

Effects of Early Intervention on Risk Factors for Antisocial Behavior

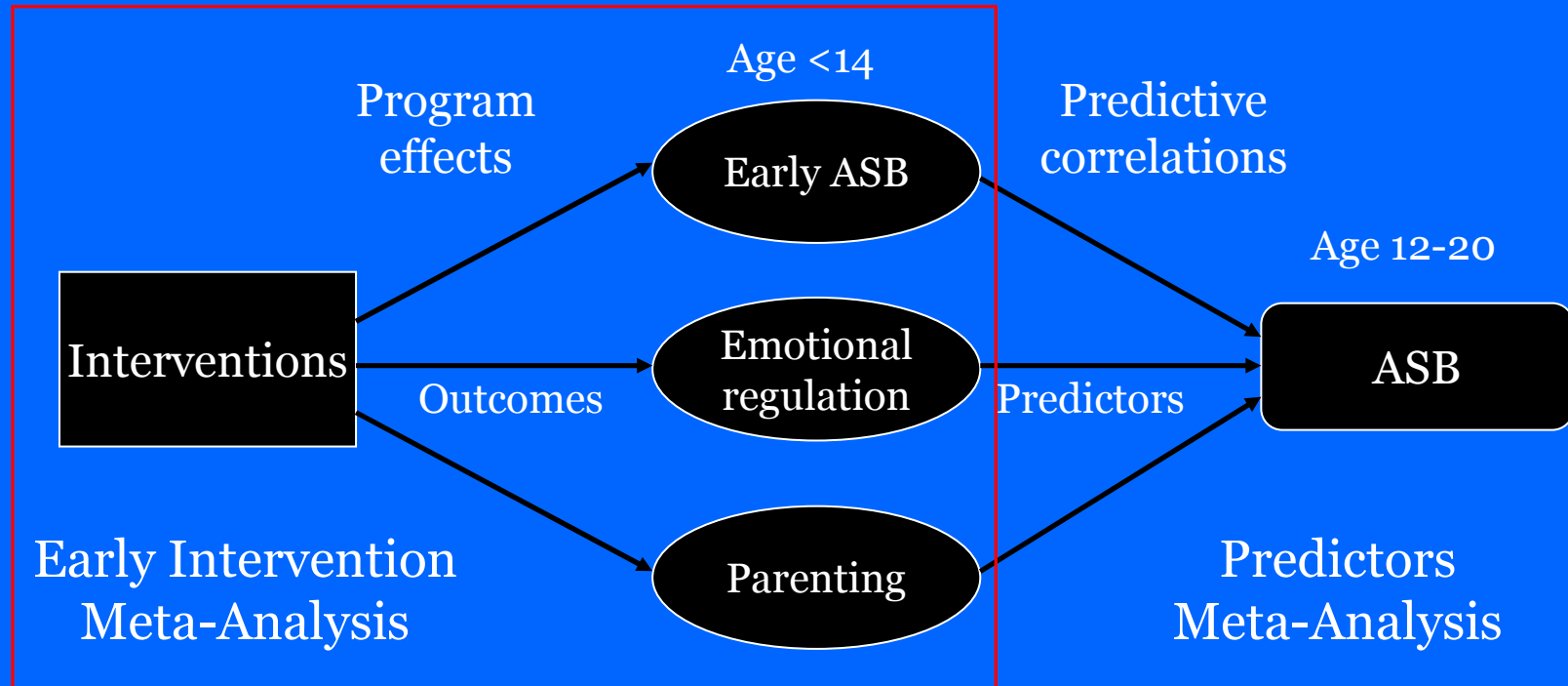


Sandra Jo Wilson, Mark Lipsey & Kelly
Noser

Center for Evaluation Research & Methodology
Vanderbilt Institute for Public Policy Studies
Vanderbilt University

Intervention Effects & Risk Predictors

Risk Constructs



Intervention Meta-analysis

- Intervention programs delivered to children, youth, and/or families that target antisocial behavior or risk factors for antisocial behavior.
- Experimental and quasi-experimental designs.
- Published and unpublished research from the U.S. and other western countries was included.

