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# Is School-Based Mentoring Effective? Making Sense of Mixed Findings

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# Is School-Based Mentoring Effective? Making Sense of Mixed Findings

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*Presentation at the National Press Club, Washington, DC, September 9, 2010, arranged by MENTOR/National Mentoring Partnership. This presentation summarizes the findings and conclusions of a recent issue of the Social Policy Report, a publication of the Society for Research on Child Development, that was co-authored by Mr. Wheeler and Drs. DuBois and Keller (available for download at [srcd.org](http://srcd.org)). The authors gratefully acknowledge the support of the William T. Grant Foundation's Distinguished Fellows Program in completing the report. Mr. Wheeler and Dr. DuBois have each been Distinguished Fellows in the program and Dr. Keller was Mr. Wheeler's Fellowship mentor. The content of this presentation is solely the responsibility of the authors and the views expressed are not necessarily those of MENTOR or the William T. Grant Foundation.*



# Mentoring

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- Mentoring: *a trusting relationship that brings a young person together with a caring individual who offers guidance, support and encouragement aimed at developing the competence and character of the mentee* (adapted from MENTOR, 2009)
- Sources:
  - Existing social networks (e.g., relative, neighbor)
  - Youth-serving professionals (e.g., teachers, staff of out-of-school time program)
  - Formal mentoring programs (e.g., Big Brothers Big Sisters)
- Currently, at least 5,000 formal mentoring programs for youth across U.S.
- Primary focus on youth at risk for negative outcomes



# Prior Research

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- Positive effects of mentoring programs on wide range of youth outcomes, including emotional well-being, risk behaviors, and academic achievement (DuBois et al., 2002; Tolan et al., 2008)
- But....benefits (“effect sizes”) for typical youth and program are modest/small by most standards
- Benefits increase with:
  - Focus on youth in higher risk environments
  - Practices such as careful monitoring of program implementation, mentor training, structured activities for mentors/youth, and parent support/involvement
- Both frequency/quality of mentor-youth interactions and relationship longevity important
- Cost-effectiveness of programs in need of clarification (Foster, 2010)



# School-Based Mentoring (SBM)

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- Meetings between youth and their mentors typically are limited to school setting
- Rapid growth in SBM during past decade, due to a number of factors, including targeted USDOE funding
- Currently, more than 1,000 SBM programs across the U.S.
- Until recently, only limited data available on effectiveness



# Three Recent Randomized Trials of SBM Programs Over One School Year

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- Big Brothers Big Sisters of America (BBBSA) affiliates\* (Herrera et al., 2007)
- Communities In Schools of San Antonio, Texas (CIS-SA; Karcher, 2008)
- Grantees of U.S. Department of Education's Student Mentoring Program (SMP; Bernstein et al., 2009)

\*This trial also included follow-up measurement during second school year.



# Three Differing Conclusions

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- “Impacts measured after one school year of involvement in the BBBS SBM program showed that ‘Littles’ [youth assigned to receive mentors] **improved in a range of school-related areas**, including their academic attitudes, performance and behaviors” (Herrera et al., 2007, p. 67)
- “School-based mentoring as typically implemented within a multi-component program may be of **limited value for students in general** and most helpful to elementary school boys and high school girls” (Karcher, 2008, p. 112)
- The programs studied **“did not lead to statistically significant impacts on students** in any of the three outcome domains [prosocial behavior, problem behavior, academic achievement]” (Bernstein et al., 2009, p. xx)



# Three Differing Responses

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- BBBSA: Continued to support implementation of SBM by its affiliates and investment of resources in strengthening the program\*
- CIS-SA: Several changes, such as ceasing to mentor high school boys; none at CIS nationally
- SMP: Elimination of funding for “ineffective” program from federal budget

\*Response partly informed by most impacts disappearing at second school year follow-up.





