

Appendix A: Sampling Design and Methodology

Statistical Power

Background

This section builds upon the brief discussion of statistical power presented in Section 2.4. For our Impact Study, we wished to determine how many grantees and students we needed to recruit in order to detect specified minimum detectable effect sizes for our overall impact analyses. We therefore performed statistical power analysis in order to estimate the required sample size.

A typical standard for statistical power is 0.80; that is, studies typically require sufficient power to detect some minimum specified effect size 80 percent of the time. For the Impact Study, we wished to recruit a sufficient number of grantees and students to detect an effect size of approximately 0.10 with power of 0.80; as discussed in greater detail below, an effect size of this magnitude represents the lower bound on the anticipated effect size for our study, as identified based on the DuBois, Holloway, Valentine, and Harris (2002) meta-analysis of previous mentoring studies. In the remainder of this section, we describe the statistical process used to derive our estimates of anticipated statistical power. Our achieved level of statistical power was very close to our initial goal (see Section 2.4), and was motivated by the statistical derivations provided here.

Anticipated Model Specification

To perform a power calculation, one must make detailed assumptions about the methodological approach to be used in estimating impacts. When performing our initial power calculations for the Impact Study, we anticipated using ordinary least squares regression to estimate the treatment effect β_{1j} for each site. Our power calculations were based on a multi-site randomized trial, where randomization occurred within sites. Under this fixed-effects design, student treatment and control group characteristics are expected to be spread equally across all sites in the study sample. In other words, because we bypassed selection of sites, the connection between students and sites is removed and inferences pertain only to study students in those sites, and any clustering effects between sites are not accounted for (Schochet, 2005).

The anticipated regression was:

$$[A.1] \quad Y_{ij} = \sum_{j=1}^J \beta_{1j} T_{ij} S_j + \sum_{j=1}^J \beta_{2j} S_j + \beta_3 X_{ij} + \varepsilon_{ij},$$

where,

Y_{ij} is the outcome of interest Y for student i in site j ,

T_{ij} is the treatment indicator for student i in site j ($T_{ij} = 1$ if student i is assigned to the treatment group; $T_{ij} = 0$ otherwise),

S_j is a program indicator equal to 1 for students randomized at site j and to 0 otherwise ($j = 1 \dots J$),

β_{1j} is the estimated average ITT treatment effect for site j ,

β_{2j} is the site-level fixed effect at site j (i.e., the average untreated outcome level of a student at site j),

X_{ij} is a vector of student characteristics measured for each student i in site j ,

β_3 represents the vector of coefficients indicating how student characteristics affect student outcomes, and

ε_{ij} represents a random error term for student i in site j , independent and identically distributed across students.

Assuming that the error terms are identically and independently distributed, for K total parameters estimated in equation [A.1] and N total students, the estimated variance of the least-squares impact estimate $\hat{\beta}_{1j}$ is

$$[A.2] \quad \text{Var}(\hat{\beta}_{1j}) \approx \frac{\hat{\sigma}_j^2}{\sum_{i=1}^N (T_{ij} - \bar{T}_j)^2} \quad \text{for each given site } j = [1 \dots J],$$

where

$$[A.3] \quad \hat{\sigma}_j^2 = \sum_{i=1}^N \frac{(Y_{ij} - \hat{\beta}_{1j}T_{ij} - \hat{\beta}_{2j} - \hat{\beta}_3X_{ij})^2}{N - K + 1}.$$

The anticipated ordinary least squares specification would result in J estimates of the treatment effect, one for each of the J sites. To obtain an estimate of the overall treatment effect, we anticipated calculating the weighted average of each of these site-specific estimates, with weights ω_j set inversely proportional to the sampling variances, $\hat{\sigma}_j^2$.¹ The resulting overall treatment effect estimate would then be given by:

$$[A.4] \quad \hat{\beta}_1 = \sum \omega_j \hat{\beta}_{1j},$$

with estimated variance equal to

¹ Application of these weights cancels out the sampling variance term ($\hat{\sigma}_j^2$) in equation [A.2], leaving only the factor of proportionality, which is equal to the numerator term in equation [A.3] when summed across all J sites and all N students.

$$[A.5] \quad \hat{\sigma}^2 = \sum_{j=1}^J \omega_j^2 \text{Var}(\hat{\beta}_{1j}).$$

Anticipated Effect Size for Overall Impacts

In order to complete our power calculations, in addition to specifying our intended methodological approach, it was also necessary to identify the expected effect size E we anticipated finding in the Impact Study. We grounded the power analysis on the best estimates of student mentoring treatment effect sizes available in the existing literature at the time the analysis was performed. Effect sizes potentially vary by outcome and program characteristics. Because the NCLB legislation authorizing the Student Mentoring Program focused on interpersonal relationships, school performance, and delinquency, we identified likely effect sizes for these types of outcomes.

The most comprehensive source of data on anticipated effect sizes in the context of student mentoring at the time we performed the power analysis was a meta-analysis of 59 mentoring studies conducted by DuBois, et al. (2002). This analysis found an average effect size (under a fixed effects assumption) of 0.14 with a confidence interval of 0.10 - 0.18. We therefore initially assumed an expected effect size of 0.14 in our power analysis. However, we later found that, due to difficulties Student Mentoring Program grantees typically encountered in finding appropriate matches for each student in a timely manner, that the expected amount or “dose” of mentoring, that students actually received from the programs in the current study was less than initially anticipated. We therefore revised our expected effect size assumption to $E = 0.10$, the lower bound of the confidence interval in the DuBois, et al. (2002) meta-analysis.

Power Calculations for Overall Impacts

The power calculations presented here were performed with respect to the overall impact analyses of the study. Recall that the power of a test statistic is the probability that the null hypothesis $\bar{\beta}_1 = 0$ will be rejected when in reality $\bar{\beta}_1 = \Delta \neq 0$. For the above specification, assuming a two-tailed test at a significance level of $\alpha = .05$, power can be expressed as:

$$[A.6] \quad \text{POWER} = - \int_{-1.96 - \frac{\Delta}{\sigma}}^{1.96 - \frac{\Delta}{\sigma}} \phi(b) db, \text{ where } \phi \text{ denotes the standard normal pdf.}^2$$

² This formula applies exactly when Y_{ij} is a continuous measure with an error term (ε_{ij} in equation [A.1]) that has a normal distribution. It applies as a close approximation when Y_{ij} is binary, since: (i) estimates of coefficients on binary explanatory variables in linear regression equations, such as the β_{1j} coefficients on the $T_{ij}S_j$ explanatory variables in equation [A.1], are essentially sample means on Y_{ij} and differences in sample means on Y_{ij} when derived using least-squares methods; (ii) by the law of large numbers, the asymptotic distribution of any sample mean or difference in sample means is normal, regardless of the distribution of the initial Y_{ij} values for individual students (a Bernoulli distribution in this case, since Y_{ij} is binary); and (iii) our sample sizes of students are large.

We used this formula to perform power calculations by solving for the value of Δ that yields $\text{POWER} = 0.80$ under a variety of simulated conditions. The parameter σ is derived from equations [A.2], [A.3], and [A.5] above.

It is possible to manipulate equation [A.6] to see that the lower the expected variance of the estimated treatment effect, $\hat{\sigma}^2$, the higher the resulting estimate of statistical power. The assumed magnitude of $\hat{\sigma}^2$ in our simulations depended on a number of factors:

- *Sample size*: From equation [A.3], statistical power estimates depended on the assumed number of sites and the number of students within each site from which we would be able to collect data. In general, the larger the number of students and the higher the assumed response rates, the smaller the sampling variance, and the greater the resulting statistical power. However, as seen below, this was also dependent both on the distribution of students across sites and the proportion of students assigned to the treatment group within each site.
- *Proportion assigned to treatment*: From equation [A.2], estimated sampling variance (and thus statistical power) depended on assumptions about the distribution of students between treatment and control groups within each site (i.e., \bar{T}_j). A fifty-fifty assignment to treatment (i.e., $\bar{T}_j = 0.5$) minimized sampling variance and thus maximized statistical power in a program; a disproportionate assignment to treatment (in either direction) increased the sampling variance, reducing estimated statistical power. Our power calculations made various assumptions about the number of students per site and how they were distributed between treatment and control groups.
- *Statistical precision*: From equation [A.3], estimated sampling variance (and thus statistical power) varied depending on assumptions about how the introduction of covariates would reduce unexplained variance in outcomes. The lower the degree of unexplained variance, the higher the resulting estimated statistical power. Our power calculations assumed alternatively that covariates explained 25 percent or 50 percent of residual variance (after accounting for treatment) within each program.
- *Distribution of students across sites*: From equation [A.5], estimated sampling variance (and thus statistical power) depended partly on our assumptions about how students were distributed across sites. Sites with more students generally had lower sampling variances for the estimated treatment effect (although the variances also depended on the proportion of students randomly assigned to treatment within each site, as explained above; see equation [A.2]).

Note that the anticipated power calculations we performed were necessarily approximate, based on our prior assumptions about the likely sample size, follow-up data collection response rates, distribution of students across sites and between treatment and control groups, residual variation in outcomes controlling for the covariates and program fixed effects (i.e., the numerator term in equation [A.3] when summed across all J sites as well as all N students), and the exact estimation methodology to be employed. In fact, we could not know the sample size, or how it would be distributed across sites and between treatment and control groups, prior to conducting the experiment.

Target Sample Size for Overall Impacts

As a result of the power calculations described above, we concluded that a sample size of 2,658 students would be adequate to detect the desired minimum detectable effect size (MDE) of 0.10 with power of 0.80. More specifically, the minimum effect size the study would have an 80 percent chance of detecting as statistically significant ranged from 0.086 to 0.110 for our anticipated sample of 2,658, depending on assumptions about response rates (either 85 or 95 percent) and the explanatory power of the model (covariates explaining either 25 percent or 50 percent of residual variance within each program after accounting for treatment).³ Comparing this minimum detectable effect to actual effect size findings from previous studies, including the DuBois, et al. (2002) meta-analysis and the BBBSA evaluation (Herrera, 2004), we were confident that, in recruiting this sample size, we would have adequate power to detect reasonable effects for the Impact Study (see discussion in Chapter 2 of the main text).

Achieved Statistical Power for Overall Impacts

In fact, as described in Section 2.9, the analytic approach and methodology ultimately employed in our impact analysis differed slightly from the specification we had assumed in our power calculations. First, because sampling rates varied over time or across schools within some sites, our impact analysis introduced observation weights into our regressions to balance the treated and untreated samples equally across time periods and/or schools within each sites. These observation weights added some additional uncertainty to the estimation. However, it is unlikely that weighting greatly changed statistical power relative to our advance calculations.

Second, we eventually chose to assume that treatment effects were heterogeneous across sites, so to estimate the average treatment effect, we weighted site-specific treatment effects by the proportion of students within each site rather than by the inverse of the sampling variance as our power calculations had assumed. Again, this alternative weighting scheme is unlikely to have greatly influenced statistical power, because sampling variances are roughly proportional to the inverse of sample size as discussed in Appendix E.

It was necessary to recruit students in two waves to meet our recruitment targets. The final group of subjects recruited for our study included 2,573 students.⁴ As previously displayed in Exhibit 2.1, based on actual sample size, response rates, distribution of students across sites and between treatment and control groups, model specification, and explanatory power of included covariates, our study realized minimum detectable effect sizes associated with overall impacts, ranging from 0.101 to 0.176 across our set of outcome variables.

³ Minimum detectable effect sizes are larger for subgroup analyses due to segmentation of the full sample. (See Section 2.9 for a more detailed discussion of our analytic approach for subgroup analyses.) Under the same assumptions as in the above analysis for the full sample, the minimum detectable effect size rises by 41 percent when estimating impacts on any subset of students that comprises half of the total sample (e.g., boys), and doubles for subsets of students comprising a quarter of the sample.

⁴ In total, as previously described in Chapter 2 and in greater detail in the following section, students were recruited from 32 individual sites. Ten programs provided students in both rounds of recruitment and random assignment, for a total of 42 individual groups of students used in our analysis.

Site Selection and Recruitment Procedures

This section elaborates on the process of how program grantees were selected and recruited into the Impact Study, previously outlined in Chapter 2. Drawing from the pool of 245 grantees representing the total population for the evaluation, members of the study team identified eligible grantees through a review of grant applications and follow-up telephone calls. As explained in Chapter 2, to be selected for the Impact Study, grantees were required to be operational by the fall of the study year. We narrowed this pool further by requiring that programs had to have a sufficient over-subscription of students to support the needs of random assignment. Finally, programs had to indicate a willingness to comply with the needs of the Impact Study with respect to random assignment and data collection. The final pool of grantees meeting these criteria comprised 117 programs. We then rank-ordered sites based on (1) the grantee's estimate of potential demand for services, and (2) indications of the grantee's cooperation with study goals. Top-ranking sites were then targeted for recruitment into our study. The first recruitment phase occurred in Summer-Fall 2005, when 21 grantees, and subsequently 1,329 students, were recruited into the study. The second phase took place in Spring-Fall 2006, when 1,244 additional students were recruited from 21 sites.⁵

Potential grantees were assigned to senior staff recruiters. Recruitment activities included a preliminary letter from ED introducing the study, and a telephone follow-up describing the study and assessing the grantee's interest and capability to participate. Abt staff conducted site visits with all eligible and willing grantees to further explain the study design, develop a Memorandum of Understanding (MOU), discuss any necessary local IRB or school board approval processes, and obtain the program's formal agreement to participate in the study.

Abt staff members were assigned to act as Site Coordinators for each grantee included in the Impact Study to facilitate all communication. In addition, each grantee designated a Site Liaison to work with the Site Coordinator to facilitate communication between the grantee and the study team.

Identification and Random Assignment of Student Participants for the Impact Study

This section discusses how students were identified and randomly assigned for the Impact Study.

Identification of Eligible Students

When identifying students for the study, grantees had categorical criteria to determine eligibility, such as grade level or school. Sites also identified appropriate students in a variety of ways, most often asking school staff (such as teachers or counselors from the participating schools) to identify and refer students in need of mentoring to the program.

The Site Liaisons at each program worked with grantee staff to contact the parents of eligible students and obtain signed consent for their children to participate in the study. Common recruitment strategies included sending study consent forms home with students to give to parents to sign and return,

⁵ Of the 32 grantees recruited, 10 provided students in both rounds of recruitment and random assignment. In other words, 10 of the 21 grantees recruited in 2006 had previously been recruited (and were part of our sample) in 2005.

advertisements in the local media, and group meetings for parents of eligible students. The study sample comprised all eligible students, though not all students and parents consented to be included in the study.

All grantees also identified “wildcards,” or students who were considered in extreme need of mentoring services and were thus allowed to receive mentoring outside of the study. In addition, some programs had state or local requirements to serve specific students, such as children of prisoners. Both wildcard students and students to whom grantees were legally bound to provide services were given mentoring, but were excluded from the study to preserve random assignment.

Conducting Random Assignment

Specific procedures for random assignment depended upon the timing of individual grantees’ recruitment activities and readiness to match students with mentors after random assignment. Sites could either submit multiple student lists during ongoing recruitment of mentees and mentors (i.e., rolling recruitment), or recruit the entire sample and send a final student list to Abt for use in random assignment.

Abt staff conducted the random assignment, matching student IDs with a computerized random sequence of numbers. From these randomly ordered lists, students were sorted into the treatment group, beginning at the top of the list and moving down, selecting as many students as available mentors reported by the program. The lists of students selected for treatment were sent back to programs, so that grantees could begin offering services to these students.⁶ This flexible approach to random assignment allowed us to create a randomly ordered list of all eligible applicants, filling program slots with those at the top of the list and assigning the remainder to the control group.

