest, multiple arrests by 18 years, rates of violent and nonviolent arrest, criminal and antisocial behavior, incorrigible behavior (p. 510)	Randomized or matched groups, quasi-experimental (p. 508)	Key journals (e.g. Monographs of the Society for Research in Child Development, the Future of Children, American Educational Research Journal), Scanning of relevant review articles (p. 508)	1970–2008 (p. 508)
Wilson et al. (2003a)	Interventions designed for White vs. minority delinquent youth (p. 1)	Control receives nothing, minimal contact, school treatment as usual, usual probation services, usual institutional treatment, other treatment as usual, placebo (p. 9)	Juvenile delinquency (p. 3). Others include academic achievement, attitude change, behavior problems, employment status, family functioning, internalizing problems, peer relations, psychological adjustment, school participation, self-esteem (p. 10)	Experimental or quasi-experimental (p. 10)	Not defined	1950–1996 (p. 7)



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