Study Identification & Coding

- Comprehensive search of databases, meta-analyses & reviews, and primary research identified potential studies, which were screened for eligibility.
- Coding categories:
 - Method and Study Characteristics
 - Subject Characteristics
 - Treatment Characteristics
 - Dependent Variables/Outcomes
 - Study Results:
 - Standardized mean difference effect sizes

Study Characteristics

- 474 controlled studies of 487 independent samples.
 - Over 70,000 children and youth.
- Mainly U.S. studies (~90%) conducted by researchers from psychology and education.
- 2/3 published; 1/3 unpublished.
- Published between 1965 and 2004; over half published since 1990.

Method Characteristics

- Experimental and Quasi-experimental Studies:
 - Nearly half were randomized at subject level.
 - About 1/5 were cluster randomized studies; remaining studies were quasi-experimental, mainly assigned at group level.
- Most studies provided pretest data to assess pre-treatment equivalence.
- Attrition averaged 10%, but some studies had significant attrition problems (up to 50% loss).
- Dependent measures most commonly self- or teacher-reported; parent reports, school records, and observations also used.

Participant Characteristics

- 14 years old or younger.
- Predominantly mixed gender subject groups, though high risk groups were mostly male.
- About 1/3 of the samples were mostly minority children.
- Low SES children well-represented.
- Youth risk ranged from low to serious behavior problems.

Program Characteristics

- About 80% of the studies were school-based and delivered to groups of children.
- Community-based studies often involved families.
- Median program length = 12 weeks.
- Majority of studies characterized by significant researcher involvement in service delivery. Less than 15% of the programs were “routine practice.”

Program Approaches

- *Behavioral approaches*: behavioral contracts, contingency management, and similar shaping and reinforcement techniques.
- *Cognitive approaches*: cognitive restructuring, skill streaming, cognitive techniques for handling anger and stress, and the like.
- *Social skill training*: interpersonal skill building exercises, taking the perspective of the other, assertiveness, resisting group pressure, conflict management.
- *Counseling*: individual, group, and family counseling in some mix in which individual or group sessions were the most frequent.
- *Parent skill training*: Consultation, counseling, and training aimed at increasing parenting skills and general family functioning.