Those students at the bottom portion of the list whose names were not sent to the program were placed into the control group. These students comprised an ordered wait list for slots opening up if students dropped out or new mentors became available within one month of the date that the program began matching students with mentors. In total, approximately two percent of students in the control group moved into the treatment group from the wait list.

Those students who never received a program slot comprised the final control group for the study. Because any segment of a randomly ordered list constitutes a random sample of the overall list, the resulting control group was still well matched to the program group; the only requirement was that slots were offered to applicants in the order their names appeared on the list and that an adequate number of controls remained for the analysis (i.e., at least half of the treatment group sample).

Maintaining the Integrity of Random Assignment

Any study involving random assignment must monitor program compliance with assignment of participants to avoid contamination of the experimental design. A particularly harmful form of contamination happens when control group individuals “cross over” and receive treatment group services, out of compliance with the randomly-ordered list of students.

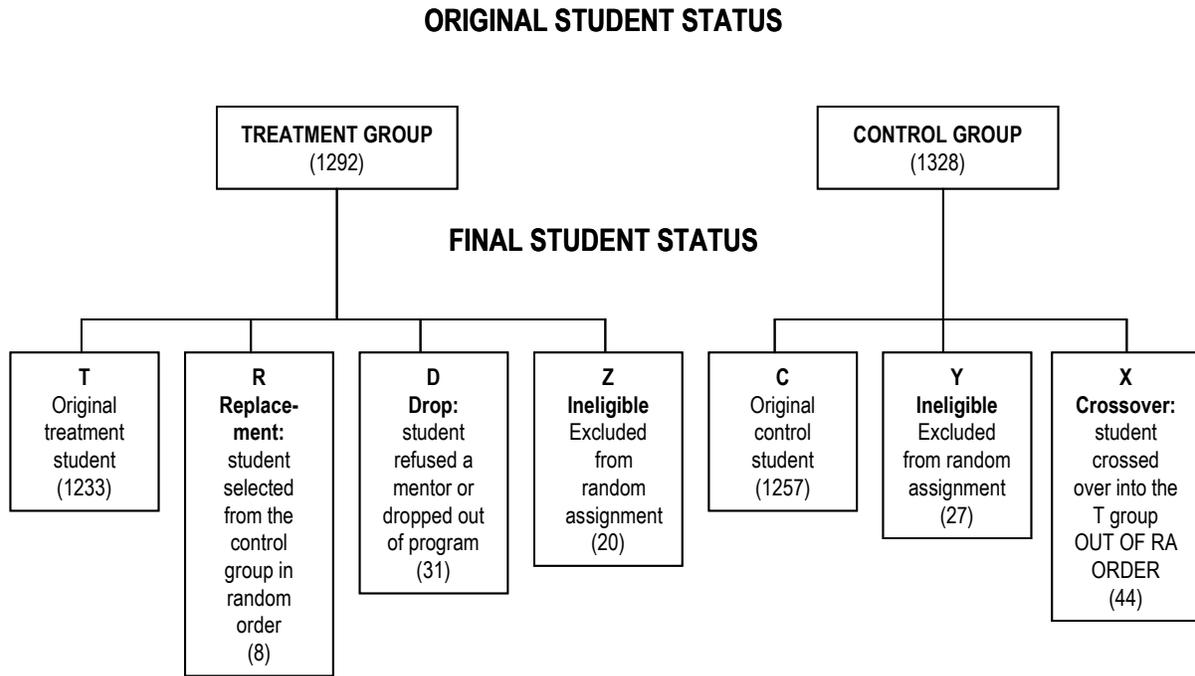
⁶ For sites with specific requirements for matching mentors with students, these lists were also stratified by school grade level, ethnicity, gender, etc. as necessary.

Although this contamination could not be completely prevented, Site Coordinators minimized crossover by working closely with Site Liaisons to monitor student matching and regularly reminding Site Liaisons that control group students must remain unmatched. Site Coordinators worked with Site Liaisons to check group assignments regularly, and to hold debriefing telephone calls with program directors to review the recruitment and random assignment process, reinforce the importance of maintaining the integrity of random assignment, and discuss appropriate strategies for filling new open program slots from the wait list.⁷ Site Liaisons also notified Abt staff if any control group students were matched with a mentor or if there were any other changes in the student sample that affected data collection or analysis, e.g., if a student transferred to a different school.

To preserve random assignment, the study retained drop-outs as members of the treated group. Similarly, wait-list (i.e. control group) students who were not moved to treatment status in order of random assignment were considered control group students, regardless of whether they actually received mentoring from the program as a crossover.

Exhibit A.1 shows the flow of students in the sample, from their original treatment or control group status at the time of initial random assignment to their final status in the study. As described in detail in Section 2.9 of the main text, the model underlying the random assignment and analysis of students was based on an **Intent-To-Treat** framework. In other words, a student's experimental *status* as a treatment or control student, rather than the actual *receipt* of mentoring, served as the measure of treatment. As a result, when a student was informed by a grantee that he or she was allowed to receive services from the program (i.e. that he or she was initially assigned to be a treatment student), then he or she was considered a *treated* student regardless of whether he or she ultimately received mentoring, or the nature of the services actually received. Thus, with the exception of control group students chosen from the wait list in compliance with the randomly-ordered list, who were considered to be valid replacements and therefore re-assigned to treatment group status, all other students in the sample retained their original treatment or control group status in the analysis.

⁷ As described above, in the event that programs wished to fill additional slots with students from the control group, they were provided with the first names in sequence from the randomized control group list to fill those slots. In this case, the student(s) from the vacated slot(s) remained in the treatment group. Programs were restricted from this practice if doing so would result in an imbalance of treatment to control group students of more than a 2:1 ratio.

Exhibit A.1**Disposition of Students in the Study Sample****Selection of the Random Sample of Grantees**

Data capturing program characteristics and implementation were collected for each of the 32 purposively selected Impact Study programs, as well as for a stratified random sample of 100 grantees from the pool of 245 eligible programs. The purpose of the random sample was to provide additional descriptive information to ED for program improvement purposes, as well as to determine whether observable characteristics for the Impact Study purposive sample were comparable to those for the universe of ED program grantees.

The rationale for selecting a sample size of 100 grantees was based on the desire to maintain cost-efficiency through dedicating adequate resources to ensure a very high response rate, essential to yielding unbiased sample estimates of population characteristics.⁸ Second, we wanted to draw a sample that would provide fairly precise estimates of population grantee characteristics for descriptive purposes as well as for conducting comparisons with the 32 purposively selected programs from the Impact Study. As shown in Exhibit A.4, our sample of 100 programs enjoyed excellent levels of precision.

For the comparison sample of grantees, our goal was to select a random sample of 100 grantees that would be representative of all ED-funded Student Mentoring Program grantees. We therefore stratified programs by auspice (community-based organization, faith-based organization and school district) and by year of funding (2004 or 2005), and then selected a random sample of programs within each stratum. This stratification approach was rooted in the assumptions that 1) programs

⁸ In fact, our response rate was 100 percent for the administration of the Grantee Survey.

operating under different auspices may have recruited different types of mentors, and 2) programs funded in different years may have represented different levels of experience or stability at the time of the Grantee Survey. Each of these conditions would be expected to result in more homogeneous characteristics of interest in each grouping.

Using stratification in the selection of grantees was beneficial in two ways: 1) it guarded against extreme cases where non-representative draws may have occurred by chance,⁹ and 2) it could potentially reduce the variance of overall estimates of program attributes by eliminating variation across strata. To minimize the variance, we stratified the sample in proportion to the number of grantees in each stratum among the 245 funded eligible programs.

Sample Allocation

A stratified random sample of 100 grantees was selected. Since we were interested in overall estimates, the best allocation in terms of minimizing the standard errors of the estimates was to allocate the sample in proportion to the number of grantees in each stratum, based on the population of 245 funded programs for which data were available.

Exhibit A.2 shows the distribution of the population of grantees by year and type (school-, community-, or faith-based), and Exhibit A.3 shows the sample allocation.

Exhibit A.2

Distribution of the Population of Grantees

Year of Funding	School-Based	Community-Based	Faith-Based	Total
Year 1	89	55	10	154 63%
Year 2	50	34	7	91 37%
Total	139 (57%)	89 (36%)	17 (7%)	245 (100%)

⁹ This was especially important because some groups of grantees (e.g. faith-based organizations) made up a relatively small proportion of the relevant universe, and could have potentially been left out of a simple random sample drawn without stratification. However, during data analysis and reporting, the community-based and faith-based categories were combined.

Exhibit A.3**Distribution of the Sample by Stratum**

Year of Funding	School-Based	Community-Based	Faith-Based	Total
Year 1	36	23	4	63
Year 2	20	14	3	37
Total	56	37	7	100

Selection of the Sample in Each Stratum

A systematic sample of grantees was drawn in each stratum. We first sorted each stratum's population of programs by region to create an ordered list. We then identified the appropriate sampling interval by dividing the total population of each stratum by the desired number of grantees in that stratum. Finally, we selected grantees from the list, starting at a random point in the first sampling interval, and continuing to select grantees with list placements corresponding to each successive sampling interval end-point.

For example, to select a sample of 20 grantees from the population of 50 in the stratum representing Year 2 school-based programs, the sampling interval was $50/20=2.5$. Starting with a randomly-generated number between 1 and 2.5, we then generated 19 more numbers by adding 2.5 successively, rounding the numbers to the closest integer. Grantees whose list placement corresponded to the 20 generated numbers were then selected for the random sample.

Applying this process within each stratum ultimately resulted in a sample representative of the universe of programs by year, auspice, and geographic region. Note that all 32 sites selected for the Impact Study were also contained in the sampling frame used to draw the random representative sample of 100 sites. As seen in the next section of the appendix, this resulted in an overlap between the representative sample and the purposive Impact Study sample, with 12 sites included in both groups.

Exhibit A.4 shows the 95 percent confidence intervals associated with varying population proportions based on drawing a random sample of 100 programs. Note that these confidence intervals have been narrowed by our stratified random sampling process. Stratification increases the precision of the sample estimates if the stratum means are very different.¹⁰ As the exhibit shows, for an observed sample proportion of .30 based on a randomly drawn sample of 100 programs, we can be 95 percent confident that the actual population proportion falls between .23 and .37.¹¹

¹⁰ The standard errors underlying these confidence intervals were further adjusted by a small sample finite population correction.

¹¹ In other words, if we conducted the random selection of programs 100 times, we would expect the actual population proportion to fall within the estimated confidence interval in 95 instances.

Exhibit A.4**Half-width 95 Percent Confidence Intervals by Population Proportion Based on Population Size, N = 245**

Population Proportion	Half-Width 95 Percent Confidence Level
0.1/.09	0.045
0.2/.08	0.060
0.3/.07	0.069
0.4/.06	0.074
0.5	0.075

Testing Differences between Impact Study and Representative Sample Grantees

We wished to determine whether the 32 purposively-selected Impact Study sites differed significantly in terms of observable program characteristics from the full population of 245 Student Mentoring Program grantees funded by ED in 2004 and 2005. Differences in program characteristics of Impact Study sites, if observed, would point to limited generalizability of our Impact Study results for the full universe of Student Mentoring Programs.

Using a difference of means test, we therefore tested the null hypothesis that observable characteristics of the 32 purposively selected Impact Study sites matched those of the full population of 245 Student Mentoring Program grantees funded in 2004 and 2005, as represented by our random sample of 100 sites.¹² For the purposes of this test, we assumed that the observed mean for the 32 Impact Study programs had no sampling variance, since this population was fully observed. In contrast, the mean for the universe of 245 programs was treated as estimated; that is, it had a sampling variance because the estimated mean was based on a random sample of 100 of these grantees. We thus wished to test whether the estimated mean for the 245 programs differed significantly from the known mean for the 32 programs, using a two-tailed test at a significance level of $\alpha=0.05$.

Because the two groups of grantees were not independent (i.e., 12 of the purposively selected Impact Study grantees were also part of the random sample of 100 programs), an independent t test of the difference between means could not be conducted. Nor could a one-sample t test be conducted given that the “population” value (mean of the 100 programs) was only an estimate, and any subsequent test would therefore be statistically inefficient.

Note that the test described above is equivalent to comparing the observed mean for the 32 programs to the estimated mean for the other 213 programs (i.e., the universe of 245 programs minus the 32 purposively selected programs). However, only 88 programs from the random sample of 100 programs were informative for this purpose. The other 12 programs from the sample of 100 programs were included in the purposive Impact Study sample of 32, and so provided no additional

¹² As previously mentioned, although 255 grantees were initially funded, only 245 grantees were eligible for the evaluation.

information.¹³ We thus eliminated these 12 programs from our random sample of 100 for the purposes of this comparison.

A sample of 88 represents an appreciable proportion of the 213 programs from the full population not selected for inclusion in the Impact Study. Given this large proportion, and because we wish to make inference about only 213 programs and not some larger population, we applied finite sample adjustments to reduce the variance of the estimated mean for the 213 programs.

Let:

X_{32} = the mean for the 32 Impact Study programs.

X_{213} = the mean for the remaining 213 programs.

\hat{X}_{213} = the estimated mean for the 213 programs based on the sample of 88.

X_{245} = the mean for all 245 programs.

\hat{X}_{245} = the estimated mean for all 245 programs.

Our problem was to compare the mean for the 32 (that is, X_{32} , known with certainty) with the mean for the entire population of 245 (X_{245} , which we had to estimate). An estimate for the mean of the 245 programs was derived by taking a weighted average of the mean for the 32 purposively selected Impact Study programs and the estimated mean for the other 213 programs.

$$[A.7] \quad \hat{X}_{245} = (32/245) * X_{32} + (213/245) * \hat{X}_{213}$$

The null hypothesis, as stated earlier is:

$$[A.8] \quad X_{32} - X_{245} = 0$$

Substituting the estimated mean \hat{X}_{245} from equation [A.7] for the true population mean X_{245} in equation [A.8], we obtain the following test statistic for the null hypothesis:

$$\begin{aligned} [A.9] \quad X_{32} - \hat{X}_{245} &= X_{32} - (32/245) * X_{32} - (213/245) * \hat{X}_{213} \\ &= (213/245) * X_{32} - (213/245) * \hat{X}_{213} \\ &= (213/245) * (X_{32} - \hat{X}_{213}) \end{aligned}$$

This statistic would be significantly different from zero if the observed mean for the 32 programs differed significantly (based on a two-tailed test at significance level $\alpha=0.05$) from the estimated mean for the 213 programs. All p-values reported for comparisons between the Impact Study sample and the representative random sample of Grantees in Chapter 3 are based on this test statistic.

¹³ These 12 programs could have provided an estimate of the mean for the 32 purposively selected Impact Study sites. However, the mean for these 32 sites was already known, so the subsample of 12 provided no additional useful data.

Appendix B: Survey Instruments

OMB# 1850-0806
Expiration date is 09/13/08

Grantee Survey

Please return by

Instructions

Please complete all questions, unless you are directed otherwise. When this happens, you will see an arrow with a note that tells you what question to answer like this:

- ₁ Yes → *Go to question 2.*
- ₂ No → *Go to question 3.*

When answering questions, unless you are directed otherwise, select the *one* answer that best describes your program.

If you have any questions about how to complete the survey, please call the following toll-free number: 1-866-534-9161. If necessary, please leave your name and telephone number and someone from the study team will call you back as soon as possible.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1850-0806.

The time required to complete this information collection is estimated to average 30 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: U.S. Department of Education, Washington, D.C. 20202-4651.

If you have comments or concerns regarding the status of your individual submission of this form, write directly to: Institute of Education Sciences, National Center for Educational Evaluation, U.S. Department of Education, 555 New Jersey Avenue, Room 501, Washington, D.C. 20208.

Please enter the date you completed the survey: / / m m/ d d/ y y y y

7-14/

Background Information

To begin we would like to confirm your contact information.

