

# Programs and Services Effective in Reducing Aggression in Young Children

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# Developmental Risks Resulting from Childhood Aggressive Behavior

- Substance use
- Overt delinquency
- Chronic violence
- School failure and dropout

# Stability of Aggressive Behavior

- Across children in general, aggressive behaviors decrease over time
- However, highly aggressive individuals at one point in time tend to be among the most aggressive at later points in time
- These linkages in the stability of aggression over time have been well-supported by longitudinal research starting in the elementary school years (e.g. Lochman & Wayland, 1994; Coie, Lochman, Terry & Hyman, 1992)
- Recent research suggests that this stability begins earlier, with aggression at age 2 predicting aggression at time of school entry (Tremblay, LeMarquand & Vitaro, 1999)

# Risk Factors Contributing to the Etiology and Maintenance of Chronic Aggressive Behavior

## Community Factors

- Neighborhood violence and crime

## Interpersonal Factors

- Hostile family environments (harsh, inconsistent, nonsupportive parenting)
- Hostile social environments with peers and others, leading to peer rejection, and to later involvement with deviant peers

## Child Factors

- Temperament patterns (high activity level, low fearfulness)
- Social cognitive processes
- Poor emotional regulation

# Developmental Sequencing of Risk Factors

- As children move on escalating trajectories towards serious adolescent conduct problems, there is a developmental stacking of risk factors (e.g., community + temperament + parenting + peer rejection + social cognitive deficiencies + school failure + deviant peers) over time
- Later interventions must address multiple risk factors
- Thus, early preventive interventions prior to school entry can impact children's increasingly stable aggressive behavior before additional risk factors accumulate

# Effective Interventions Designed to Reduce Early Aggression

- There are very few rigorously-designed intervention studies with children in the 0-5 age range
- Of the studies that do exist, most examine the effects of interventions in the latter preschool years, rather than during infancy or early toddlerhood
- The primary focus of effective interventions has been on risk factors important in the 0-5 age period: parenting and family processes

# Characteristics of Effective Parent Management Training Programs

(Kazdin & Weisz, 1998)

- Based on view that conduct problems are developed and sustained in the home by maladaptive parent-child interactions
- Emphasis on direct reinforcement of prosocial rather than coercive behavior within the family
- Conducted primarily with parents, or parent-child dyads
- Parents are trained to carefully identify, define and observe problem behaviors
- Role-playing and modeling are used to illustrate techniques (e.g., time-out, ignoring, social reinforcement)
- Often includes homework for parents to use at home

# Types of Intervention Programs

- Parent Training in the Preschool Years
- Parent-Child Dyadic Training in the Preschool Years
- Home Visitation in the Prenatal and Infancy Periods

# (1a) Effective Interventions in the Preschool Period: Parent Training

## Webster-Stratton (1998): Incredible Years

- Randomly-assigned 9 Head Start Centers to intervention (parent training) or control
- 9 weekly 2-hour group meetings with parents of 4-year-olds
- Results:
  1. Lower rates of observed negative behavior and noncompliance
  2. Higher levels of parenting competence
  3. Most of these gains maintained at a one-year follow-up

# (1b) Effective Interventions in the Preschool Period: Parent Training + Teacher Training

Webster-Stratton, Reid & Hammond (2001)

- Randomly assigned 14 Head Start Centers (272 4-year-olds) to intervention (Incredible Years Parent and Teacher Programs) or control
- Teacher training involved 6 monthly 1-day workshops, addressing positive management and discipline and social competence
- Results: fewer child conduct problems at school, teachers displayed better classroom management skills; reductions in behavior problems maintained at 1-year follow-up, for highest risk children

# (1c) Effective Interventions in the Preschool Period: Parent Training + Child Training

Webster-Stratton & Hammond (1997)

- The combined intervention (22 weekly meetings), in comparison to control, with 4-8 year-old outpatients, resulted in stronger improvements in child behavior at a 1-year follow-up
- The child intervention produced change in child problem-solving and conflict management, and the parent intervention produced most change in parenting behaviors and in post-treatment child behavior change

# (1c) Effective Interventions in the Preschool Period: Parent Training + Child Training

Miller-Heyl, Macphee & Fritz (1998): DARE To Be You

- Parent workshops for 12 weeks, child intervention with 2-5 year-old target-children and siblings, joint activity time for parents and children; random assignment to intervention or to control
- Results: Parents' reports of children's oppositional behavior and of use of harsh discipline were reduced

## (2) Effective Interventions in the Preschool Period: Parent-Child Dyadic Training

Schuhmann, Foote, Eyberg, Boggs & Algina (1998): Parent-Child Intervention Therapy (PCIT):

- 64 3-to-6 year old clinic-referred children were randomly assigned to intervention or to wait-list control
- Weekly sessions for 4 months
- Therapist coached parent's use of specific parenting behaviors during natural play situations with the child
- Results:
  1. observers found parents to interact more positively with children, and to better gain children's compliance
  2. higher parent-rated behavioral improvement

## (2) Effective Interventions in the Preschool Period: Parent-Child Dyadic Training

### Strayhorn & Weidman (1991)

- Randomly assigned preschool children to parent-child interaction training or to control
- Results: lower levels of disruptive behavior at a 1-year follow-up

# (3) Interventions in the Prenatal and Infancy Period: Home Visiting Programs

## Elmira Nurse Home Visitation Program

- 400 pregnant women randomly assigned to 4 conditions
- Home visiting involved twice-monthly nurse visits during pregnancy, weekly visits in first 6 weeks postpartum, approximately monthly visits until age 2
- Home visits promoted maternal health-related behaviors, parenting and maternal life-course development

# (3) Interventions in the Prenatal and Infancy Period: Home Visiting Programs

- Results:
  1. Indirect support: in control conditions parental maltreatment was related to youths' later problem behaviors at age 15, but no such relation existed in the home visiting group (Eckenrode, Zelinski, Smith, Marcynyszyn, Henderson, Kitzman, Cole & Powers, 2001), possibly due to lower maltreatment rates in the intervention group by age 2 (Olds & Kitzman, 1993)
  2. Partial support: 15 year-old intervention children who had been raised by higher risk mothers had lower arrest, alcohol use and promiscuous sexual behavior rates (Olds, Henderson, Cole, Eckenrode, Kitzman, Luckey, Pettit, Sidora, Morris & Powers, 1998)

# Conclusions

- Parenting interventions in the preschool period can have immediate effects on children's aggressive and noncompliant behaviors and on parenting behaviors, although follow-up effects may be moderated by risk status
- Effective parenting interventions in the preschool period can be provided in group interventions or in parent-child dyads; the latter format is more suitable for clinical settings or indicated prevention but the former can be used in all forms of prevention and treatment
- Parent group interventions in the preschool period provided in conjunction with teacher training and with child training may augment effects

# Conclusions (continued)

- The efficacy of prevention programming in the prenatal through infancy age period is less well established, although home-visitation interventions bear promise

# Implications

- Because the empirical database on early intervention programs is only modestly developed, research will still need to rigorously evaluate preschool-age programs and especially infancy-age programs
- There is a need for research on refinements and enhancements of existing effective interventions, to determine optimal methods for intervention delivery
- There is a need to firmly ground new and existing interventions in developmental theory, and thus to precisely target intervention aims

# Implications (Continued)

- Research should confirm that intervention effects are due to changes in the presumed mediating processes, such as parents' discipline practices
- The next generation of prevention research should examine factors in the training process and in the host systems which can affect dissemination
- In terms of social policy, there is enough evidence to encourage widespread parent training programs for children in the preschool years