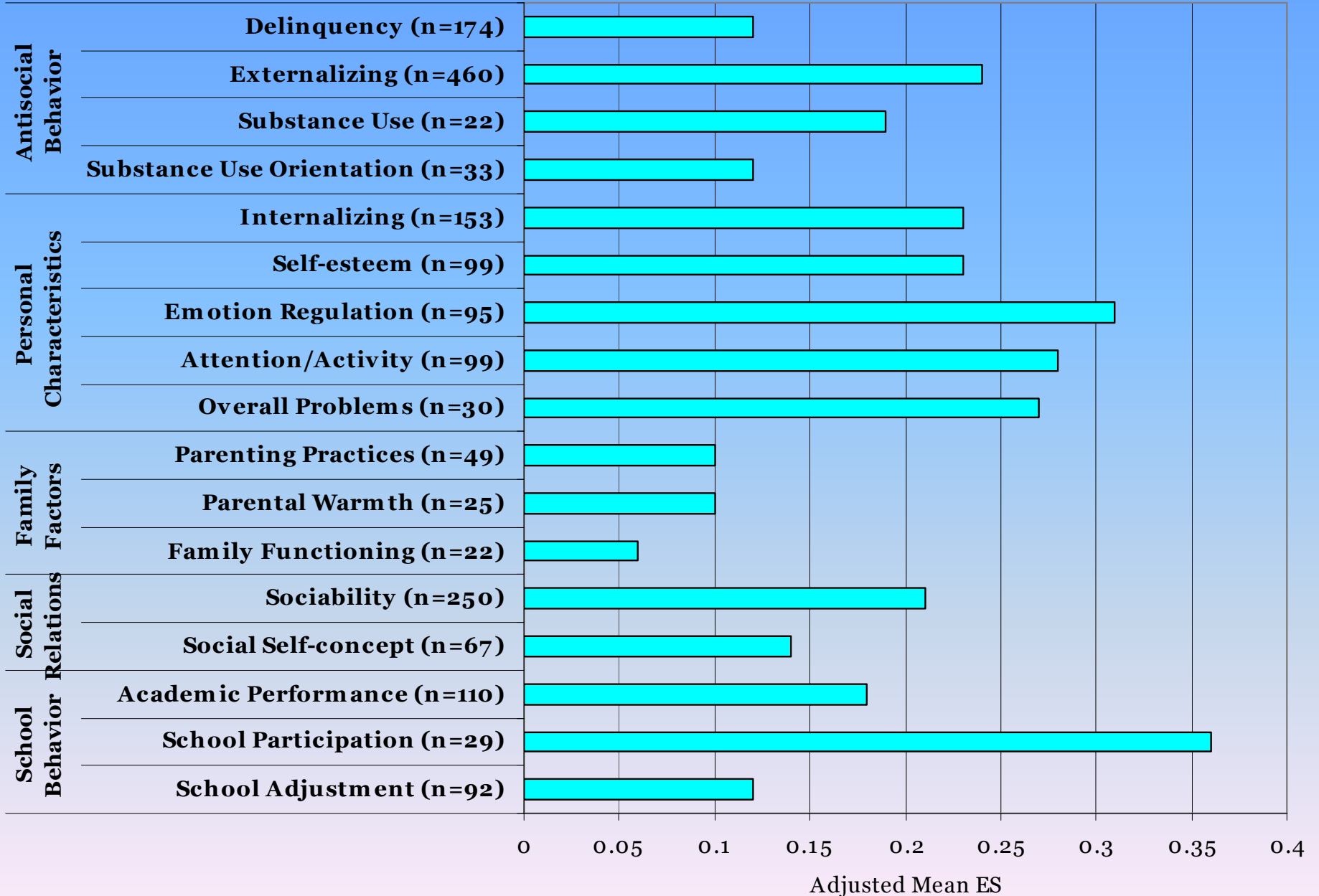
Risk Factor Outcomes

- Antisocial behavior
- Personal characteristics
- Family factors
- Social relations
- School behavior