CONTACT INFORMATION	CORRECTIONS / UPDATES? (Please fill in below)
	Respondent name: _____ Organization name: _____ Name of mentoring program: _____ Mailing address: _____ Telephone number: _____ E-mail address: _____

The following few questions are about your organization’s budget, specifically both your total operating budget and your budget for *all* mentoring programs at your organization, and your budget *for your school-based mentoring programs*. If you are a program operator and do not have this information, please obtain it from your organization’s CFO or executive director. The rest of the questions in the survey are about program operations and should be answered by the lead school-based mentoring program staff.

- What is the entire annual operating budget ...

For your school-based mentoring program?	\$ _____	15-21/
For all mentoring programs at your organization?	\$ _____	22-28/
For your entire organization?	\$ _____	29-35/

- If your school-based mentoring efforts are funded by organizations other than the U.S. Department of Education, what kinds of organizations are they? (*Check all that apply.*)

<input type="checkbox"/> ₁ Other government agencies	36/
<input type="checkbox"/> ₂ Foundations	37/
<input type="checkbox"/> ₃ Corporations	38/
<input type="checkbox"/> ₄ Individual donors	39/
<input type="checkbox"/> ₅ Other: _____	40/

41-55/

- Does your organization run any other programs for at-risk youth?

<input type="checkbox"/> ₁ Yes → <i>Go to question 4.</i>	56/
<input type="checkbox"/> ₂ No → <i>Go to question 5.</i>	

4. If your organization runs other activities/programs for at-risk youth that are separate and distinct from the school-based mentoring program, what are they? *(Check all that apply.)*
- ₁ After-school programs (that are distinct from school-based mentoring program efforts that occur after school) 57/
 - ₂ Tutoring 58/
 - ₃ Counseling 59/
 - ₄ Organization refers at-risk youth to other social service agencies 60/
 - ₅ Organization provides support services (counseling, referrals, etc.) to the families of at-risk youth 61/
 - ₆ Other mentoring program(s) 62/
 - ₇ Other: _____ 63/
- 64-78/
5. Describe your organization. Is it... *(Check one response.)*
- ₁ A chapter of Big Brothers Big Sisters, Inc.? 79/
 - ₂ A school or school district?
 - ₃ A non-profit/community based organization other than Big Brothers Big Sisters, Inc.?
 - ₄ A faith-based organization?
 - ₅ Other? _____
- 80-94/
6. Please describe any of the organizations with which you are partnering to run your school-based mentoring program. Are you partnering with ... *(Check all that apply.)*
- ₁ Our organization is not partnering with other organizations. 95/
 - ₂ Faith-based organization(s)? 96/
 - ₃ Big Brothers Big Sisters, Inc.? 97/
 - ₄ Non-profit/community based organization(s) other than Big Brothers Big Sisters, Inc.? 98/
 - ₅ The criminal justice system? 99/
 - ₆ Local company(ies)? 100/
 - ₇ Local college(s)/university(ies)? 101/
 - ₈ Other? _____ 102/
- 103-117/
7. How many paid staff people work on your organization's school-based mentoring program?
- 7a. _____ Number of full-time staff, fully dedicated to your school-based mentoring program. 118-120/
 - 7b. _____ Number of part-time staff, or staff who are full-time, but who dedicate less than full-time to your school-based mentoring efforts. 121-123/

8. Does your program employ a program coordinator specifically for your school-based mentoring program?

₁ Yes → Go to question 9.

124/

₂ No → Go to question 11.

9. How many employees serve in this program coordinator role? Please provide an answer in terms of full-time equivalents (FTEs) (i.e., 1 full-time person = 1 FTE; 1 full-time person and 1 half-time person = 1.5 FTEs; etc.).

_____ Number of FTEs

125-127/

10. Please describe the relevant training and experience that the program coordinator has completed. (Check all that apply. If there is more than one person in this role, please answer for the most senior staff person in this position.)

Education

₁ High school degree or GED 128/

₂ Vocational degree or certification 129/

₃ 2-year college degree 130/

₄ 4-year college degree 131/

₅ Advanced (master's or higher) degree in education 132/

₆ Advanced degree in social work 133/

Other experience

₇ Prior experience teaching 134/

₈ Prior experience as a social worker 135/

₉ Prior experience working with volunteers 136/

₁₀ Prior experience working at a community-based organization 137-138/

₁₁ Prior experience working at a faith-based organization 139-140/

Organization's Experience in School-based Mentoring

11. For how many years has your organization been running a school-based mentoring program?

_____ Number of years of experience

141-143/

12. Which of the following best describes your school-based mentoring efforts? (*Check one response.*)

₁ School-based mentoring is the primary focus of our organization.

144/

₂ School-based mentoring is important to our organization, but not our primary focus.

₃ School-based mentoring is one of many services that we offer youth.

₄ Other: _____

145-159/

13. How many mentor/mentee matches were made in your school-based mentoring program in the past school year? (Here, we define a “match being made” as a mentor and mentee having been paired. Note: if a mentor has more than two mentees this counts as two matches. The number of matches made may not equal the number of mentees served.)

_____ Number of matches

160-162/

14. Consider the length of mentor/mentee relationships in your school-based mentoring program.

(For the following question, please provide a number for each category. When you determine the length of a mentoring relationship, consider that relationship to have begun once mentees and mentors were matched, even if they never met in person. Please consider a relationship to have ended on the last day that the match met. For example, if Jane Mentor and John Mentee were matched on 9/1/06 and their last meeting was 3/1/07, their relationship would have lasted 6 months and you would indicate 6 to 9 months below. If matches lasted exactly 6 months indicate 6 to 9 months. If matches lasted 9 months indicate 9 to 12 months.)

- 14a. By June 30th this year, what percentage of matches will have lasted each of the following time periods:

₁ Our program does not collect these data → Go to question 14b.

163/

**Percentage
of matches**

Duration

Less than 3 months

164-166/

3 to 6 months

167-169/

6 to 9 months

170-172/

9 to 12 months

173-175/

More than 12 months

176-178/

100%

Total

- 14b. By which month were more than 50% of mentees in your school-based mentoring program matched with a mentor? (E.g., if 50% of mentees and mentors were matched in September and another 20% were matched in October, the answer would be “October”.)

₁ September

₇ March

179-180/

₂ October

₈ April

₃ November

₉ May

₄ December

₁₀ June

₅ January

₁₁ July

₆ February

₁₂ August

Organization's Goals for Mentoring

15. To what extent is your school-based mentoring program focused on addressing each of the following goals? (Check one response per row.)

	Our program is not focused on this at all.	Our program is a little focused on this.	Our program is moderately focused on this.	Our program is extremely focused on this.	
Improving mentees' self-esteem	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	181/
Providing mentees with general guidance	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	182/
Improving mentees' relationships with their parents/other caregivers	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	183/
Improving mentees' relationships with other adults in authority (teachers, principals, probation officers, etc.)	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	184/
Improving mentees' relationships with peers	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	185/
Improving mentees' attitudes towards school	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	186/
Improving mentees' academic performance in school	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	187/
Improving mentees' attendance	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	188/
Improving the likelihood that mentees will not drop out of school before graduating from high school	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	189/
Improving mentees' ability to plan for the future (to think about graduating from school, going to college, planning for jobs, etc.)	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	190/
Increasing mentees' likelihood of being engaged in their communities (participating in community service activities, etc.)	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	191/
Increasing mentees' ability to refrain from getting involved in gangs	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	192/
Increasing mentees' ability to refrain from engaging in violent activities	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	193/
Increasing mentees' ability to refrain from engaging in criminal activities	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	194/
Increasing mentees' ability to refrain from using drugs/alcohol	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	195/

	Our program is not focused on this at all.	Our program is a little focused on this.	Our program is moderately focused on this.	Our program is extremely focused on this.	
Increasing mentees' ability to refrain from high-risk sexual behaviors	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	196/

16. Would it be accurate to say that, in your school-based mentoring program... *(Check one response.)*

₁ A. Mentors and mentees are encouraged to spend time together, but the organization does not encourage mentors and mentees to focus on particular issues? *(Go to question 19.)*

197/

OR

₂ B. Program staff encourage mentors and mentees to engage in particular activities and to work on specific behaviors, but there is not a formal written curriculum for mentors? *(Please answer questions 17 and 18.)*

OR

₃ C. Program staff encourage mentors and mentees to engage in particular activities and to work on specific behaviors, and there is a formal written curriculum for mentors (developed either commercially or by the program)? *(Please answer questions 17 and 18.)*

17. If the answer to question 16 is B or C: To what extent do your mentors and mentees in your school-based mentoring program focus on each of the following? *(Check one response per row.)*

	Mentors and mentees are not focused on this at all.	Mentors and mentees are a little focused on this.	Mentors and mentees are moderately focused on this.	Mentors and mentees are extremely focused on this.	
Academics (working with mentees on homework, basic skills, etc.)	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	198/
Career exploration (educating mentees about the world of work, discussing career opportunities that mentees may wish to pursue, etc.)	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	199/
Goals that mentees establish for themselves	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	200/
Preventing mentee involvement with drugs/drug abuse	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	201/
Preventing early sexual activity	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	202/
Preventing truancy/ dropping out of school	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	203/
Preventing violence	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	204/

	Mentors and mentees are not focused on this at all.	Mentors and mentees are a little focused on this.	Mentors and mentees are moderately focused on this.	Mentors and mentees are extremely focused on this.	
Preventing gang involvement	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	205/
Other: _____ _____	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	206/

207-221/

18. Which of these behaviors is the most important focus of your school-based mentoring program? (*Check one response.*)

- ₁ Academics (working with mentees on homework, basic skills, etc.)
- ₂ Career exploration (educating mentees about the world of work, discussing career opportunities that mentees may wish to pursue, etc.)
- ₃ Goals that mentees establish for themselves
- ₄ Preventing mentee involvement with drugs/drug abuse
- ₅ Preventing early sexual activity
- ₆ Preventing truancy/ dropping out of school
- ₇ Preventing violence
- ₈ Preventing gang involvement
- ₉ Other: _____

222/

223-237/

Recruiting Mentors

19. How does your school-based mentoring program recruit mentors? (*Check all that apply.*)

- ₁ 1. Through ads in local newspapers
- ₂ 2. Through public service announcements on local radio or TV stations
- ₃ 3. By distributing flyers and brochures around the community
- ₄ 4. Through partnerships with local businesses
- ₅ 5. Through partnerships with local faith-based organizations
- ₆ 6. Through partnerships with local universities/colleges
- ₇ 7. Through referrals from intermediary organizations (such as mentoring organization, volunteer centers or statewide recruitment campaigns)
- ₈ 8. Through referrals from Board members
- ₉ 9. Through referrals from mentors already involved in the program
- ₁₀ 10. Other: _____

238/

239/

240/

241/

242/

243/

244/

245/

246/

247-248/

249-263/

20. Which of these strategies (1–10) is most effective for recruiting mentors? (*Select one strategy.*)

_____ Strategy #

264-265/

Recruiting Mentees

21. What is the primary source of referrals for mentees in your school-based mentoring program? (*Check one response.*)

- ₁ Classroom teachers
- ₂ School guidance counselors
- ₃ Community-based organizations
- ₄ Faith-based organizations
- ₅ Social service agencies
- ₆ The criminal justice system
- ₇ Other (*Please list.*) _____

266/

267-281/

22. How many school districts have students participating in the school-based mentoring program in the past school year?

_____ Number of districts

282-284/

23. How many schools have students participating in your school-based mentoring program in the past school year?

_____ Number of schools

285-287/

School-based Mentoring Program Mentee Demographics and Risk Factors

24. What is the total number of mentees participating in your school-based mentoring program that your organization runs?

_____ Number of mentees

288-290/

25. What percentage of mentees in the school-based mentoring program that your organization runs were in the following grades in the past school year?

₁ Our program does not collect these data → *Go to question 26.*

291/

Percentage of mentees

Grade

_____ %	Grades K–3	292-294/
_____ %	Grade 4	295-297/
_____ %	Grade 5	298-300/
_____ %	Grade 6	301-303/
_____ %	Grade 7	304-306/
_____ %	Grade 8	307-309/
_____ %	Grades 9 and higher	310-312/
100%	Total	

26. What’s the racial/ethnic composition of mentees in the school-based mentoring program that your organization runs?

₁ Our program does not collect these data → *Go to question 27.*

313/

Percentage of mentees

Race/Ethnicity

_____ %	American Indian or Alaska Native	314-316/
_____ %	Asian	317-319/
_____ %	Black or African American	320-322/
_____ %	Hispanic or Latino	323-325/
_____ %	Native Hawaiian or other Pacific Islander	326-328/
_____ %	White	329-331/
100%	Total	

27. What percent of mentees in your school-based mentoring program that your organization runs are not native English speakers?

₁ Our program does not collect these data → *Go to question 28.*

332/

_____ % of mentees not native English speakers

333-335/

28. What percent of mentees in your school-based mentoring program that your organization runs is female?

_____ % female mentees

336-338/

29. What are the most common risk factors experienced by mentees in your school-based mentoring program? (Check all that apply and rank (1-3) the top three, with 1 being the biggest risk factor.)

Example:

- 3 A
- 1 B
- _____ C
- 2 D
- _____ E, etc.

Does it apply?

Check if yes.

Rank top 3

Does it apply? Check if yes.		Rank top 3	
<input type="checkbox"/> ₁	339/	_____	_{340/} A. Parents abuse drugs/alcohol.
<input type="checkbox"/> ₂	341/	_____	_{342/} B. Child uses drugs/alcohol.
<input type="checkbox"/> ₃	343/	_____	_{344/} C. Child lives in extreme poverty.
<input type="checkbox"/> ₄	345/	_____	_{346/} D. Child has been neglected/abused.
<input type="checkbox"/> ₅	347/	_____	_{348/} E. Child has a learning disability/is developmentally delayed.
<input type="checkbox"/> ₆	349/	_____	_{350/} F. Child gets into frequent fights with peers.
<input type="checkbox"/> ₇	351/	_____	_{352/} G. Child has few/no positive adult role models.
<input type="checkbox"/> ₈	353/	_____	_{354/} H. Child has self-esteem problems.
<input type="checkbox"/> ₉	355/	_____	_{356/} I. Child is failing in school.
<input type="checkbox"/> ₁₀	357-358/	_____	_{359/} J. Child is in a gang.
<input type="checkbox"/> ₁₁	360-361/	_____	_{362/} K. Child has other behavioral problems.
<input type="checkbox"/> ₁₂	363-364/	_____	_{365/} L. Other: _____

366-380/

Pre-Match Activities

30. In your school-based mentoring program, what kinds of screening must **volunteers** go through before they are matched with mentees? *(Check all that apply.)*
- ₁ Written application process 381/
 - ₂ Personal interview 382/
 - ₃ Background check (general) 383/
 - ₄ Background check—criminal records check 384/
 - ₅ Background check—child and domestic abuse record checks 385/
 - ₆ Reference check 386/
 - ₇ Other: _____ 387/
- 388-402/
31. Are **mentors** in your school-based mentoring program required to participate in pre-match training/orientation?
- ₁ Yes → *Go to question 32.* 403/
 - ₂ No → *Go to question 34.*
32. If yes, what does that pre-match training/orientation for mentors include? *(Check all that apply.)*
- ₁ Opportunity to meet with mentees interested in having a mentor 404/
 - ₂ Introduction to the program (discussion of requirements for participation and program logistics) 405/
 - ₃ Cross-cultural sensitivity training 406/
 - ₄ Training in how to identify and address situations in which the mentee has been neglected or abused 407/
 - ₅ Training in encouraging mentees to plan for the future and to set long-term goals 408/
 - ₆ Training in working with mentees on academic achievement 409/
 - ₇ Training in working with mentees on refraining from using drugs 410/
 - ₈ Training in working with mentees on refraining from engaging in other criminal behaviors 411/
 - ₉ Training in working with mentees on career preparation 412/
 - ₁₀ Training in working with mentees on drop-out reduction 413-414/
 - ₁₁ Training in working with mentees on refraining from engaging in violence 415-416/
 - ₁₂ Training in working with mentees on refraining from gang involvement 417-418/
 - ₁₃ Training in working with mentees on avoiding high risk sexual behaviors 419-420/
 - ₁₄ Other: _____ 421-422/
- 423-437/