# Our Report

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- Comparative analysis of the three studies - how differences in programs/ implementation and evaluation methodologies may have influenced findings
- Synthesis of results across studies to clarify overall trends in impact of SBM programs on youth outcomes
- Consideration of implications for understanding potential of SBM as intervention strategy for at-risk youth
- Recommendations for practice/policy and research



# Comparing the Programs

	<b>BBBSA</b>	<b>CIS-SA</b>	<b>SMP</b>
Mentor training	Not required*	1 hour mandatory	General requirement in legislation
Length and frequency of match meetings	No requirements	1 hour weekly	No requirements
Minimum relationship duration commitment	1 school year	1 school year	No requirements
Match support	Monthly for mentors; bi-monthly for mentees	Case managers available at schools to help mentors, but no specific support requirements	General requirement in legislation

\*Although pre-match training is not compulsory, national standards require agencies to provide orientation and the opportunity for training to volunteers.



# Comparing Implementation of the Programs

	<b>BBBSA</b>	<b>CIS-SA</b>	<b>SMP</b>
SBM experience (implementing agencies)	9.5 years	14 years	6.1 years
Implementation support	Meetings and teleconferences held with study agencies to support implementation	Additional training opportunities provided to mentors by principal investigator	No additional support provided to study sites
Pre-match mentor training (average)	~45 minutes	50 minutes	3.4 hours
Months of mentoring received (average)	5.3	5.9	5.8
Total hours of mentoring provided to typical youth	~17 hours	~10 hours	~23 hours

# Comparing Study Samples: Agencies & Schools

	<b>BBBSA</b>	<b>CIS-SA</b>	<b>SMP</b>
Agencies	10 BBBSA affiliates	1 agency: CIS-SA	32 (2/3 non-profits, 1/3 school districts)
Agency Inclusion Criteria	<ul style="list-style-type: none"> <li>• Strong leadership for 3+ years</li> <li>• 4+ years experience in SBM</li> <li>• Annual service to 150+ SBM youth</li> <li>• Well-established relationships with schools</li> </ul>	Convenience sample	<ul style="list-style-type: none"> <li>• Be operational</li> <li>• Able to oversubscribe youth</li> <li>• Willing and able to support study logistics</li> </ul>
Schools	71 public schools in rural and urban school districts: 41 elementary, 27 middle, and 3 high schools	19 public schools in 1 large metropolitan school district: 7 elementary, 5 middle, and 7 high schools	103 elementary and middle schools

# Comparing Study Samples: Youth

	<b>BBBSA</b>	<b>CIS-SA</b>	<b>SMP</b>
Number of Youth	1,139	525	2,360
Gender (% female)	54%	67%	57%
White	<b>37%</b>	2%	23%
Hispanic/Latino	23%	<b>78%</b>	29%
Black/African-American	18%	9%	<b>41%</b>
Multi-race/other	23%	11%	7%
Grades 4-5	<b>61%</b>	19% (5 <sup>th</sup> only)	42%
6-8	34%	37%	44%
9-12	6% (9 <sup>th</sup> only)	<b>44%</b>	14%
Poverty status	69% received free/reduced lunch	Average family income < \$20,000	86% eligible for free/reduced lunch

# Comparing Study Samples: Mentors

	<b>BBBSA</b>	<b>CIS-SA</b>	<b>SMP</b>
Gender (% female)	<b>72%</b>	<b>73%</b>	<b>72%</b>
White	<b>77%</b>	35%	66%
Hispanic/Latino	6%	<b>54%</b>	10%
Black/African American	8%	5%	<b>29%</b>
Multi-race/other	10%	6%	9%
High school student	<b>48%</b>	0%	18%
College student	18%	<b>70%</b>	23%
Adult (under 65)	33%	28%	<b>56%</b>
Other	1%	2%	3%



# Comparing Study Designs

	<b>BBBSA</b>	<b>CIS-SA</b>	<b>SMP</b>
Nature of control group	No treatment  34% reported meeting with "an adult or older student mentor, 'buddy' or 'big'" in the previous six months	Received supportive services through CIS-SA	No treatment  35% reported being mentored in a formal program
Nature of treatment group	Intended to receive mentoring  7% not matched with a mentor	Intended to receive mentoring + CIS-SA supportive services  10% not matched with a mentor	Intended to receive mentoring  <b>17% not matched with a mentor</b>
Criterion used for statistical significance	$p < .10$	$p < .05$	$p < .05$ + Benjamini-Hochberg test