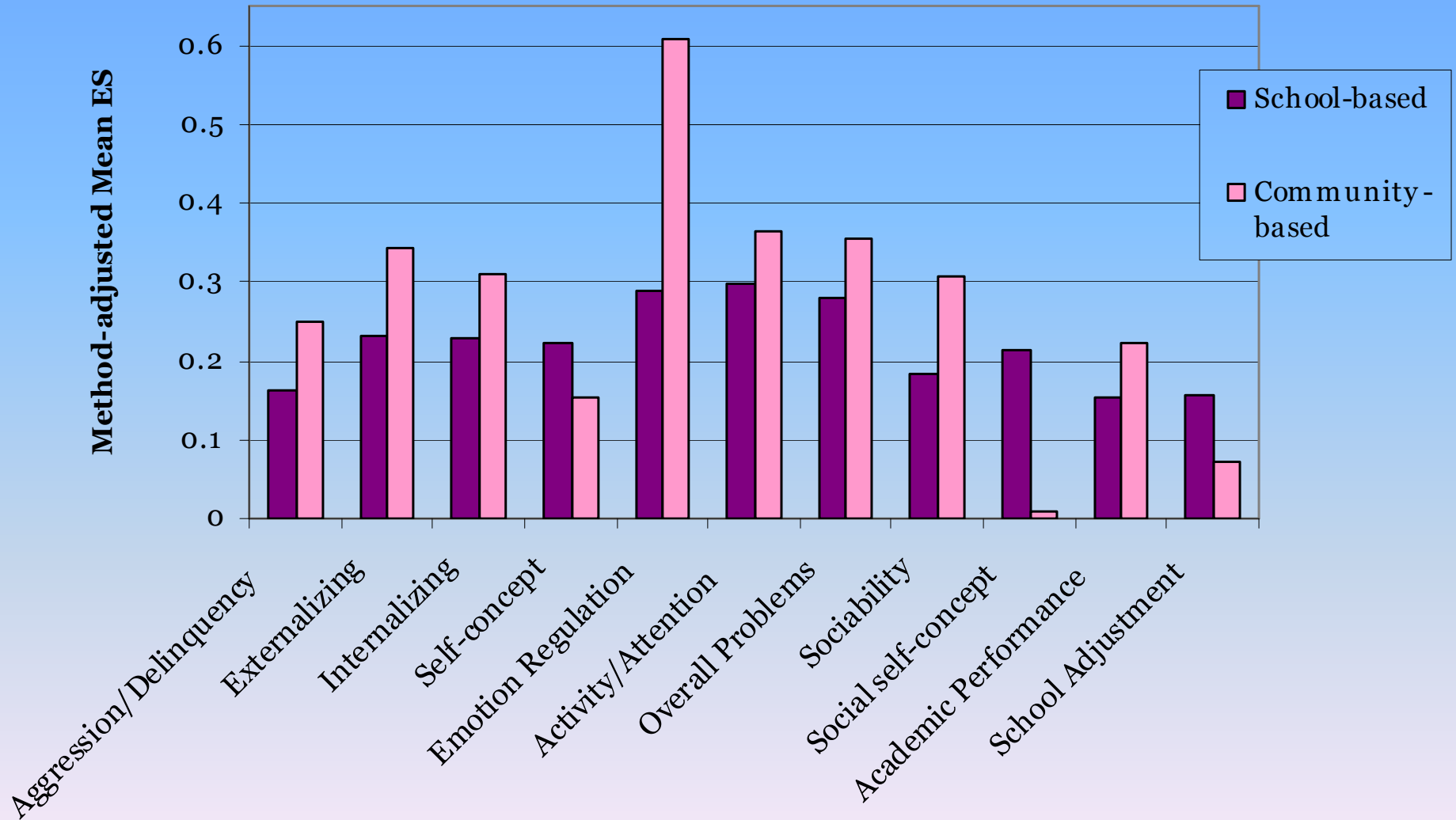
Effect Size Adjustments

- Regression models were fit to identify between-study differences in:
 - Research design and initial equivalence
 - Measurement characteristics and informants
 - Subject characteristics (age, gender, ethnicity)
- Optimal methodological and average subject characteristics were used to predict effect sizes with those features constant.
- Result was added to residuals to produce adjusted effect sizes.