33. In your school-based mentoring program how many hours of pre-match training/orientation must each mentor receive before he or she is able to meet with his or her mentee?
- ₁ There is not a specific number of hours required → *Go to question 34.* 438/
- _____ Number of hours 439-441/
34. In your school-based mentoring program how many weeks, on average, does it take to get a volunteer screened and trained and matched with a mentee?
- _____ Number of weeks 442-444/
35. Are **mentees** in your school-based mentoring program provided with any sort of pre-match orientation/training?
- ₁ Yes → *Go to question 36.* 445/
- ₂ No → *Go to question 37.*
36. If yes, what kind of pre-match orientation/training is provided to **mentees**? (*Check all that apply.*)
- ₁ Introduction to the program (discussion of requirements for participation and program logistics) 446/
- ₂ Training in setting boundaries/resisting inappropriate advances from adults 447/
- ₃ Training in and help with setting goals for participation in the school-based mentoring program 448/
- ₄ Other: _____ 449/
- 450-464/
37. How does your organization match mentees and mentors for your school-based mentoring program? (*Check all that apply.*)
- ₁ Match mentees with mentors as soon as a mentor becomes available 465/
- ₂ Match “highest risk” mentees first 466/
- ₃ Aim to make same race matches 467/
- ₄ Aim to make same gender matches 468/
- ₅ Make matches based on personality-based assessment of what would constitute a good fit (survey of interests, etc.) 469/
- ₆ Mentees meet a pool of eligible mentors and can choose 470/
- ₇ Mentors meet a pool of eligible mentees and can choose 471/
- ₈ Other: _____ 472/
- 473-487/

Parental Involvement

38. How does your program work with the parents/guardians of mentees in the school-based mentoring program? *(Check all that apply.)*
- ₁ Our program does not work with parents. 488/
 - ₂ Parents/guardians meet with potential mentors before matches are made. 489/
 - ₃ Parents/guardians play an active role in selecting particular mentors for their children. 490/
 - ₄ Parents/guardians meet regularly with their children's mentors. 491/
 - ₅ Parents/guardians participate in group-activities with mentors, other youth in the program, and other parents. 492/
 - ₆ Other: _____ 493/
- 494-508/

Participating Mentors

39. Who are the mentors in the school-based mentoring program? That is, what types of people have been recruited? *(Check all that apply.)*
- ₁ Teachers 509/
 - ₂ Clergy 510/
 - ₃ Employers of specific businesses or agencies 511/
 - ₄ Retirees 512/
 - ₅ General adult community members 513/
 - ₆ College students 514/
 - ₇ High-school students 515/
 - ₈ Other: _____ 516/
- 517-531/
40. Are most of the mentors in your school-based mentoring program from one of these groups?
- ₁ Yes → *Go to question 41.* 532/
 - ₂ No → *Go to question 42.*
41. If most of the mentors are from one group, which group is it? *(Check one response.)*
- ₁ Teachers 533/
 - ₂ Clergy
 - ₃ Employers of specific businesses or agencies
 - ₄ Retirees
 - ₅ General adult community members
 - ₆ College students
 - ₇ High school students
 - ₈ Other: _____

Mentee/Mentor Activities

42. During the school year, what is the minimum commitment required for mentees and mentors in your school-based mentoring program? *(Please answer all three of the following unless there is no specific minimum contact required.)*
- ₁ There is no specific minimum contact required. → *Go to question 43.* 549/
- 42a. _____ Number of contacts per month 550-552/
- 42b. _____ Number of hours per contact 553-555/
- 42c. _____ Number of months 556-558/
43. What is the most common ratio for mentees and mentors in your school-based mentoring programs? *(Check one response.)*
- ₁ One mentor to one mentee 559/
- ₂ One mentor to several mentees
- ₃ One mentee to several mentors
- ₄ Several mentors to several mentees
44. Where do mentors and mentees in your school-based mentoring program meet most often? *(Check one response.)*
- ₁ At mentees' schools, during the school day 560/
- ₂ At the mentees' schools, after the school day is over
- ₃ At a faith-based organization
- ₄ At a community-based organization
- ₅ At a local company
- ₆ In the community (location selected by mentee and/or mentor)
- ₇ Somewhere else: _____ 561-575/
45. In what kinds of activities do most mentors and mentees in your school-based mentoring program engage? *(Check all that apply.)*
- ₁ Mentors and mentees spend time talking and "hanging out" together. 576/
- ₂ Mentors and mentees work on mentees' homework. 577/
- ₃ Mentors and mentees work on mentees' academic skills. 578/
- ₄ Mentors and mentees engage in community service activities. 579/
- ₅ Mentors and mentees visit the mentors' workplaces. 580/
- ₆ Mentors and mentees participate in group-activities sponsored by your organization (trips to local museums, libraries, ballgames, colleges, etc.) 581/
- ₇ Mentors meet with mentees' families. 582/
- ₈ Other: _____ 583/

46. Does your school-based mentoring program require or permit contact over the summer (outside of the traditional school year) between mentors and mentees?
- ₁ Yes, summer contact is required → *Go to question 47.* 599/
- ₂ Yes, summer contact is permitted (but not required) → *Go to question 47.*
- ₃ No → *Go to question 48.*
47. If yes, how do mentors and mentees stay in touch over the summer? (*Check all that apply.*)
- ₁ Mentees and mentors continue to meet at school. 600/
- ₂ Mentees and mentors continue to meet in the community. 601/
- ₃ Mentees and mentors are encouraged to exchange e-mails and/or letters and/or to talk on the telephone. 602/
- ₄ Mentees and mentors are encouraged to participate in group-activities sponsored by the organization. 603/
- ₅ We don't encourage any specific behavior. 604/
- ₆ Other: _____ 605/
- 606-620/
48. After mentees “graduate” from (or age out of) your school-based mentoring program, is it possible for their mentors to continue to mentor them, with support from your organization as they do that?
- ₁ Yes 621/
- ₂ No

On-going Support and Training

49. What kinds of **ongoing support** for mentors in your school-based mentoring program does your organization provide? (*Check all that apply.*)
- ₁ Mentor/mentee meetings are supervised by program staff. 622/
- ₂ Mentors have access to social workers who are involved in the program and who can answer questions/address concerns. 623/
- ₃ The organization hosts get-togethers where mentors can meet and discuss strategies for working effectively with mentees. 624/
- ₄ The organization sponsors listservs, mentoring chat rooms, or other on-line forums for mentors to support each other. 625/
- ₅ Mentors are required to participate in on-going trainings on a variety of issues. 626/
- ₆ Mentors have the opportunity to participate in on-going trainings on a variety of issues. 627/
- ₇ Other: _____ 628/
- 629-643/

- ₈ None, our organization focuses on providing support before the match is made and/or after mentoring relationships end. 644/
50. Are mentors in your school-based mentoring program required to report to program staff about their interactions with their mentees?
- ₁ Yes → Go to question 51. 645/
- ₂ No → Go to question 52.
51. If yes, how do they report on their activities? (Check all that apply.)
- ₁ Mentors are required to provide program staff with detailed reports of each of their meetings with mentees, describing activities, etc. 646/
- ₂ Mentors are required to check-in with program staff after every meeting, but they are not required to provide detailed information. 647/
- ₃ Mentors are required to check-in with program staff periodically but not after every mentoring session. 648/
- ₄ Mentors keep formal logs of contacts and times they meet with their mentees. 649/
- ₅ Other: _____ 650/
- 651-665/
52. Does your organization provide any **training opportunities** for mentors in your school-based mentoring program over the course of the program year (in addition to training provided as part of orientation)?
- ₁ Yes → Go to question 53. 666/
- ₂ No → Go to question 54.
53. If yes, what kinds of post-orientation trainings are offered over the program year? (Check all that apply.)
- ₁ Cross-cultural sensitivity training 667/
- ₂ Training in how to identify and address situations in which the mentee has been neglected or abused 668/
- ₃ Training in working with mentees on academic achievement 669/
- ₄ Training in working with mentees on refraining from using drugs 670/
- ₅ Training in working with mentees on refraining from engaging in other criminal behaviors 671/
- ₆ Training in working with mentees on career preparation 672/
- ₇ Training in working with mentees on drop-out reduction 673/
- ₈ Training in working with mentees on refraining from engaging in violence 674/
- ₉ Training in working with mentees on refraining from gang involvement. 675/
- ₁₀ Training in working with mentees on avoiding high risk sexual behaviors 676-677/
- ₁₁ Other ongoing training. (Please describe:) _____ 678-679/
- 680-694/

Information About Program Challenges/Needs for Technical Assistance

54. How difficult is it for you to implement each of the following aspects of mentoring program operation in your school-based mentoring program? (Check one response per row.)

	Very difficult	Somewhat difficult	Not very difficult	Not at all difficult	
Recruiting mentors	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	695/
Retaining mentors	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	696/
Recruiting mentees	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	697/
Retaining mentees	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	698/
Screening mentors (including background checks)	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	699/
Training mentors before they are matched	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	700/
Providing ongoing, post-match support and post-match training for mentors	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	701/
Hiring and retaining quality staff	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	702/
Fundraising	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	703/
Documenting program outcomes	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	704/
Obtaining appropriate insurance/liability coverage	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	705/
Other challenges (<i>Specify:</i>) _____ _____	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	706/

707-721/

Please return this survey, in the enclosed pre-paid envelope, to:

Christina Dyou
Spring Grantee Survey
c/o Abt Associates Inc.
55 Wheeler St.
Cambridge, MA 02138

THANK YOU FOR PARTICIPATING IN THIS SURVEY!

Id 1-4/
Batch 5-6/
7-9/ Blank

Empty rectangular box.

Mentor Survey

General Questions

Please return by _____

Instructions

Please complete all questions; each question includes directions for recording your answer.

You are sometimes told to skip over some questions in the survey. When this happens, you will see an arrow with a note that tells you what question to answer like this:

- ₁ Yes
- ₂ No → *Go to question E4*

Please complete this survey in terms of your experiences in the past school year.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1850-0806.

The time required to complete this information collection is estimated to average 30 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection.

If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: U.S. Department of Education, Washington, D.C. 20202-4651. If you have comments or concerns regarding the status of your individual submission of this form, write directly to: Institute of Education Sciences, National Center for Educational Evaluation, U.S. Department of Education, 555 New Jersey Ave., Room 501, Washington, D.C. 20208.

Information about you

To begin, we would like to confirm your contact information. This information will help us be able to contact you and to mail you your incentive payment.

CONTACT INFORMATION	CORRECTIONS / UPDATES? (Please fill in below)	
	Name: _____	10-34/ 35-69/
	E-mail address: _____	70-119/
	Home telephone #: _____	120-129/
	Work telephone #: _____	130-139/ 140-143/
	Cell phone #: _____	144-153/
		154-188/ 189-223/
		224-225/
	Mailing Address: _____	226-230/

A. Information About Your Involvement in the Student Mentoring Program

The next questions are about your involvement in the Student Mentoring Program.

A1. How did you hear about the program? Was it through ... (Check all that apply.)

- ₁ Ads in local newspapers 231/
- ₂ Public service announcements on local radio or TV stations 232/
- ₃ Flyers/brochures distributed around the community 233/
- ₄ My employer 234/
- ₅ My church/synagogue/mosque/ other faith-based organization 235/
- ₆ My university/college 236/
- ₇ An intermediary organization (such as a mentoring organization, a volunteer center or through a statewide recruitment campaign) 237/
- ₈ Referrals from Board members at the organization that runs the program 238/
- ₉ Mentors already involved in the program 239/
- ₉₅ Other: _____ 240-241
242-243/ 244-245/ 246-247/

A2. How important were the following in your decision to volunteer in the Student Mentoring Program?

	Check one box for each row below ...			
	Not Important	Not very important	Somewhat important	Very important
a. Volunteering makes me feel needed.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 248/
b. I feel compassion for people who need help.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 249/
c. People I respect consider volunteering an important activity.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 250/
d. Volunteering provides me with new perspective on things.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 251/
e. Volunteering is an important aspect of my faith.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 252/
f. I am eager to participate in an activity where I have the opportunity to meet new people who are also interested in volunteering.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 253/
g. I want to give back to my community.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 254/
h. I want to gain experience working with youth.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 255/
i. I want to gain experience working in/with schools.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 256/
j. I have always wanted to be a mentor.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 257/
k. Participating in the Student Mentoring Program fits well with my schedule.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 258/
l. I had heard about this program/sponsoring organization and wanted to volunteer there.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 259/
m. Other: _____ _____	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 260/

261-262/ 263-264/ 265-266/

A3. Have you volunteered as a mentor before participating in the Student Mentoring Program?

267/

- ₁ Yes
- ₂ No

A4. How much contact had you had, prior to your participation in the Student Mentoring Program, with students in grades 4–8?

268/

- ₁ None
- ₂ Very little
- ₃ Some
- ₄ A lot

A5. From the list below, please rank order (1-3, with 1 being the most important) the three most important things you hope to accomplish with your student through the Student Mentoring Program.

Example:

___ 3 ___	Answer choice A
___ 2 ___	Answer choice B
_____	Answer choice C
___ 1 ___	Answer choice D, etc.

#	Rank top 3 below ...	
_____	Increase the student's self-esteem	269-270/
_____	Provide student with general guidance	271-272/
_____	Improve the student's relationships with his/her parents or caregivers	273-274/
_____	Improve the student's relationships with other adults in authority (teachers, principals, probation officers, etc.)	275-276/
_____	Improve the student's relationships with peers	277-278/
_____	Improve the student's attitudes towards school	279-280/
_____	Improve the student's academic performance in school	281-282/
_____	Improve student's attendance	283-284/
_____	Improve the likelihood that the student will not drop out of school before graduating from high school	285-286/
_____	Improve student's ability to plan for the future (to think about graduating from school, going to college, planning for jobs, etc.)	287-288/
_____	Increase the likelihood that the student will be engaged in his/her community (participating in community service activities, etc.)	289-290/
_____	Decrease the likelihood that the student will become involved in gangs	291-292/
_____	Decrease the likelihood that the student will engage in violence	293-294/
_____	Decrease the likelihood that the student will engage in criminal activities	295-296/
_____	Decrease the likelihood that the student will use drugs/alcohol	297-298/
_____	Decrease the likelihood that the student will engage in high-risk sexual behaviors	299-300/
_____	Other:	301-302/
_____	_____ 303-304/ 305-306/ 307-308/	

B. Pre-Match Activities

B1. What kind of screening did you receive before you were matched with your student? **(Check all that apply.)**

- ₁ Written application process 309/
₂ Personal interview 310/
₃ Background/criminal records/child and domestic abuse records check 311/
₄ Reference check 312/
₅ No screening was done prior to being matched with my student 313/
₉₅ Other: _____ 314-315/
316-317/ 318-319/ 320-321/

B2. What kind of orientation and training did you receive before you were matched with your student? **(Check all that apply.)**

- ₁ Opportunity to meet with students interested in having a mentor 322/
₂ Introduction to the program (discussion of requirements for participation and program logistics) 323/
₃ Cross-cultural sensitivity training 324/
₄ Training in encouraging students to plan for the future and to set long-term goals 325/
₅ Training in how to identify and address situations in which the student has been neglected or abused 326/
₆ Training in working with students on academic achievement 327/
₇ Training in working with students on refraining from using drugs 328/
₈ Training in working with students on refraining from engaging in other criminal behaviors 329/
₉ Training in working with students on career preparation 330/
₁₀ Training in working with students on drop-out reduction 331-332/
₁₁ Training in working with students on refraining from engaging in violence 333-334/
₁₂ Training in working with students on refraining from gang involvement 335-336/
₁₃ Training in working with students on avoiding high risk sexual behaviors 337-338/
₁₄ No orientation or training was provided prior to being matched with my student → *Go to question B4* 339-340/
₉₅ Other: _____ 341-342/
343-344/ 345-346/ 347-348/

B3. About how many hours of training or orientation did you receive before you met with your student for the first time?