# Study findings as a function of different criteria for statistical significance

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Statistical  
Significance  
Criterion

$p < .10$

## **BBBSA**

- Perceived scholastic efficacy
- Non-parental adult relationships
- Truancy (teacher report)
- Truancy (youth report)
- Overall academic performance
- Written and oral language performance
- Science performance
- Quality of class work
- Number of assignments completed
- Engaging in serious school misconduct

## **CIS-SA**

- Connectedness to peers
- Global self-esteem
- Self-in-the-present
- Peer social support

## **SMP**

- Perceived scholastic efficacy
- Non-parental adult relationships
- Truancy
- Absenteeism
- Future orientation





# Study findings as a function of different criteria for statistical significance

---

Statistical  
Significance  
Criterion

$p < .05$

## **BBBSA**

- Perceived scholastic efficacy
- Non-parental adult relationships

- Truancy (youth report)
- Overall academic performance

- Quality of class work
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# Study findings as a function of different criteria for statistical significance

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Statistical  
Significance  
Criterion

**BBBSA**

**CIS-SA**

**SMP**

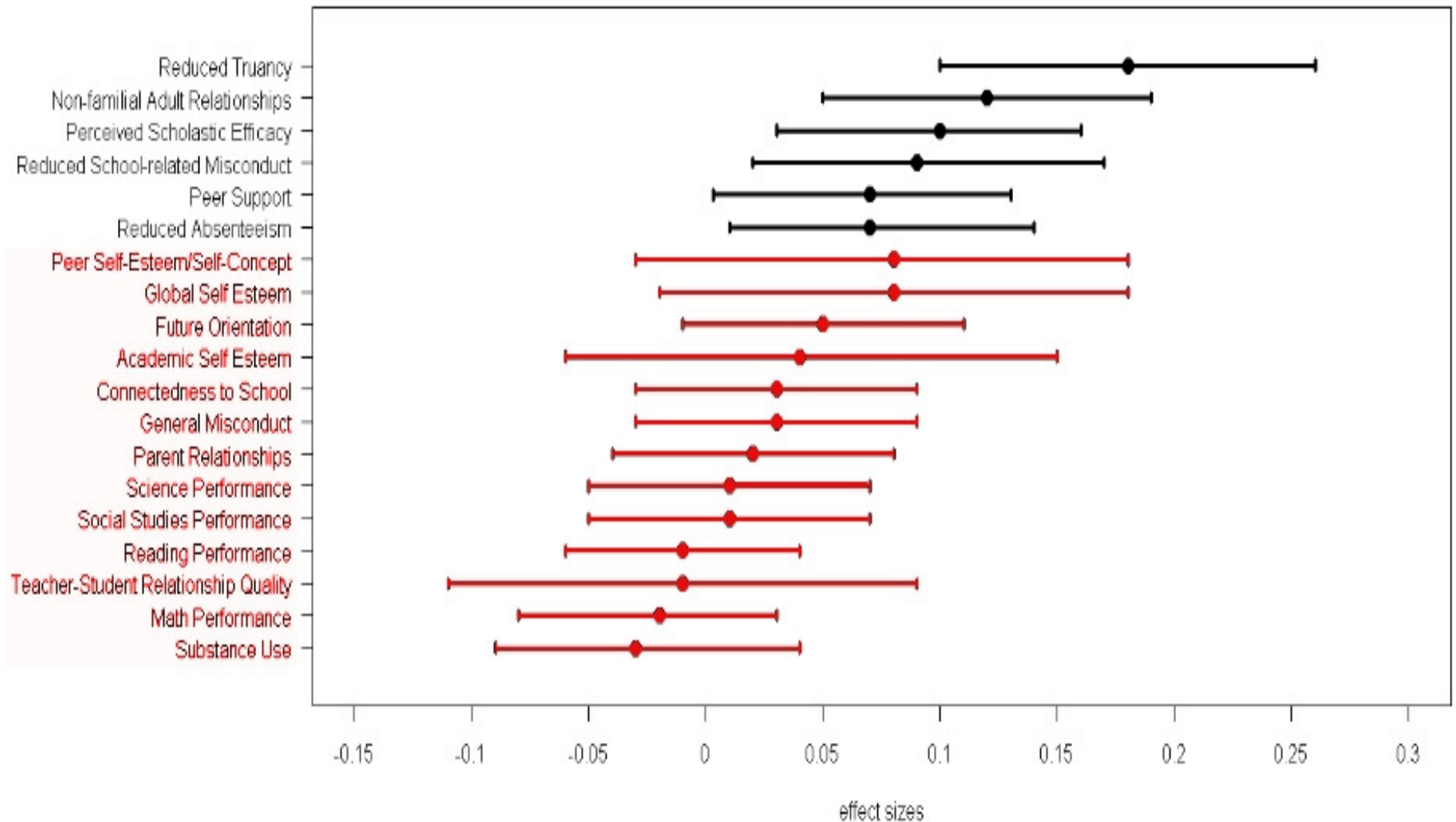
$p < .05$  +  
Benjamini  
-Hochberg  
correction