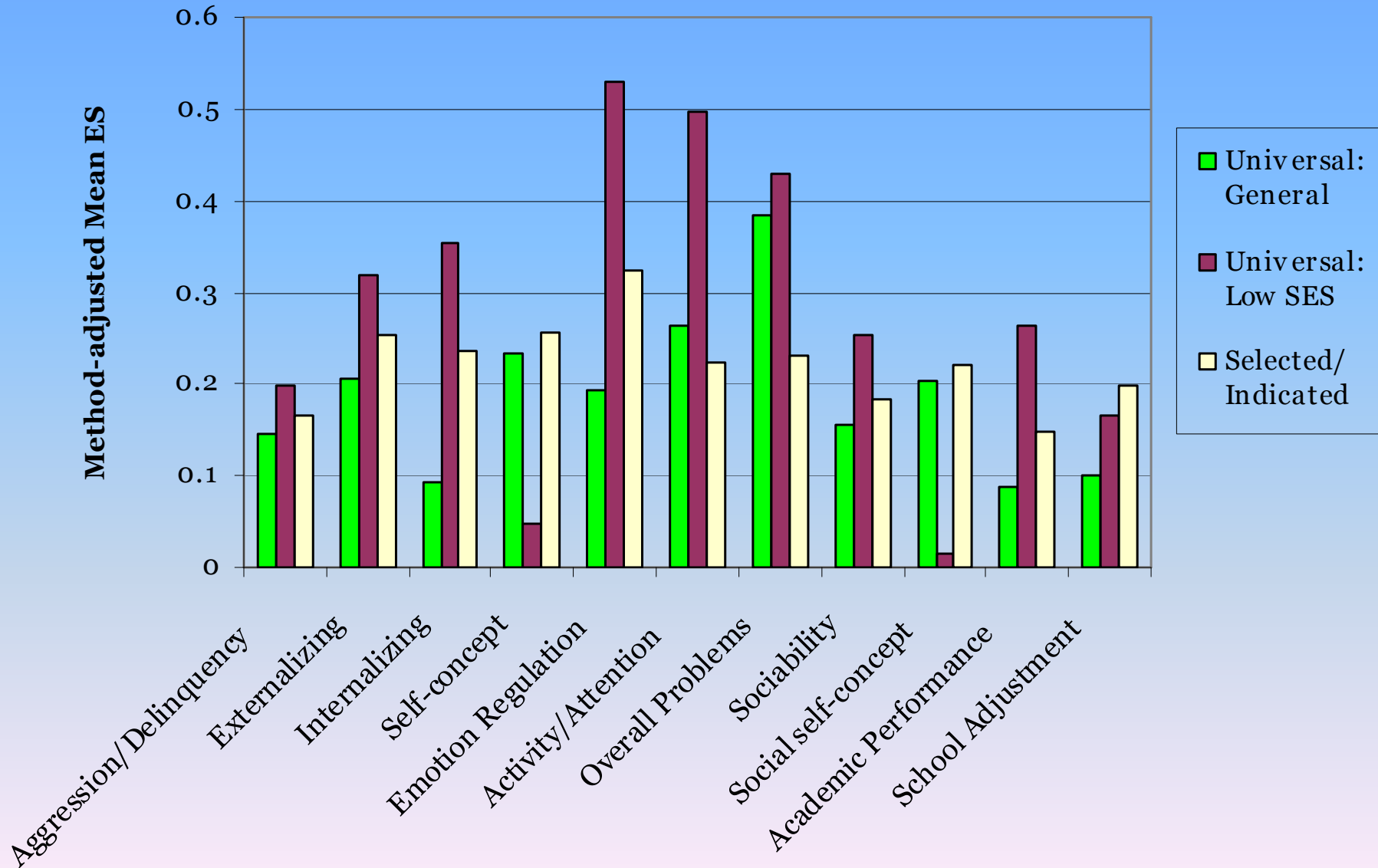
Effects of Intervention on the Risk Factors