_____ Number of hours 349-352/

B4. How many weeks did it take you to get screened and trained before you met with your student for the first time?

_____ Number of weeks

353-356/

C. Program Participation

C1. Are you currently mentoring a student in this program?

₁ Yes → *Go to question C3*

₂ No, but I met with a student in this program

₃ No, I never met with any student in this program → *Go to question C7*

C2. If you are not currently mentoring a student but did previously meet with a student in this program, how long ago did you stop mentoring? (When was the last meeting with your last student?)

₁ Last month (within the last four weeks)

₂ One to less than three months ago

₃ Three to less than six months ago

₄ Six or more months ago

C3. Describe the nature of most of your mentoring sessions. **(Check one answer.)**

₁ I shared one student with another mentor

₂ I mentored two or more students at a time with one or more other mentors

₃ I mentored one student at a time

₄ I mentored two or more students at a time

C4. Since you became active in the program, what kinds of ongoing support has the organization that runs the mentoring program provided you and your student(s)? **(Check all that apply.)**

₁ Mentor/student meetings were supervised by program staff

₂ Mentors had access to social workers or program staff who were involved in the program and _____ who could answer questions/address concerns

₃ The organization hosted get-togethers where mentors could meet one another and discuss strategies for working effectively with students

₄ The organization sponsored listservs, mentoring chat rooms, or other on-line forums for mentors to support each other
363/

₅ Other:

_____ 364/

365-366/ 367-368/ 369-

370/

₆ None, the host organization focused instead on providing support before the match was made and/or after mentoring relationships ended
371/

372/Blank

C5. About how often did you see or talk with a mentoring program supervisor about how things were going?

₁ More than once a week
373/

₂ Once a week

₃ Once every two or three weeks

₄ Once a month

₅ Less than once a month

₆ Never

C6. Was this contact...

₁ Required?
374/

₂ Strongly encouraged but not required?

₃ Not required and not strongly encouraged?

₄ Discouraged?

375/Blank

C7. Did the organization provide any training opportunities for mentors to participate in over the course of the program year (in addition to the training provided as part of orientation)?

₁ Yes
376/

₂ No → *Go to question D1*

C8. If yes, what kinds of trainings were offered over the program year, not including the training provided as part of orientation? (**Check all that apply.**)

₁ Cross-cultural sensitivity training
377/

₂ Training in how to identify and address situations in which the student has been neglected or abused
378/

₃ Training in encouraging students to plan for the future and to set long-term goals
379/

₄ Training in working with student on homework
380/

- ₅ Training in working with student on academic skills 381/
 - ₆ Training in working with students on academic achievement 382/
 - ₇ Training in working with students on refraining from using drugs 383/
 - ₈ Training in working with students on refraining from engaging in other criminal behaviors. 384/
 - ₉ Training in working with students on career preparation 385/
 - ₁₀ Training in working with students on drop-out reduction 386-387/
 - ₁₁ Training in working with students on refraining from engaging in violence 388-389/
 - ₁₂ Training in working with students on refraining from gang involvement. 390-391/
 - ₁₃ Training in working with students on avoiding high-risk sexual behaviors. 392-393/
 - ₉₅ The organization provides other ongoing training. *(Please describe:)*
- _____
- _____ 394-395/
- _____ 396-397/ 398-399/ 400-401/

D. Your Perceptions of the Student Mentoring Program

D1. Please rate the quality of each of the following components of the Student Mentoring Program.

	Check one box for each row below ...					
	Extremely Poor	Poor	Fair	Good	Excellent	Not Applicable
Mentor screening process	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅	<input type="checkbox"/> ₆ 402/
Pre-match training/orientation	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅	<input type="checkbox"/> ₆ 403/
Process of matching students and mentors	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅	<input type="checkbox"/> ₆ 404/
Ongoing support from agency staff	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅	<input type="checkbox"/> ₆ 405/
Special group events for mentors and students	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅	<input type="checkbox"/> ₆ 406/

	Check one box for each row below ...					
	Extremely Poor	Poor	Fair	Good	Excellent	Not Applicable
Mentoring program curriculum (A mentoring program curriculum is a particular focus on either discouraging or encouraging certain specified behaviors or on improving academic performance.)	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅	<input type="checkbox"/> ₆ 407/
Ongoing support from school staff	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅	<input type="checkbox"/> ₆ 408/
Appropriate support from staff when mentor/student relationship terminated	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄	<input type="checkbox"/> ₅	<input type="checkbox"/> ₆ 409/

410-

419/Blank

D2. Now, please assess how important each component was to your experience in the program.

	Check one box for each row below ...			
	Not Important	Somewhat Important	Very Important	Essential
Mentor screening process	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 420/
Pre-match training/orientation	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 421/
Process of matching students and mentors	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 422/
Ongoing support from agency staff	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 423/
Special group events for mentors and students	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 424/
Mentoring program curriculum	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 425/
Appropriate support from staff when mentor/student relationship terminated	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 426/
Ongoing support from school staff	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 427/

D3. How satisfied are you with your experience in the Student Mentoring Program?

- ₁ Very satisfied
428/
- ₂ Somewhat satisfied
- ₃ Neutral
- ₄ Somewhat dissatisfied

₅ Very dissatisfied

D4. What could have made your experience in this program better? **(For this question, we are interested in learning about: 1) all of the things that could have made your experience in the program better and 2) about the top 3 things that could have improved your experience. To answer this question, please first check all that apply and then rank (1-3) the top 3 things that could have enhanced your experience, with 1 being the most important.)**

Example:

<input checked="" type="checkbox"/> ₁	_3__	Answer choice A
<input checked="" type="checkbox"/> ₂	_2__	Answer choice B
<input checked="" type="checkbox"/> ₃	___	Answer choice C
<input checked="" type="checkbox"/> ₄	_1__	Answer choice D, etc.

Does it apply? Check if yes	Rank top 3	
<input type="checkbox"/> ₁ 429/	___ 430-431/	More/better training before being matched with your student
<input type="checkbox"/> ₂ 432/	___ 433-434/	More frequent meetings with student
<input type="checkbox"/> ₃ 435/	___ 436-437/	More frequent contact with program staff
<input type="checkbox"/> ₄ 438/	___ 439-440/	Less high-risk students in the program
<input type="checkbox"/> ₅ 441/	___ 442-443/	More supports for my student outside of the program. (My student needs social services that s/he is not getting.)
<input type="checkbox"/> ₆ 444/	___ 445-446/	More/better group activities
<input type="checkbox"/> ₇ 447/	___ 448-449/	More opportunities to meet with other mentors
<input type="checkbox"/> ₈ 450/	___ 451-452/	More opportunities to meet with student's teachers
<input type="checkbox"/> ₉ 453/	___ 454-455/	More opportunities to meet with student's parents
<input type="checkbox"/> ₁₀ 456-457/	___ 458-459/	More support or supervision for mentors
<input type="checkbox"/> ₁₁ 460-461/	___ 462-463/	More training in _____ _____ _____
<input type="checkbox"/> ₉₅ 470-471/	___ 472-473/	Other (Please describe:) _____ _____ _____

D5. What were the biggest challenges in participating in the Student Mentoring Program? **(For this question, we are interested in learning about: 1) all of the challenges you experienced and 2) about the top 3 challenges you faced. To answer this question, please first check all that apply and then rank (1-3) the top 3 challenges, with 1 being the biggest challenge.)**

Example:

<input checked="" type="checkbox"/> ₁	<u> 3 </u>	Answer choice A
<input checked="" type="checkbox"/> ₂	<u> 2 </u>	Answer choice B
<input checked="" type="checkbox"/> ₃	<u> </u>	Answer choice C
<input checked="" type="checkbox"/> ₄	<u> 1 </u>	Answer choice D, etc.

Does it apply? Check if yes	Rank top 3:	
<input type="checkbox"/> ₁ 480/	<u> </u> 481-482	It was hard for me to make the time to meet regularly.
<input type="checkbox"/> ₂ 483/	<u> </u> 484-485/	Pre-match training was ineffective/insufficient.
<input type="checkbox"/> ₃ 486/	<u> </u> 487-488/	It took too long/was too labor intensive to go through pre-match screening and orientation.
<input type="checkbox"/> ₄ 489/	<u> </u> 490-491/	I needed more training than I received. It would have been particularly helpful to have training in _____ _____. <i>(Please fill in the blank.)</i>
<input type="checkbox"/> ₅ 498/	<u> </u> 499-500/	I didn't get enough support from program staff.
<input type="checkbox"/> ₇ 501/	<u> </u> 502-503/	My student(s) didn't get enough support from program staff.
<input type="checkbox"/> ₈ 504/	<u> </u> 505-506/	I didn't know what to do with my student(s). We needed more structured activities.
<input type="checkbox"/> ₉ 507/	<u> </u> 508-509/	It was difficult to establish a relationship with my student(s).
<input type="checkbox"/> ₁₀ 510-511/	<u> </u> 512-513/	My student(s) often didn't show up for our meetings.
<input type="checkbox"/> ₁₁ 514-515/	<u> </u> 516-517/	My student(s) pressured me to get more involved in his or her life than I felt comfortable doing.
<input type="checkbox"/> ₁₂ 518-519	<u> </u> 520-521/	My student(s) and I were supposed to work on particular skills and behaviors. Working on those things wasn't fun/interesting.
<input type="checkbox"/> ₁₃ 522-523/	<u> </u> 524-525/	My student(s) seemed embarrassed by the fact that he or she was in this program.
<input type="checkbox"/> ₁₄ 526-527/	<u> </u> 528-529/	My student(s) had problems that were too big for me to handle. I felt overwhelmed.

₁₅ 530-531/ _____ 532-533/ I really did not have any challenges participating in the program.

₉₅ 534-535/ _____ 536-537/ Other (Please describe:)

538-539/ 540-541/ 542-543

544-

553/Blank

E. Your Plans for the Future

E1. Do you plan to participate in the Student Mentoring Program next year?

₁ Yes

554/

₂ No → Go to question F1

₉₇ Don't know

E2. Do you plan to participate next year with your current student?

₁ Yes

555/

₂ No

₉₇ Don't know

F. Information About You

F1. Are you...

₁ Male

₂ Female

556/

F2. How old are you?

557-559/

_____ years

F3. Are you Hispanic or Latino?

560/

₁ Yes, Hispanic or Latino

₂ No, not Hispanic or Latino

F4. What is your race? (Please check one or more.)

₁ American Indian or Alaskan Native

561/

₂ Asian

562/

₃ Black or African American

563/

- ₄ Native Hawaiian or other Pacific Islander 564/
- ₅ White 565/

F5. Are you a native English speaker? 566/

₁ Yes → *Go to question F6*

₂ No



F5a. If no, what is your first language?

First Language: _____

567-568/
569-570/

F6. Are you married or living with a partner? 571/

₁ Yes, I am married or living with a partner.

₂ No, I am not married or living with a partner.

F7. Do you have children? 572/

₁ Yes

₂ No → *Go to question F8*



F7a. If you have children:

	Fill # below ...
a. How many live with you all or most of the time?	# _____ 573-574/
b. How many of those that live with you are ages 0 – 5?	# _____ 575-576/
c. How many of those that live with you are ages 6 – 11?	# _____ 577-578/
d. How many of those that live with you are ages 12 – 18?	# _____ 579-580/

F8. What is your employment status (*Please select one answer. If you are a student and employed, please check that you are a full-time student.*)

581/

- ₁ I am employed full-time
 - ₂ I am employed part-time
 - ₃ I am a full-time student → *Go to question F9*
 - ₄ I am retired → *Go to question F9*
 - ₅ I am not employed outside of the home → *Go to question F9*
- F8a. In what field do you work?

- ₁ Agriculture
582/
- ₂ The Arts/creative arts/performing arts/writing/music/dance/photography/film/video
583/
- ₃ Construction
584/
- ₄ Business
585/
- ₅ Computers/technology/science
586/
- ₆ Education/teaching
587/
- ₇ Environmental
588/
- ₈ Healthcare/health-related
589/
- ₉ Law
590/
- ₁₀ Military
591-592/
- ₁₁ Public Safety
593-594/
- ₁₂ Social/community work
595-596/
- ₉₅ Other _____
597-598/

599-600/ 601-602/ 603-604/

F9. How much formal education have you completed?

605-606/

- ₁ Some high school
- ₂ High school graduate or a GED
- ₃ Vocational or technical school certification

- ₄ Some college
- ₅ 2 year college degree
- ₆ 4 year college degree
- ₇ Some post-graduate study
- ₈ Advanced degree

F10. Please record the date you completed this questionnaire.

_ _	_ _	_ _ _ _
Month	Day	Year
<small>607-608/</small>	<small>609-610/</small>	<small>611-614/</small>

If you have not completed your Student-Specific Questionnaire(s), please do so at this time.

If you have completed all of the questionnaire(s), please return the surveys, in the enclosed pre-paid envelope, to:

**Mentor Survey
C/O Abt Associates Inc.
55 Wheeler St.
Cambridge, MA 02138**

THANK YOU FOR PARTICIPATING IN THIS SURVEY!

OMB# 1850-0806
Expiration date is 09/13/08

Mentor Survey

Student Specific Questions

Please complete this survey for:

(insert student name label)

Please return by

Instructions

Please complete these questions based on your experience with the student whose name is on the front of this booklet. Please complete a booklet of student specific questions for each student with whom you were paired in the Student Mentoring Program during the past school year. Please complete all questions. Each question includes directions for recording your answer.

You are sometimes told to skip over some questions in the survey. When this happens, you will see an arrow with a note that tells you what question to answer like this:

- ₁ Yes
- ₂ No → Go to question 4

If you have any questions about how to complete the survey, or if there is another student for whom we did not provide a survey, please call the following toll-free number: 1-866-534-9161. If needed, please leave your name and telephone number, and someone from the study team will call you back as soon as possible.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1850-0806.

The time required to complete this information collection is estimated to average 30 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection.

If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: U.S. Department of Education, Washington, D.C. 20202-4651. If you have comments or concerns regarding the status of your individual submission of this form, write directly to: Institute of Education Sciences, National Center for Educational Evaluation, U.S. Department of Education, 555 New Jersey Ave., Room 501, Washington, D.C. 20208.

Student-Specific Questions

1. Did you ever meet with this student?

₁ Yes → *Go to question 6*
10/

₂ No

2. If no, who initiated the end of the match before you and your student met?

₁ I did.
11/

₂ The student did. → *Go to question 4*

₃ The agency or school did. → *Go to question 4*

3. If **you** ended the match, why did you do so? (**Check all that apply.**)

₁ It was too much of a time commitment
12/

₂ My student had needs that I could not meet; I felt overwhelmed
13/

₃ The program was disorganized/run poorly
14/

₄ I did not feel welcome at my student's school
15/

₉₅ Other (*Please describe:*) _____
16-17/

22-23/

18-19/ 20-21/

4. How disappointed were **you** that the match ended?

24/

₁ Not disappointed at all

₂ A little disappointed

₃ Fairly disappointed

₄ Extremely disappointed

5. How disappointed did **your student** appear to be that the match ended?

₁ Not disappointed at all
25/

₂ A little disappointed

₃ Fairly disappointed

₄ Extremely disappointed

₅ Couldn't tell/not sure

If you never met with this student, you have now completed this section of the survey. If you had a mentoring relationship with any other students in this program, whose name appears on one of the attached survey cover pages, please complete the separate questionnaire for that/those student(s) in terms of your experience with that youth. If you met with another student whose name is not on the attached survey cover pages, please do not complete the rest of the survey (this survey captures the experiences of any youth and mentors who are part of the evaluation of the Student Mentoring Program, and not necessarily every student with whom you may have met).

