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Impact of the Federal School-based Student Mentoring Program

School-based mentoring programs can provide at-risk students with guidance, academic assistance, and new experiences. But mentoring programs under the federal competitive Student Mentoring Program grants had no statistically significant impacts on student-level outcomes after one school year.

As mentors, supportive adults can help students avoid high-risk activities and make more successful transitions to adulthood. In school-based (as opposed to community-based) mentoring programs teachers and other school staff identify academically or socially at-risk students who would benefit from mentoring. Students are then paired with volunteers who meet with them regularly at school (typically one hour a week) either during or after the school day.

Such interventions may be particularly helpful for students from single-parent families and low-income households who might lack the opportunity to connect with adults from their neighborhood or social network with whom mentor relationships could evolve organically. Mentor programs have emerged in response to this problem to connect at-risk students with volunteer mentors from outside the household who serve as role models, offer support and guidance, expose students to new ideas and experiences, and provide academic assistance.

The program

The U.S. Department of Education's Student Mentoring Program, authorized under the No Child Left Behind Act of 2001, section 4130, is a competitive federal grant program managed by the Office of Safe and Drug-Free Schools. Addressing a lack of supportive adults in the lives of at-risk students, the Student Mentoring Program provides funds to schools and to community- and faith-based organizations to create school-based mentoring programs targeting students in grades 4–8.

While the legislation does not mandate specific mentoring activities, it states that supported activities are those designed to improve interpersonal relationships with peers, teachers, other adults, and family members; increase personal responsibility and community involvement; discourage drug and alcohol use, use of weapons, and other delinquency involvement; reduce dropout rates; and improve academic achievement. A priority of the program, as stipulated by the Office of Safe and Drug-Free Schools in their grant solicitation for the program, is its focus on the academic and social needs of at-risk students. The grant solicitation also outlines strategies underlying well designed and effective school-based mentoring programs, including screening and background checks, ongoing training and support for mentors and program staff, activities for mentors and students, and established

procedures for supervising and monitoring mentor-student relationships.

The study

The Office of Management and Budget requested that the Institute of Education Sciences (IES) oversee an independent impact evaluation of the federal Student Mentoring Program, and in 2005 IES contracted with Abt Associates and its team of subcontractors (Branch Associates, Moore and Associates, and the Center for Resource Management) to conduct the study. This three and a half year evaluation is designed to describe the grant-funded programs and to estimate their impact on a range of student outcomes.

Employing a student-level random assignment design, the study focuses on the impacts after one school year of school-based mentoring programs funded through the U.S. Department of Education's Student Mentoring Program on students randomly assigned to either receive or not receive program services. The study provides experimentally based evidence about the effect of school-based mentoring programs when implemented by a variety of sponsoring organizations. Using school records and self-reported data from student surveys, the study estimated impacts on outcomes for intervention and control group students after one school year. Seventeen outcomes in the three domains of interpersonal relationships and personal responsibility, academic achievement and engagement, and high-risk or delinquent behavior were measured. Outcome measures were based on the intended outcomes as stated in the Student Mentoring Program legislation and in the three study research questions:

- What is the impact of school-based mentoring programs funded through the Student Mentoring Program on students' interpersonal relationships with adults, personal responsibility, and community involvement?
- What is their impact on students' school engagement (for example, attendance, positive attitude toward school) and academic achievement?
- What is their impact on students' high-risk or delinquent behavior?

In addition to measuring impacts for the entire sample, impacts were examined within and across subgroups defined by gender, age, family structure, previous low academic achievement, and previous delinquent behaviors. Exploratory analyses examined the relationships between site-level characteristics and student outcomes.

Finally, the study assessed program characteristics and program implementation and whether grantees in the study sample were representative of the full universe of grantees funded through the Student Mentoring Program in 2004 and 2005.

To participate in the study, grantees had to be operational at the beginning of the school year and had to demonstrate that they had more students interested in their programs than they could serve, creating the opportunity to randomly assign interested students to either the program or a control group. A total of 32 grantees met these selection criteria and agreed to participate in the study. The majority of grantees participating in the impact study were nonprofit community- or faith-based organizations (66 percent) with an average of six years of experience with school-based mentoring programs. In addition to data on these grantees, data were also collected on program characteristics for a random sample of 100 grantees to provide additional descriptive information to the U.S. Department of Education and to assess whether the purposive sample used to assess overall program impacts was representative of the range of funded grantees.

To obtain an adequate sample size, 2,573 students were recruited—1,272 were randomly assigned to receive mentoring services from the program (intervention), and 1,301 were randomly assigned to not receive these services (control). Control group students were, however, free to seek out other mentoring services in the community. Three-fifths (60 percent) of the students in the sample were at academic risk, defined as being below proficiency in either reading or math (or both) when the study began, and a fourth of the sample (25 percent) was at risk for delinquency, defined by self-reported delinquent behaviors prior to the study. Nearly three-fourths (72 percent) of the sample were racial/ethnic minority students, and most (86 percent) qualified for the federal free or reduced-price school lunch program.