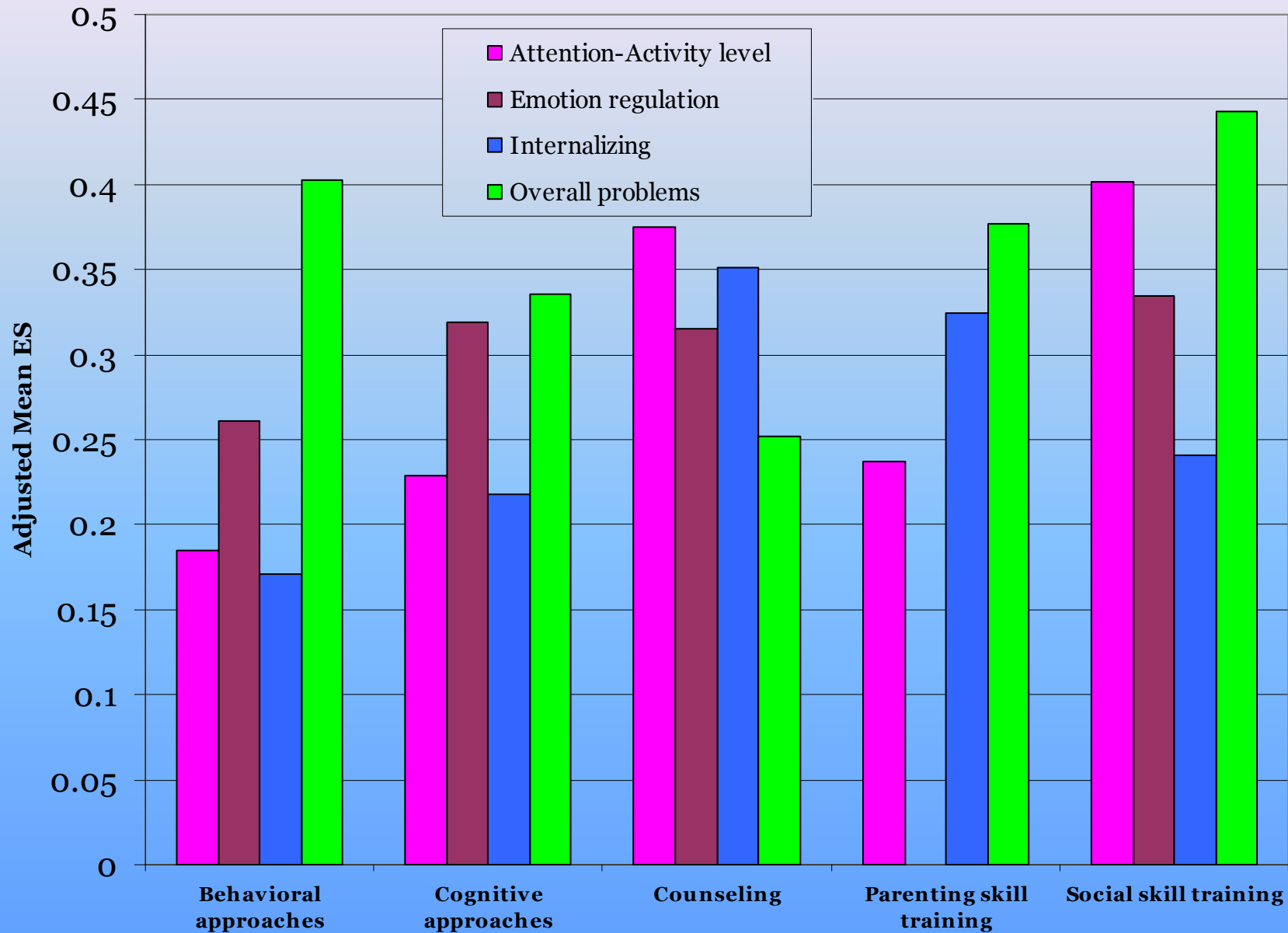
Mean Treatment Effects for School vs. Community-Based Programs on Select Risk Factors