If you have filled out a questionnaire for each student with whom you have/had a mentoring relationship, the survey is now complete. Please place all completed questionnaires in the pre-paid envelope provided.

Thank you for participating!

6. Please check the month that you and your student were **matched**.

Consider you and your student to be matched once you knew his or her name and expected to meet with him or her.

Month you were matched with your student

- _____1 September
_____2^{27/} October
_____3 November
_____4 December
_____5 January
_____6 February
_____7 March
_____8 April
_____9 May
_____10 June

26-

- 6a. Please check the month that you **stopped** or you **expect to stop** mentoring your student.

Consider the relationship to have ended on the last day that you met with that student. If you plan to mentor this student beyond June, please check June as the month you expect to stop mentoring your student.

Month you stopped/expect to stop mentoring your student

- _____1 September
_____2^{29/} October
_____3 November
_____4 December
_____5 January
_____6 February
_____7 March
_____8 April
_____9 May
_____10 June

28-

7. During the past school year, on average, how often per month did you have in-person contact with your student?

_____ Average number of in-person contacts per month

33/

30-

8. On average, how long, in minutes, was each in-person meeting with your student?

_____ Number of minutes

37/

34-

9. Was the frequency of in person meetings with your student consistent throughout your experience in the program? **(Check one answer.)** 38-
- 39/
- ₁ Yes, we met about the same number of times per month throughout the program.
- ₂ No, initially we met in person regularly; at the end of the school year, we were meeting less, although we were in regular contact even when we didn't meet in person.
(We e-mailed or spoke on the phone.)
- ₃ No, initially we met in person regularly; at the end of the school year we were meeting less frequently and we did not talk on the phone or e-mail when we missed meetings.
- ₄ No, initially we met sporadically, but as our relationship developed, we met more and more frequently.
- ₉₅ Other (*Specify*): _____
- _____ 40-41/ 42-43/
- 44-45/
10. During the past school year, on average, how often per month did you have **other (DO NOT INCLUDE IN-PERSON CONTACTS)** kinds of contact with your student, such as, telephone, e-mail, fax, etc?
- _____ Average number of other (not in-person) contacts per month 46-
- 49/
11. Rate your relationship with your student.
- ₁ **Extremely positive.** We had a terrific, trusting relationship and were very close. 50/
- ₂ **Somewhat positive.** We had a good relationship and were moderately close.
- ₃ **Fair.** We got along OK, but were not very close.
- ₄ **Poor.** We really didn't connect.
12. Where did you and your student meet most often?
- ₁ At school, during the school day 51
- ₂ At school, after the school day 52/
- ₃ At a community based organization 53/
- ₄ At a faith-based organization 54/
- ₅ At a local company 55/
- ₆ In the community (location selected by student and mentor) 56/
- ₉₅ Somewhere else (*Please describe:*) _____ 57-
- 58/ 59-60/ 61-62/ 63-64/
13. What activities did you and your student do in the Student Mentoring Program? **(Check all that apply.)**
- ₁ We spent time talking and "hanging out" together 65/
- ₂ We worked on the student's homework/academic skills 66/
- ₃ We engaged in community service activities 67/

₄ We visited my workplace

68/

₅ We participated in group activities sponsored by the organization (trips to local museums, libraries, ball games, colleges, etc.)

69/

₆ I met with my student's family

70/

₉₅ Other (*Specify*): _____

71-72/

77-78/

73-74/ 75-76/

14. What strategies did you use to support your student? **(For this question, we are interested in learning both what kinds of strategies mentors used to support their students (in general) and what strategies they used most often. To answer this question, please first check all options that apply, then rank (1-3) the 3 strategies you used most frequently, with 1 indicating the most frequent strategy)**

Example:

<input checked="" type="checkbox"/> ₁	<u> 3 </u>	Answer choice A
<input checked="" type="checkbox"/> ₂	<u> 2 </u>	Answer choice B
<input checked="" type="checkbox"/> ₃	<u> </u>	Answer choice C
<input checked="" type="checkbox"/> ₄	<u> 1 </u>	Answer choice D, etc.

Does it apply? Check if yes	Rank top 3	
<input type="checkbox"/> ₁ 79/	<u> </u> 80/	Listened and was a friend to the student
<input type="checkbox"/> ₂ 81/	<u> </u> 82/	Provided the student with a consistent and supportive adult role-model
<input type="checkbox"/> ₃ 83/	<u> </u> 84/	Provided the student with constructive criticism about his or her behavior
<input type="checkbox"/> ₄ 85/	<u> </u> 86/	Praised the student
<input type="checkbox"/> ₅ 87/	<u> </u> 88/	Shared my experiences and discuss how they have affected my life
<input type="checkbox"/> ₆ 89/	<u> </u> 90/	Exposed the student to new things
<input type="checkbox"/> ₇ 91/	<u> </u> 92/	Set goals or standards for the student or helped the student set goals for him or herself
<input type="checkbox"/> ₉₅ 93-94/	<u> </u> 95/	Other. (<i>Please describe</i> :) _____

96-97/ 98-99/ 100-101/

15. When you met with your student, how often did you do each of the following? **(Check the appropriate box for each item.)**

	Check one box for each row below ...			
	Never	Some- times	Most of the time	Almost always
Engaged in casual conversation	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 102/
Talked about student's personal problems	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 103/
Talked about student's aspirations for the future (career plans, college plans, etc.)	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 104/
Talked about student's relationships with parents	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 105/
Talked about student's relationships with teachers/other adults in authority	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 106/
Talked about student's relationships with peers	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 107/
Worked on academic skills	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 108/
Worked on homework	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 109/
Engaged in community service	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 110/
Talked about the importance of completing high school	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 111/
Talked about the risks associated with alcohol/drug use	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 112/
Talked about the risks associated with engaging in violence/criminal activities	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 113/
Talked about the risks associated with gang involvement	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 114/
Talked about the risks associated with high-risk sexual activity	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 115/

117/Blank

116-

16. When you met with your student, how often did each of the following happen? **(Check the appropriate box for each item.)**

	Check one box for each row below ...			
	Never	Some- times	Most of the time	Almost always
Your student seemed really glad to see you.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 118/

	Check one box for each row below ...			
	Never	Some- times	Most of the time	Almost always
Your student confided in you.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 119/
Your student failed to show up for a regularly scheduled meeting.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 120/
You failed to show up for a regularly scheduled meeting.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 121/
It was hard for you to engage your student in conversation.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 122/
You felt overwhelmed by issues that your student presented you with.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 123/
Your student seemed bored/disengaged.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 124/
You enjoyed the time with your student.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 125/
Your student enjoyed the time with you.	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 126/
Other (<i>Please specify:</i>) _____ _____	<input type="checkbox"/> ₁	<input type="checkbox"/> ₂	<input type="checkbox"/> ₃	<input type="checkbox"/> ₄ 127/

128-129/ 130-131/ 132-133/

17. Did your relationship with your student end over the course of the year?

- ₁ Yes
134/
- ₂ No → *Go to question 23*

18. If yes, who initiated the end of the match?

- ₁ I did.
135/
- ₂ The student did. → *Go to question 20*
- ₃ The agency or school did. → *Go to question 21*

19. If **you** ended the match, why did you do so? (**Check all that apply.**)

- ₁ It was too much of a time commitment
136/
- ₂ I didn't get along with my student
137/
- ₃ My student had needs that I could not meet; I felt overwhelmed
138/
- ₄ The program was disorganized/run poorly
139/
- ₅ I did not feel welcome at my student's school
140/

₉₅ Other (*Please describe:*)

141-142/

143-144/ 145-146/ 147-148/

If you answered question 19, go to question 21

20. If the **student** ended the match, why did he or she do so? (**Check all that apply.**)

₁ He or she moved out of the area

149/

₂ He or she had a poor attitude towards the match/behaved poorly while we were meeting and so it became impossible for us to work together

150/

₃ He or she didn't enjoy the experience

151/

₉₅ Other (*Please describe:*)

152-153/

154-155/ 156-157/ 158-

159/

₉₇ I don't know

160-161/

21. How disappointed were **you** that the match ended?

₁ Not disappointed at all

162/

₂ A little disappointed

₃ Fairly disappointed

₄ Extremely disappointed

22. How disappointed did **your student** appear to be that the match ended?

₁ Not disappointed at all

163/

₂ A little disappointed

₃ Fairly disappointed

₄ Extremely disappointed

₅ Couldn't tell/not sure

23. Please record the date you completed this questionnaire.

|_|_|_| |_|_|_| |_|_|_|_|_|_|

Month

164-165/

Day

166-167/

Year

168-171/

If you had a mentoring relationship with any other students in this program, whose name appears on one of the attached survey cover pages, please complete the questionnaire for that/those student(s).

If you have filled out a questionnaire for each student with whom you have/had a mentoring relationship, the survey is now complete. Please place all completed questionnaires in the pre-paid envelope provided. Thank you for participating!

Please return this survey along with your completed Mentor Survey, to:

**Mentor Survey
C/O Abt Associates Inc.
55 Wheeler St.
Cambridge, MA 02138**

THANK YOU FOR PARTICIPATING IN THIS SURVEY!



Abt Associates Inc.

The Evaluation of the
Student Mentoring
Program



CHILD ASSENT FORM

Student Mentoring Evaluation

Dear Student:

The U.S. Department of Education gives out money for student mentoring programs. Student mentoring programs are where students meet with older students or adults to help with school, talk about stuff, and hang out. The Department of Education needs a study to find out how helpful these mentoring programs are and how they can be made better. A company called Abt Associates is doing the study. They will be asking students like you about the things they do and how they feel. Some of these students will be part of a mentoring program and some will not. But we need answers to these questions from both kinds of students.

There are no right or wrong answers to these questions. Your answers will be combined with other students' answers. All the answers you give to our questions will be confidential. This means that we will not tell your parents, your teachers, your school, or anyone else who you know about the answers you give us. We will not ask you to put your name on the answer sheet.

You do not have to answer the questions but we hope you will. We will be asking you some questions about things that you do; some of these questions will be about personal things like questions about your family and friends, drug and alcohol use, and how you do in school. If you do not want to answer a question, you may leave it blank. You may stop answering the questions any time you want. You may ask questions to the person giving the survey to you any time you like. Again, all the answers you give to these questions will be private.

We have also obtained a Confidentiality Certificate (CC) from the US Department of Health and Human Services (DHHS) to protect the researchers from being forced, even by court order or subpoena, to identify you. (The Certificate does not imply approval or disapproval of the project by the Secretary of DHHS. It adds special protection for the research information about you.) You should know, however, that researchers may provide information to appropriate individuals or agencies if harm to you, harm to others, or child abuse becomes a concern. In addition, the federal agency funding this research may see your information if it audits us.

Please read the statements below and sign your name, telling us whether or not you will answer the questions. If you do not want to answer the questions nothing bad will happen to you.

PLEASE PUT AN "X" ON ONE OF THE LINES BELOW, AND PRINT AND SIGN YOUR NAME.

_____ YES, I WILL ANSWER THE QUESTIONS IN THIS SURVEY. My answers will be used for research and will never be given to my parents/guardian, my school or anyone else.

_____ NO, I WILL NOT ANSWER THE QUESTIONS IN THIS SURVEY.

«Name» _____

_____ SIGN YOUR NAME ON THE LINE

Student Survey

Fall Version



The Evaluation of the
Student Mentoring
Program



Abt Associates Inc.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1850-0806. The time required to complete this information collection is estimated to average 25 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: U.S. Department of Education, Washington, D.C. 20202-4651. If you have comments or concerns regarding the status of your individual submission of this form, write directly to: Institute of Education Sciences, National Center for Educational Evaluation, U.S. Department of Education, 555 New Jersey Avenue, Room 501, Washington, D.C. 20208.

DO NOT write your name anywhere on your paper.

Use the pencil provided to complete the survey.
Fill in circles completely.

Like this: ● Not like this: (✓) (✗) (○)

1. You are a . . .

- Boy
- Girl

**4. Which of these people do you live with most of the time?
(Mark ALL of the people who live with you most of the time, not just now and then.)**

- | | |
|---|---|
| <input type="checkbox"/> Mother | <input type="checkbox"/> Sister(s) |
| <input type="checkbox"/> Stepmother | <input type="checkbox"/> Brother(s) |
| <input type="checkbox"/> Foster mother, female guardian | <input type="checkbox"/> Other children |
| <input type="checkbox"/> Father | <input type="checkbox"/> Grandparent(s) |
| <input type="checkbox"/> Stepfather | <input type="checkbox"/> Other adult(s) |
| <input type="checkbox"/> Foster father, male guardian | |

Please fill in the circle that tells whether these things are Not True at All, Not Very True, Sort of True, or Very True for you.

5. About School	Not True at All	Not Very True	Sort of True	Very True
5.a I'm pretty slow in finishing my schoolwork.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.b I do well at my classwork.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.c I have trouble figuring out the answers in school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.d I forget what I learn.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.e I feel that I am just as smart as other kids my age.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.f I raise my hand in class to answer questions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.g I do extra schoolwork on my own.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.h I feel that I am good at schoolwork.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.i I like school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.j Most mornings I look forward to going to school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.k When I have schoolwork to do, I keep working on it until it is finished.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. About Your Friends	Not True at All	Not Very True	Sort of True	Very True
6.a I find it hard to make friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.b I argue or fight with my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.c I wish I had more friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please fill in the circle that tells how often you do these things: Never, Not Much, Some, or A Lot.

7. About Your Parents/Guardians	Never	Not Much	Some	A Lot
7.a I talk with my parent(s) about things I do with my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.b I go to a movie, play, museum, or sports event with my parent(s).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.c I talk with my parent(s) about a problem I am having.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.d I talk with my parent(s) about schoolwork or grades.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. About Other Adults	Never	Not Much	Some	A Lot
8.a I get help with my schoolwork or homework outside of regular school hours from adults other than my parents/guardians.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.b I get help with problems or stuff that is bothering me from adults other than my parents/guardians.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.c I hang out or do fun things with adults other than my parents/guardians.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. About Things You Do	Never	Not Much	Some	A Lot
9.a Finish your homework without being reminded.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.b Get out of bed for school without your parents or other people having to wake you.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.c Clean up after yourself without being reminded.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.d Volunteer to help others through your church, mosque, temple, or synagogue.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.e Volunteer to help others at your school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.f Volunteer to help others in your neighborhood.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. During the past month, did you . . .	Never	Not Much	Some	A Lot
10.a Break something on purpose?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.b Punch, kick, or hit someone?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.c Argue with your parents?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.d Lie to your parents about something?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.e Skip school without permission?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.f Steal something from a store or from another person?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.g Give a teacher a hard time?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.h Carry a weapon, such as a club, knife, or gun?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Have you ever been a member of a gang? (A gang is a group that does some illegal things together, and may have a special name or an area it calls its own.)

- Yes
- No

11.a Are you now a member of a gang?

- Yes
- No

12. Cigarettes, Alcohol, and Other Drugs

12.a How many times did you smoke a cigarette or chew tobacco in the past month?