•Self-in-the-present

- Quality of class work
- Number of assignments completed

# Synthesizing Findings of the Three Studies Using Meta-Analysis

Figure 1. Weighted Mean Effect Sizes and 95% Confidence Intervals





## Specific Meta-Analysis Findings

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Six of nineteen constructs had statistically significant effects:

- Non-familial adult relationships (.12)
- Peer support (.07)
- Scholastic efficacy (.10)
- Reduced school related misconduct (.11)
- Reduced truancy (.18)
- Reduced absenteeism (.07)



# Comparing SBM with Other School-Based Interventions on Selected Outcomes

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<b>intervention</b>	<b>outcome</b>	<b>effect size</b>
SBM <sup>†</sup>	reading	-.01
SBM <sup>†</sup>	school-related misconduct	.11*
Experience Corps <sup>†</sup>	reading	.13*, .16*
SBM <sup>†</sup>	truancy	.18*
SEL (Universal)	conduct problems	.23*
SEL (Universal)	academic performance	.28*
Volunteer tutoring	reading	.30*
Volunteer tutoring	writing	.45*

<sup>†</sup> Findings based on trials of scaled-up programs (rather than small, researcher-controlled trials).

\*  $p < .05$



# Effective Drop-out Prevention Programs

WWC Effectiveness Ratings For Dropout Prevention: Staying in school

<b>Intervention</b>	<b>Evidence Rating</b>	<b>Includes Mentoring*</b>
ALAS	Potentially positive effects	<b>YES</b>
Check & Connect	Positive effects	<b>YES</b>
Accelerated Middle Schools	Potentially positive effects	NO
Twelve Together	Potentially positive effects	<b>YES</b>
Career Academies	Potentially positive effects	NO (POSSIBLY SOME WORK-SITE)
Financial Incentives for Teen Parents to Stay in School	Potentially positive effects	NO

\*Mentoring elements in these programs tend to be more time-intensive and structured than those found in typical SBM programs.



## Take-Aways

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- Currently, SBM programs appear to have positive, but relatively small, effects on selected outcomes -- concentrated around behaviors and beliefs that keep students engaged in school and are likely to foster learning
- Ill-advised to base policy or practice decisions on single studies; need to take stock of the broader landscape of available research



# Future Directions: Research

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## ○ Relationships

- In-depth “on the ground” study over time to clarify “active ingredients” of effective mentoring in school context
- Investigate role of match longevity

## ○ Programs

- Test innovative approaches (e.g., hybrid “school-plus” model, programs including more structured components, etc.)
- Examine influence of implementation fidelity on program effectiveness and strategies to enhance it

## ○ Cost-Benefit

- SBM as compared to alternative forms of intervention





# Future Directions: Policy & Practice

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- Use well-defined program models with clearly articulated practice standards
- Ensure that all eligible students are matched with appropriate mentors
- Build in strong provisions for ongoing monitoring and support for high-quality program implementation
- Enlist adults as mentors rather than older students, pending future studies establishing their effectiveness
- Design programs so that mentors and mentees meet consistently and are supported in developing relationships that can be sustained