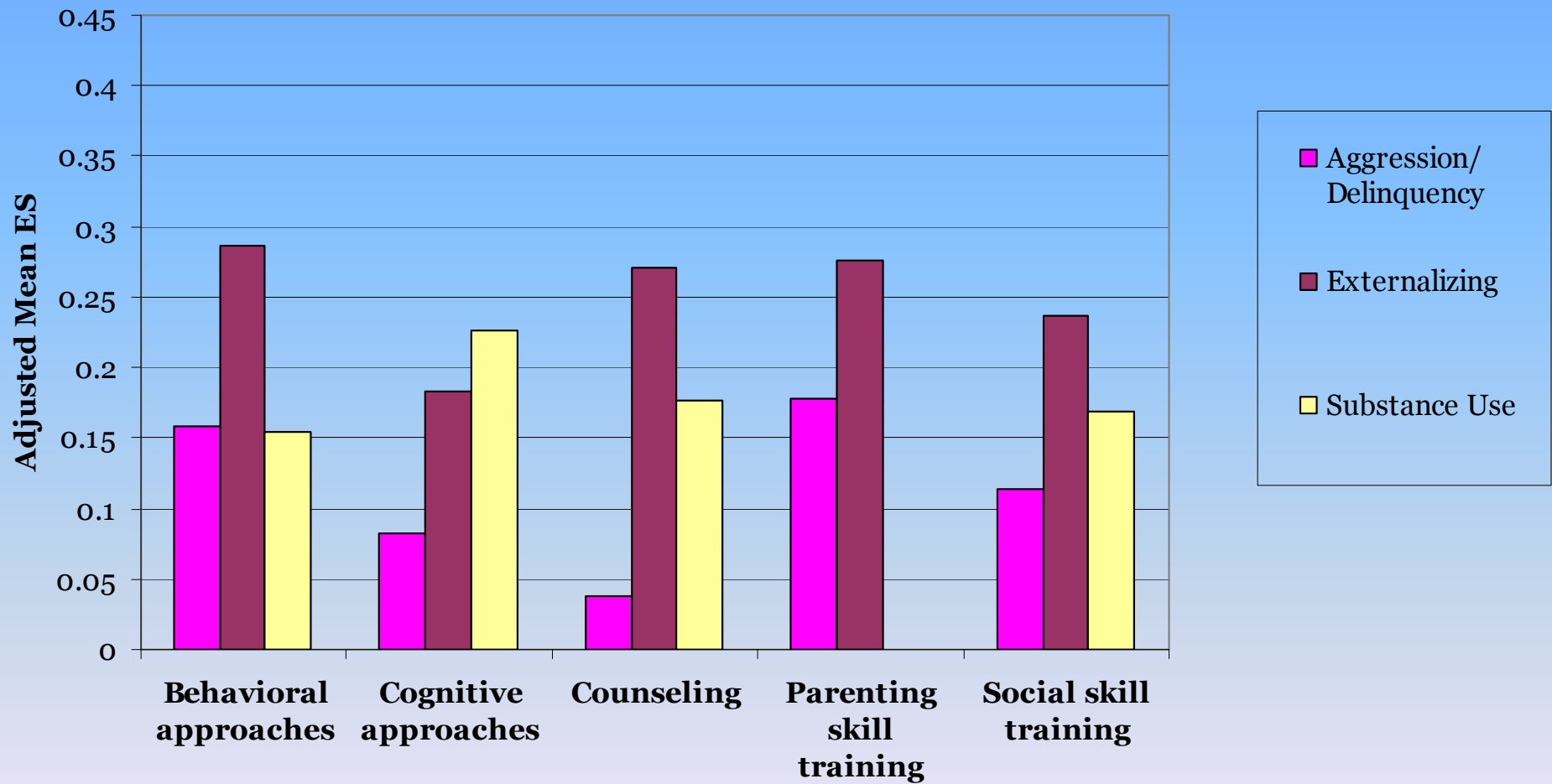
Mean Treatment Effects by Subject Risk Status on Select Risk Factors