- | | |
|--|---|
| <input type="checkbox"/> I have never smoked or chewed tobacco | <input type="checkbox"/> 3 to 5 times |
| <input type="checkbox"/> None in the last month | <input type="checkbox"/> 6 to 9 times |
| <input type="checkbox"/> Once or twice | <input type="checkbox"/> 10 or more times |

12.b How many times did you drink a glass of beer, wine, or other alcohol in the past month?

- | | |
|--|---|
| <input type="checkbox"/> I have never drunk a glass of beer, wine or other alcohol | <input type="checkbox"/> 3 to 5 times |
| <input type="checkbox"/> None in the last month | <input type="checkbox"/> 6 to 9 times |
| <input type="checkbox"/> Once or twice | <input type="checkbox"/> 10 or more times |

12.c How many times in the past month did you use any of the following drugs?

	I have never used	None in the past month	Once or twice	3-5 times	6-9 times	More than 10 times
Marijuana (pot, weed)	<input type="checkbox"/>					
Glue, gas, aerosol sprays	<input type="checkbox"/>					
Medicine not prescribed for you	<input type="checkbox"/>					
Cocaine, methamphetamine ("speed")	<input type="checkbox"/>					
Some other drug (Please write its name): _____	<input type="checkbox"/>					

13. How important is it for you . . .

	Not Important at All	Not Very Important	Important	Very Important
13.a To graduate from high school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.b To get an education after finishing high school, such as going to college?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.c To be successful in a job or career?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.d To save money for the future?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Have you ever been in a mentoring program before this school year? (By mentoring, we mean a program where you are matched with an adult or older student and you meet to do things, work on schoolwork, or talk about problems.)

- Yes
 No

15. How often did you meet in that program?

- I have never been in a mentoring program before
 More than 4 times a month
 2 to 4 times a month
 Once a month
 Less than once a month

This is the end of our questions. Thank you very much for participating.



Abt Associates Inc.

The Evaluation of the
Student Mentoring
Program



CHILD ASSENT FORM

Student Mentoring Evaluation

Dear Student:

The U.S. Department of Education gives out money for student mentoring programs. Student mentoring programs are where students meet with older students or adults to help with school, talk about stuff, and hang out. The Department of Education needs a study to find out how helpful these mentoring programs are and how they can be made better. A company called Abt Associates is doing the study. They will be asking students like you about the things they do and how they feel. Some of these students will be part of a mentoring program and some will not. But we need answers to these questions from both kinds of students.

There are no right or wrong answers to these questions. Your answers will be combined with other students' answers. All the answers you give to our questions will be confidential. This means that we will not tell your parents, your teachers, your school, or anyone else who you know about the answers you give us. We will not ask you to put your name on the answer sheet.

You do not have to answer the questions but we hope you will. We will be asking you some questions about things that you do; some of these questions will be about personal things like questions about your family and friends, drug and alcohol use, and how you do in school. If you do not want to answer a question, you may leave it blank. You may stop answering the questions any time you want. You may ask questions to the person giving the survey to you any time you like. Again, all the answers you give to these questions will be private.

We have also obtained a Confidentiality Certificate (CC) from the US Department of Health and Human Services (DHHS) to protect the researchers from being forced, even by court order or subpoena, to identify you. (The Certificate does not imply approval or disapproval of the project by the Secretary of DHHS. It adds special protection for the research information about you.) You should know, however, that researchers may provide information to appropriate individuals or agencies if harm to you, harm to others, or child abuse becomes a concern. In addition, the federal agency funding this research may see your information if it audits us.

Please read the statements below and sign your name, telling us whether or not you will answer the questions. If you do not want to answer the questions nothing bad will happen to you.

PLEASE PUT AN "X" ON ONE OF THE LINES BELOW, AND PRINT AND SIGN YOUR NAME.

_____ YES, I WILL ANSWER THE QUESTIONS IN THIS SURVEY. My answers will be used for research and will never be given to my parents/guardian, my school or anyone else.

_____ NO, I WILL NOT ANSWER THE QUESTIONS IN THIS SURVEY.

SIGN YOUR NAME ON THE LINE

Student Survey

Spring Version



The Evaluation of the
Student Mentoring
Program



Abt Associates Inc.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1850-0806. The time required to complete this information collection is estimated to average 25 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: U.S. Department of Education, Washington, D.C. 20202-4651. If you have comments or concerns regarding the status of your individual submission of this form, write directly to: Institute of Education Sciences, National Center for Educational Evaluation, U.S. Department of Education, 555 New Jersey Avenue, Room 501, Washington, D.C. 20208.

DO NOT write your name anywhere on your paper.

Use the pencil provided to complete the survey.
Fill in circles completely.

Like this: ● Not like this: (✓) (✗) (○)

1. You are a . . .

- Boy
- Girl

**4. Which of these people do you live with most of the time?
(Mark ALL of the people who live with you most of the time, not just now and then.)**

- | | |
|---|---|
| <input type="checkbox"/> Mother | <input type="checkbox"/> Sister(s) |
| <input type="checkbox"/> Stepmother | <input type="checkbox"/> Brother(s) |
| <input type="checkbox"/> Foster mother, female guardian | <input type="checkbox"/> Other children |
| <input type="checkbox"/> Father | <input type="checkbox"/> Grandparent(s) |
| <input type="checkbox"/> Stepfather | <input type="checkbox"/> Other adult(s) |
| <input type="checkbox"/> Foster father, male guardian | |

Please fill in the circle that tells whether these things are Not True at All, Not Very True, Sort of True, or Very True for you.

5. About School	Not True at All	Not Very True	Sort of True	Very True
5.a I'm pretty slow in finishing my schoolwork.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.b I do well at my classwork.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.c I have trouble figuring out the answers in school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.d I forget what I learn.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.e I feel that I am just as smart as other kids my age.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.f I raise my hand in class to answer questions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.g I do extra schoolwork on my own.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.h I feel that I am good at schoolwork.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.i I like school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.j Most mornings I look forward to going to school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.k When I have schoolwork to do, I keep working on it until it is finished.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. About Your Friends	Not True at All	Not Very True	Sort of True	Very True
6.a I find it hard to make friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.b I argue or fight with my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.c I wish I had more friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please fill in the circle that tells how often you do these things: Never, Not Much, Some, or A Lot.

7. About Your Parents/Guardians	Never	Not Much	Some	A Lot
7.a I talk with my parent(s) about things I do with my friends.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.b I go to a movie, play, museum, or sports event with my parent(s).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.c I talk with my parent(s) about a problem I am having.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.d I talk with my parent(s) about schoolwork or grades.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. About Other Adults	Never	Not Much	Some	A Lot
8.a I get help with my schoolwork or homework outside of regular school hours from adults other than my parents/guardians.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.b I get help with problems or stuff that is bothering me from adults other than my parents/guardians.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.c I hang out or do fun things with adults other than my parents/guardians.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. About Things You Do	Never	Not Much	Some	A Lot
9.a Finish your homework without being reminded.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.b Get out of bed for school without your parents or other people having to wake you.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.c Clean up after yourself without being reminded.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.d Volunteer to help others through your church, mosque, temple, or synagogue.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.e Volunteer to help others at your school.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.f Volunteer to help others in your neighborhood.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. During the past month, did you . . .	Never	Not Much	Some	A Lot
10.a Break something on purpose?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.b Punch, kick, or hit someone?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.c Argue with your parents?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.d Lie to your parents about something?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.e Skip school without permission?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.f Steal something from a store or from another person?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.g Give a teacher a hard time?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.h Carry a weapon, such as a club, knife, or gun?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 11. Have you ever been a member of a gang?** (A gang is a group that does some illegal things together, and may have a special name or an area it calls its own.)
- Yes
- No

- 11.a Are you now a member of a gang?**
- Yes
- No

12. Cigarettes, Alcohol, and Other Drugs

12.a How many times did you smoke a cigarette or chew tobacco in the past month?

- | | |
|--|---|
| <input type="checkbox"/> I have never smoked or chewed tobacco | <input type="checkbox"/> 3 to 5 times |
| <input type="checkbox"/> None in the last month | <input type="checkbox"/> 6 to 9 times |
| <input type="checkbox"/> Once or twice | <input type="checkbox"/> 10 or more times |

12.b How many times did you drink a glass of beer, wine, or other alcohol in the past month?

- | | |
|--|---|
| <input type="checkbox"/> I have never drunk a glass of beer, wine or other alcohol | <input type="checkbox"/> 3 to 5 times |
| <input type="checkbox"/> None in the last month | <input type="checkbox"/> 6 to 9 times |
| <input type="checkbox"/> Once or twice | <input type="checkbox"/> 10 or more times |

12.c How many times in the past month did you use any of the following drugs?

	I have never used	None in the past month	Once or twice	3-5 times	6-9 times	More than 10 times
Marijuana (pot, weed)	<input type="checkbox"/>					
Glue, gas, aerosol sprays	<input type="checkbox"/>					
Medicine not prescribed for you	<input type="checkbox"/>					
Cocaine, methamphetamine ("speed")	<input type="checkbox"/>					
Some other drug (Please write its name): _____	<input type="checkbox"/>					

13. How important is it for you . . .	Not Important at All	Not Very Important	Important	Very Important
13.a To graduate from high school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.b To get an education after finishing high school, such as going to college?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.c To be successful in a job or career?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.d To save money for the future?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Have you been involved in a mentoring program this past school year? (By mentoring we mean a program where you are matched with an adult or older student and you meet to do things, work on schoolwork, or talk about problems.)

- Yes
 No

If you answered No to this question, you are finished with the survey. Please put down your pencil and wait while we finish with others.

15. How often do you meet with your mentor in that program?

- I have never been in a mentoring program before
 More than 4 times a month
 2 to 4 times a month
 Once a month
 Less than once a month

16. Were you mentored as part of the _____ program this past school year?

- Yes
 No

If you answered No to this question, you are finished with the survey. Please put down your pencil and wait while we finish with others.

These last few questions are for only those of you were mentored as part of the _____ program. We will be asking you about the person who has been assigned to you by that mentoring program, your mentor. Please answer these questions about you and your mentor.

17. Since school started in fall, how many different mentors from this program have you met with?

- None
- One
- Two
- More than two

*If you answered **None** to this question, you are finished with the survey. Please put down your pencil and wait while we finish with others.*

18. Are you still meeting with a mentor?

- Yes (Go to question 19)
- No

18.a (If No:) How long ago did you stop meeting with your mentor?

- This month
- Last month
- Between last month and six months ago
- More than six months ago

Please fill in the circle that tells whether these things are Not True at All, Not Very True, Sort of True, or Very True for you.

19.	Please answer these questions about you and your mentor.	Not True at All	Not Very True	Sort of True	Very True
19.a	When I am with my mentor, I feel bored.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.b	Sometimes my mentor promises that we will do something and then we don't do it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.c	I feel that I can trust my mentor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.d	When something is bugging me, my mentor listens to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.e	My mentor has good ideas about how to solve problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.f	My mentor talks to me about my future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.g	My mentor helps me with my schoolwork.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

This is the end of our questions. Thank you very much for participating.

Appendix C: Construction of Student Outcome Measures

As explained in Chapter 2, outcome measures for the Impact Study were derived from two sources: the Student Survey and school records. The purpose of this appendix is to explain in detail the creation of the outcome measures based on items in the Student Survey and from abstraction of school records. Readers may refer to Exhibit 2.4, which summarizes the sources and measures used in developing student outcome measures, as well as Appendix B for copies of all survey instruments.

Construction of Measures Based on Student Survey Data

The scales included in the Student Survey were selected with the program logic model in mind; that is, specific measures of impact were matched to the specific goals and activities of the mentoring program. The scales selected met requirements of adequate reliability and validity and had been used in similar studies. Exhibit C.1 identifies the original scales and items in the Student Survey representing the impact domains of interest.

Exhibit C.1			
Student Survey—Included Scales and Measures			
Scale/Measure	Impact Domain	Question Number	Source
Gender	N/A	1	US Census
Household Composition	N/A	4	Original Measure
Scholastic Efficacy	Academics	5a-f*	Subscale of Harter (1988) <i>Self Perception Profile for Adolescents</i> *5f is original item
School Bonding	Academics	5g-k	Hawkins, Guo, Hill, Battin-Pearson, and Abbot (2001)
Peer Relationships	Pro-Social Behaviors	6a-c	Original Scale
Parental Relationships	Pro-Social Behaviors	7a-d	Adapted from <i>National Longitudinal Study of Adolescent Health (AddHealth)</i> – National Institute of Child Health and Human Development
Relationships with Other Adults	Pro-Social Behaviors	8a-c	Original Scale
Personal Initiative	Pro-Social Behaviors	9a-f	Modified from <i>Michigan State University Early Adolescent Survey II</i> , Michigan State University Cooperative Extension Service
Delinquency/Misconduct	Delinquency/ Misconduct	10a-h	Adapted from <i>21st Century Community Learning Centers Program</i> survey, Mathematica Policy Research
Gang Involvement	Delinquency/ Misconduct	11	Original Measure
Tobacco Use	Delinquency/ Misconduct	12a	Adapted from <i>Monitoring the Future</i> , SAMHSA
Alcohol Use	Delinquency/ Misconduct	12b	Adapted from <i>Monitoring the Future</i> , SAMHSA
Drug Use	Delinquency/ Misconduct	12c	Adapted from <i>Monitoring the Future</i> , SAMHSA
Future Orientation	Academics	13a-d	Original Scale

The Student Survey contains a number of scales representing each domain. In developing final outcome measures from the survey items we undertook a series of steps to refine and confirm the best scale construction for our sample. We took these steps for several reasons. First, most of the scales originally identified for inclusion in the Student Survey were subsequently altered in some way, e.g. items were added or subtracted, or subscales of larger scales were used. In addition, the ultimate study sample spanned a large age and comprehension range, from 4th to 8th grade, and some of the scales selected were originally developed on somewhat older populations of children. Given these concerns, we had two analytic goals in constructing final impact measures from the Student Survey: 1) to confirm the reasonableness of the items that constitute the scales originally selected for the instrument, and 2) to determine the reliability of those scales in our sample, eliminating those with low reliability coefficients.

Initial Factor Analyses

We performed a series of factor analyses to determine the utility of our outcome measures for the populations we surveyed. We originally planned a traditional “confirmation” of the underlying constructs represented in the subscales that had been taken from other instruments for use in this context. We were alert to the fact that the subscales had been extracted from longer instruments and in some cases wording had been changed and single items added. In addition, we were aware that while some of the scales have sound psychometric properties they were not tested on populations as diverse in age as the children in our study. In the best of all cases, the factor analysis would have simply confirmed the 8 dimensions they were thought to measure. This was not the case. We describe the steps taken in the development of final outcome measures below.

Assuming that we may be confirming existing scale constructions, we first analyzed sets of scales or items that appeared together visually under the same topic heading on the survey (e.g., *About School*) and/or constituted existing scales.¹ For example, the original 10 items under *About School* constituted subsets of items from two previously developed scales: Scholastic Efficacy (Harter, 1988) and School Engagement/Bonding (Hawkins et al., 2001), with one original item added. We examined each of the similar blended areas of the survey without specifying the number of factors to be extracted within each, assuming the original scales would emerge intact. Scales were analyzed using the fall data. Again, because our survey questions were developed based on existing instruments that have been previously tested and validated by other researchers, our working hypothesis was that the factors present would correspond to these instruments, and that individual items would load in groupings consistent with the original survey question structure, for a total of eight factors in all.

However, at the end of the initial factor analyses, there were 11 preliminary groupings:

- School Bonding
- Scholastic Efficacy
- Perceived Learning Difficulty
- Volunteerism
- Personal Responsibility
- Misconduct
- Delinquency

¹ These preliminary analyses did not include question 11 (Gang Involvement) or question 12 (tobacco, alcohol, and drug abuse).