Program implementation

Approximately 20 percent of the mentors were of high-school age (18 years or younger) and an additional

23 percent were of college age. The majority (96 percent) of mentors reported receiving training or orientation, and 94 percent reported access to ongoing supports from the programs. One in ten mentors reported not having undergone a reference or background check despite that being required as a condition of the grant.

Programs took an average of 81 days from the start of the school year to match students and mentors and had an average lag of 37 days between the date of student random assignment to the programs and the time when a student was matched with a mentor. Fourteen percent of students assigned to receive mentoring services were never matched with a mentor, and 3 percent were matched but never met with their mentors during the school year. Among those who were matched, the majority were matched with mentors of the same race (55 percent) and gender (81 percent).

Once students were matched, they met an average of 1 hour per meeting, 4.4 times a month for 5.8 months, meeting mostly one on one with their mentors. According to the mentors, activities revolved largely around discussions of relationships and students' future plans, as well as academic-related activities. Specifically, 52 percent of mentors reported discussing relationships, 48 percent reported discussing plans for the future all or most of the time, and 43 percent reported working on or discussing academic-related activities all or most of the time; 21 percent reported never working on or discussing academic-related activities despite its being a priority of the program.

Impact findings

No statistically significant impacts were found for the key student-level outcomes after adjusting for multiple comparisons. There were some statistically significant differences in impacts within and across subgroups, and some significant associations were found between site-level characteristics and student outcomes.

Overall impact findings

At the end of the school year (spring) students in the intervention group did not report statistically significant differences in interpersonal relationships, personal responsibility, and community involvement compared with students in the control group. They also did not exhibit statistically significant differences in academic achievement or school engagement or statistically significant lower levels of high-risk or delinquent behavior compared with control group students.

Subgroup findings

Subgroup analyses were conducted to examine impacts both across and within groups by gender, age, family structure, academic risk, and baseline delinquency. For age, truancy rates were statistically significantly lower in the treatment group for younger students (below age 12), but not for older students. However, the difference in impacts between younger and older students was not significant. No further statistically significant differences in impacts between age groups were found for any outcome measure across the three impact domains. Likewise, no statistically significant impacts or differences in impacts were found for family structure, prior academic performance, and prior delinquency. But there were statistically significant differences in impacts and outcomes by gender in two outcome domains:

- *Interpersonal relationships, personal responsibility, and community involvement (positive social behavior).* Intervention group boys reported statistically significantly lower scores on the positive social behavior measure compared with their control counterparts. The difference in impacts between boys and girls was also statistically significant, with boys experiencing significantly lower scores than girls did.

- *Academic outcomes.* The impact of school-based mentoring programs on student self reports of school efficacy and bonding was positive and statistically significant for girls, but not for boys, and the difference in impact by gender was statistically significant with girls scoring higher than boys. The mentoring programs had a statistically significant positive impact on the future orientation measure for boys, but not for girls. But the difference in impacts on this measure by gender was not statistically significant. For all other academic outcomes, neither impacts on boys or girls, nor differences in impacts by gender, were statistically significant.

Correlations between site-level characteristics and impacts

The study also examined whether characteristics of programs and their mentors varied across sites and, if so, whether

program and mentor characteristics could be associated with differences in impacts at the site level. Because sites were not randomly assigned to different levels of implementation—a primary potential source of impact variation—this analysis is descriptive and exploratory, not causal.

Nine site-level factors were included in this analysis: average hours of pre-match training provided to mentors, amount of ongoing mentor support, use of activities in mentor-student meetings, percentage of mentors age 22 or below, percentage of mentor-student matches of the same race/ethnicity, percentage of students with self-reported delinquent behaviors at baseline, percentage of students scoring "not proficient" in either math or reading/English language arts at baseline, percentage of mentor-student matches lasting six months or longer, and average number of hours of mentor-student meetings per month. The analyses did not control for the multiple tests that were made, increasing the probability that a statistically significant relationship was found when one does not actually exist. The following associations were found to be statistically significant:

- The frequency of mentor-supervisor meetings was negatively associated with site-level impacts on the positive social behaviors measure from the student survey and on grades in math and social studies. It was also positively associated with site-level impacts on school-reported delinquency.

- The proportion of students with self-reported delinquent behaviors at baseline was positively associated with site-level impacts on social studies grades and negatively associated with site-level impacts on absenteeism and truancy. However, the proportion of students with self-reported delinquent behaviors at baseline was also positively associated with site-level impacts on repeated misconduct from student records.

- The proportion of mentors age 22 or younger was negatively associated with site-level impacts on math grades.

- The proportion of mentor-student matches of the same race/ethnicity was positively associated with site-level impacts on reading grades.

- Average monthly hours of mentor-student meetings were positively associated with site-level impacts on student self-reported future orientation but negatively associated with site-level impacts on grades in math and reading.

For the full report, please visit:

http://ies.ed.gov/ncee/pubs/20094047/index.asp

Bernstein, L., Dun Rappaport, C., Olsho, L., Hunt, D., and Levin, M. (2009). *Impact Evaluation of the U.S. Department of Education's Student Mentoring Program* (NCEE 2009-4047). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance.

NCEE developed the Evaluation Briefs to offer short synopses of complex technical evaluation reports. This brief was not prepared by the study authors.

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