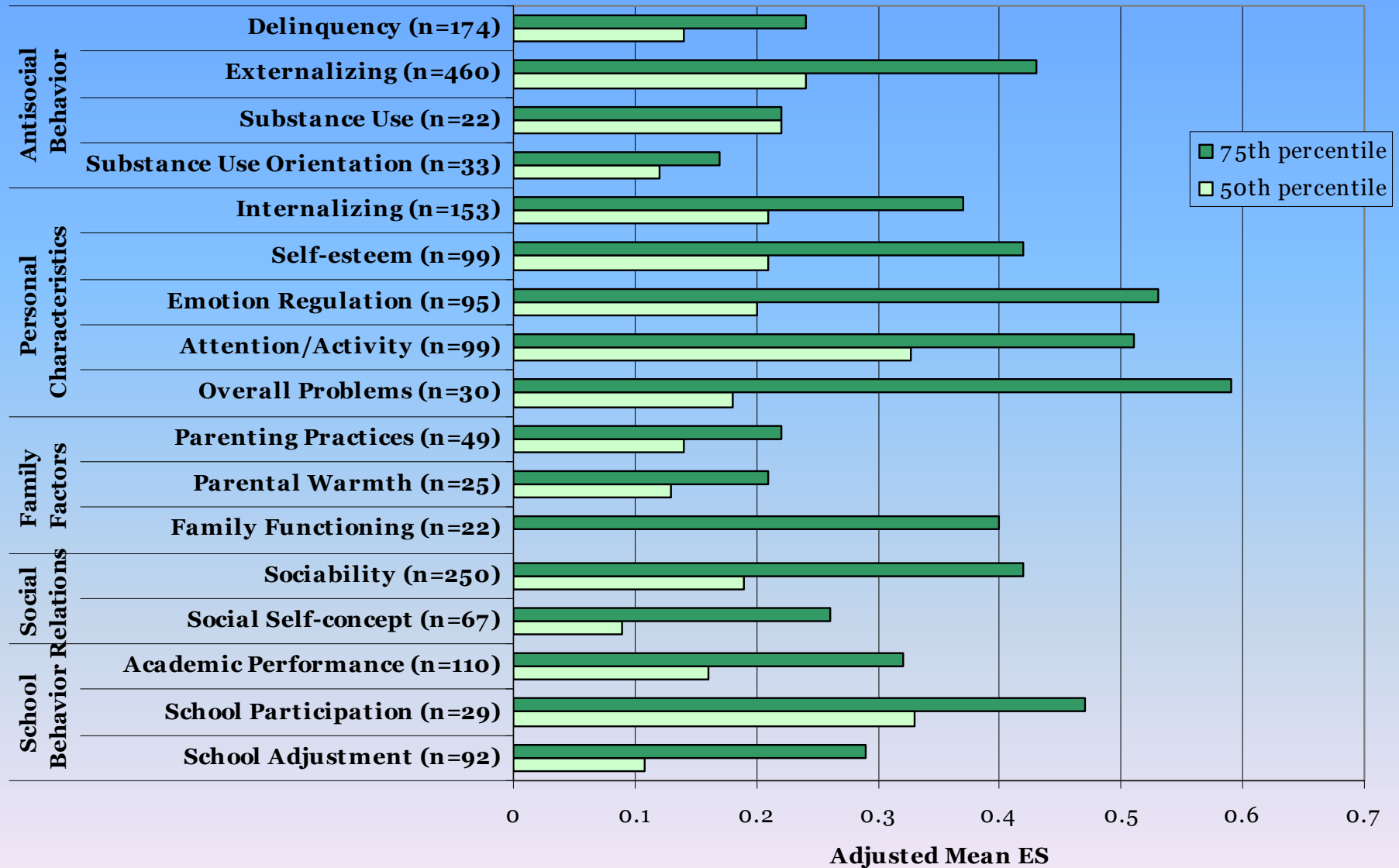
Program Effects on Person Risk Factors



Program Effects on Antisocial Behavior



Effects of Intervention on Risk Factors



Findings

- Effects for prevention programs were modest overall.
- Largest prevention effects were found for emotion regulation, attention-activity level, and overall problems.
- Higher risk youth, and those in community-based programs achieved greater benefits across all risk factors.
- Program approaches were not widely different in overall effectiveness.

Contact information:

mark.lipsey@vanderbilt.edu

sandra.j.wilson@vanderbilt.edu

www.vanderbilt.edu/cerm

Thanks to the W.T. Grant Foundation, NIMH,
NIDA, and OJJDP for support of this research