- Peer Relationships
- Relationships with Parents
- Relationship with Other Adults
- Future Orientation

We evaluated the reliability of each of these outcome measures by calculating Cronbach's α , a measure of internal consistency, using a reliability cutoff of $\alpha = .70$ as a rule of thumb.² Only three groupings, school bonding, future orientation, and mentoring relationships, had Cronbach's α above .70, and four groupings (school efficacy, relationship with parents, relationship with other adults, and misconduct) had Cronbach's α above .60 but below .70.

At this point there were several possible options available to us if we wished to retain these natural groupings: 1) dropping groupings with low reliability (relative to either the .60 or .70 cutoff), 2) retaining groupings with Cronbach's α above 0.60 as well as groupings with Cronbach's α relatively close to the .60 cutoff on the basis of their strong theoretical validity, and/or 3) choosing individual items of interest as single-item outcome measures. We judged the first option to be too restrictive, because it would have eliminated too many groupings, sacrificing important information from each impact domain. The second option was deemed to unacceptably compromise reliability standards. The third and final option threatened analytic parsimony, and additionally could have lent the appearance of "cherry-picking" individual items to achieve desired results.

Exploratory Factor Analysis

We therefore undertook an exploratory factor analysis using all of the survey items to determine the most efficient and reliable set of constructs for this sample and to ascertain whether any other natural groupings of survey items across questions might be present, in hopes of improving both the range of impact measures and their reliability. The new analysis also included imputed data for scales with missing items.³

In general, the results were quite similar to the results from the first analysis, with items falling into the same groupings with only a few minor adjustments involving the retention or exclusion of individual items from each scale. In an effort to improve the overall reliability of other factor groupings to allow the inclusion of these impact measures, we continued the analysis including items from questions 11 and 12, which asked about gang membership and the use of illegal substances (alcohol, tobacco, and drugs), respectively. The result was essentially identical to the prior results, with gang membership and illegal substance abuse items grouping to form two additional outcome measures, for a total of 13 individual factors, only four of which had Cronbach's α above .70: (School Bonding, Future Orientation, Gang Membership, and Misconduct).

² However, particularly for scales with a small number of items, a Cronbach's α of .60 may in some instances be considered acceptable (DeVellis, 2003).

³ These values were imputed according to the following rules:

- On scales (factors) that are made up of five items or more, allow for one missing item and impute it from the mean. Do not include observations with more than one missing item.
- On scales with fewer than five items, only include observations with all values present.

98% of observations were included based on these criteria.

Restricted Analyses

Finally, we conducted a series of *restricted analyses*, varying the power of the analysis and specification of the number of factors allowed. A seven-factor solution resulted in constructs with acceptable theoretical validity for all seven factors. All but two factors (Self-Perception (.61) and Relationship with Other Adults (.61)) were also viewed as having acceptable reliability. Four of these had Cronbach's α at or above the .70 cutoff, while one (Pro-social Behaviors) had an α of .69.⁴ Consequently, we eliminated the two factors with unacceptable reliability, resulting in a total of five outcome measures from the Student Survey scales as follows:

- Pro-social Behaviors (combines items on parental relationships, volunteerism, and personal responsibility)
- Delinquency (combines general items on delinquent behaviors with specific items on gang membership and alcohol, drug, and tobacco use)
- Misconduct
- Scholastic Efficacy and School Bonding (combines items from the Scholastic Efficacy scale and the School Bonding scale)
- Future Orientation

Exhibit C.2 reports included survey items and reliability coefficients for each scale.

Exhibit C.2

Outcome Measures and Reliability Coefficients: Student Survey

Measure	Cronbach's Alpha
<i>Pro-social Behaviors</i>	.69
I talk with my parent(s) about things I do with my friends	
I go to a movie, play, museum or sports event with my parent(s).	
I talk to my parents about a problem	
I talk to my parents about schoolwork	
Finish your homework without being reminded	
Get out of bed for school without being reminded	
Clean up after yourself without being reminded	
Volunteer to help others through church, mosque, temple or synagogue	
Volunteer to help others at school	
Volunteer to help others in your neighborhood	
<i>Future Orientation</i>	.76
How important is it for you:	
To graduate from high school	
To get an education after finishing high school, such as going to college?	
To be successful in a job or career?	

⁴ Given the direct relevance of this domain to the mentoring intervention and its close proximity to the cutoff, we felt it was acceptable to include it in our measures.

Exhibit C.2**Outcome Measures and Reliability Coefficients: Student Survey**

Measure	Cronbach's Alpha
Misconduct	.72
<i>(Reverse coded)</i> During the past month did you:	
Break something on purpose	
Punch, kick or hit someone	
Argue with your parents	
Lie to your parents about something	
Steal something from a store or another person	
Give a teacher a hard time	
Argue or fight with my friends	
Delinquency	.74
<i>(Reverse coded)</i> During the past month did you:	
Skip school without permission	
Carry a weapon, such as a club, knife or gun	
Have you ever been a member of a gang?	
Are you now a member of a gang?	
How many times did you smoke a cigarette or chew tobacco in the past month?	
How many times did you drink a glass of beer, wine or other alcohol in the past month?	
How many times in the past month did you use any of the following drugs? <i>(Followed by list grid of frequency of marijuana; glue, gas aerosols; cocaine, methamphetamine; some other drug (specified))</i>	
Scholastic Efficacy & School Bonding	.72
I do well at my classwork	
I feel that I am just as smart as other kids my age	
I raise my hand in class to answer questions	
I do extra schoolwork on my own	
I feel that I am good at schoolwork	
I like school	
Most mornings I look forward to going to school	
When I have schoolwork to do, I keep working on it until it is finished	

All items except for several of the Delinquency measures were answered using the same 1 – 4 Likert scale. Four items in the Delinquency measure were scored using different metrics. The drug, alcohol and tobacco items were answered in terms of the frequency of use in 6 ordinal categories from “never used” and “none” to “10 or more times” covering the prior 30 days period. The gang involvement items were dichotomous (i.e., currently in a gang or not). All items were standardized into a common scale for analysis. All of these items were standardized to the mean and standard deviation of the two Likert-scale Delinquency measures.

For example, for a given item Y_i , the standardized value Y'_i is given by:

$$[1] Y'_i = \frac{S * (Y_i - \bar{Y})}{s_Y} + M ,$$

where,

S = standard deviation of Likert-scale items,

M = mean of Likert-scale items,

\bar{Y} = mean of Y_i , and

s_Y = standard deviation of Y_i .

Construction of Measures Based on School Records

This section explains how final outcome measures were constructed from school records. School records were abstracted for statewide proficiency test scores, grades, attendance, truancy, disciplinary actions, and student demographic factors such as receipt of free or reduced-price school lunch, for the year prior to the study and at the end of the study year.

Statewide Assessments: Proficiency Test Scores

The test scores for each site varied across all sites that provided test data (see Exhibit C.3); scores were converted into a dichotomous variable representing the threshold level of what was deemed by that state's standard (as published on state education websites and/or determined via telephone follow up with state education representatives) as "proficient."

Exhibit C.3: Coding Rules for Converting Statewide Assessment Test Scores to Proficiency Levels by Site

Site #	Coded as Proficient	Coded as Not Proficient
1	Score of 300 and higher	Scores below 300
2	Score of 300+ or 800+ depending on grade and subject	Scores below 300 or below 800 depending on grade and subject
3	Proficient (P) & Advanced (A)	Needs Improvement (NI) & Warning/Failing (W)
4	Achievement levels 3 & 4	Achievement levels 1 & 2
5	"Pass" or score of 2100+	"Fail" or score below 2100
6	A "grade equivalent" score higher than a student's "grade placement"	A "grade equivalent" score lower than a student's "grade placement"
7	Score of 2100 and higher	Score below 2100
8	Meets Standard (M) & Exceeds (E)	Falls Far Below Standard (FFB) & Approaches Standard (A)
9	Proficient (P) & Distinguished (D)	Novice (N) & Apprentice (A)
10	Proficient (P), Accelerated (AC) & Advanced (AD)	Limited (L) & Basic (B)
11	<i>No data available</i>	<i>No data available</i>
12	Meets Standard (M) & Exceeds (E)	Academic Warning (W) & Below Standards (B)
13	Mastery (M) & Advanced (A) or Foundational (F)	Unsatisfactory (U), Approaching Basic (AB) & Basic (B) or Pre-Foundational (PF)
14	Proficient (3) & Advanced (4)	Minimal (1) & Basic (2)
15	A "grade equivalent" score higher than a student's "grade placement"	A "grade equivalent" score lower than a student's "grade placement"
16	Levels 3, 4, & 5 or Meets Standard (M) & Exceeds Standard (E)	Levels 1 & 2 or Partially Meets Standard (P) & Does Not Meet Standard (D)
17	Meets Standard or scores ending in 50 and higher	Partially Meets Standard or scores ending in less than 50
18	Proficient (P) & Advanced (A)	Novice (N) & Partially Proficient (PP)
19	Achievement levels 3 & 4	Achievement levels 1 & 2
20	Achievement levels 3 & 4	Achievement levels 1 & 2
21	Score of 2100 and higher or Pass	Scores below 2100 or Did Not Pass
22	Score of 300+ or 800+ depending on grade and subject	Scores below 300 or below 800 depending on grade and subject
23	Proficiency levels 3 & 4	Proficiency levels 1 & 2
24	Score of 2100 and higher or Pass	Scores below 2100 or Fail
25	Pass	Fail
26	Proficient (4) & Advanced (5)	Far Below Basic (1), Below Basic (2), & Basic (3)
27	Cut off score varies based on grade & subject (ranges from 204-231)	Cut off score varies based on grade & subject (ranges from 204-231)
28	Score of 2100 and higher	Scores below 2100
29	Proficiency levels 3 & 4	Proficiency levels 1 & 2
30	Proficiency levels 3 & 4	Proficiency levels 1 & 2
31	Meets Standard (M) & Exceeds (E)	Conditional (C) & Do Not Meet (D)
32	Meets Standard (M) & Exceeds (E)	Academic Warning (W or A) & Below average (B)

Student Grades

Grades were abstracted using the grading system employed in each school/district and then transformed into a 5-point scale. Grading systems were remarkably similar. Sixty-nine percent of all sites used a single letter in a series (i.e., A-F) or single number in an ordinal series (1-5) system; 31 percent used an interval numeric system (0-100) and less than one percent used some other system (checks, +/-, written text). The three most common grading systems were transformed into grade equivalencies as outlined in Exhibit C.4. In the case of grading systems not listed in the exhibit, we contacted the local school district to determine appropriate conversion rules.

Exhibit C.4

Grade Equivalencies Across Sites

Performance Level	Grade Equivalencies Included in Score	
	0-100 Scale	Letter Value
1	1-59	F
2	60-69	D
3	70-79	C
4	80-89	B
5	90-100	A

Disciplinary Infractions

A wide range of behaviors was reported in school records as reportable infractions. As Exhibit C.5 indicates, these infractions were first categorized into seven broad categories, and counts were developed for the number of each type of infraction reported for each child. These seven categories were subsequently combined to represent less and more serious behaviors. The categories designated as Harassment, Non-Compliance, Truancy, and “other” were combined to create a single “Misconduct” measure. The categories designated as Property, Drug-Related, and Violence were combined to create a single “Delinquency” measure.

Exhibit C.5**Disciplinary Infractions, by Category**

Harassment:

- Harassment/Bullying (unspecified)
- Verbal Abuse/Name Calling
- Discrimination
- Indecent Exposure
- Makes an Unfounded Charge against Authority

Non-Compliance:

- Inappropriate Behavior/Language, Disruptive
- Failure to Comply with Rules/Disrespectful
- Unauthorized Use of Technology
- Lying/False Information
- Lacks Assignment or Materials
- Bus Violation
- Cheating
- Dress Code Violation
- Not Paying Attention
- Safety Violation
- Student Attire
- Too Many Referrals

Property:

- Damage/Deface Property
- Theft/Extortion
- Record Falsification/Tampering
- Fires/False Alarms
- Unauthorized Use of School Property

Drug-Related:

- Alcohol
- Drugs
- Prohibited Substance
- Tobacco Use

Truancy:

- Cutting Class/Assembly
- Excessive Tardiness
- Leaving School or Class without Permission
- Failure to Attend/Serve Detention
- Chronic Truancy

Violence:

- Physical Aggression – Student
- Physical Aggression – Teacher/Staff
- Possession of Dangerous Weapon
- Possession of Explosives/Pyrotechnic Device
- Sexual Misconduct/Assault
- Fighting/Assault (unspecified)
- Endangered Self or Others
- Gang/Cult Activity
- Hazing
- Throwing Objects
- Violent Pictures/Usage of Weapons
- Possession of Other Weapon, No Intent

Other infractions (not fitting into other categories)

Appendix D: Impact Analysis Results on Original Student Survey Scales and Measures

As first discussed in Chapter 2 and elaborated upon in Appendix C, most measures included in the Student Survey were derived from existing scales with adequate levels of reliability and validity previously established in prior research. However, because some of these scales were developed on older populations of students than those represented by our study sample, most were altered in some way prior to their inclusion in the survey instrument. We ultimately found that for our study sample, many of these Student Survey scales did not meet standard minimal criteria for internal reliability.

To correct for potential threats to internal reliability, in developing final outcome measures from Student Survey data we performed principal components factor analysis with Promax rotation to refine and confirm scale construction for our sample. Appendix C describes in detail the factor analytic steps taken in developing the final Student Survey outcome measures, which maximize internal reliability while preserving a logical mapping to the impact domains of interest. However, analysis of these composite scale outcomes could potentially mask meaningful variation in the individual measures making up each scale, and readers may be interested in comparing the results of this study to impacts on scales corresponding to those used in prior research. For these reasons, in this appendix we present results of a supplementary impact analysis conducted using scales as they originally appeared in the Student Survey.¹ We dropped individual items from scales as necessary to improve internal reliability, but otherwise present results based on intact measures representing the original intent of the Student Survey instrument. Exhibit D.1 displays the individual items comprising each of these measures, along with estimated scale reliability and sources for each set of question items.

¹ See Appendix B for a copy of the Student Survey instrument.

Exhibit D.1: Original Student Survey Scales and Measures

Scale/ Measure	Impact Domain	Cronbach's Alpha (Fall)	Question Number	Item	Source
Scholastic Efficacy	Academics	0.55	5.a	I am slow in finishing school work	Subscale of Harter (1988) <i>Self Perception Profile for Adolescents</i>
			5.b	I do well at class work	
			5.c	I have trouble figuring out the answers	
			5.d	I forget what I learn	
			5.e	I am just as smart as other kids my age	
			5.f	*I raise my hand in class	*Original Item
School Bonding	Academics	0.66	5.g	I do extra schoolwork on my own	Hawkins, Guo, Hill, Battin-Pearson, and Abbot (2001)
			5.h	I am good at school work	
			5.i	I like school	
			5.j	I look forward to going to school	
			5.k	I keep working on schoolwork until it is finished	
Peer Relationships	Interpersonal Relationships	0.56	6.a	I find it hard to make friends	Original Scale
			6.b	I argue or fight with my friends	
			6.c	I wish I had more friends	
Parental Relationships	Interpersonal Relationships	0.63	7.a	I talk with my parents about things	Adapted from <i>National Longitudinal Study of Adolescent Health (AddHealth)</i> - National Institute of Child Health and Human Development
			7.b	I go to a movie with parents	
			7.c	I talk with my parents about a problem	
			7.d	I talk to my parents about schoolwork	
Relationships with Other Adults	Interpersonal Relationships	0.61	8.a	I get help with my schoolwork (other than parents)	Original Scale
			8.b	I get help with problems (other than parents)	
			8.c	I hang out (other than parents)	

Exhibit D.1: Original Student Survey Scales and Measures

Scale/ Measure	Impact Domain	Cronbach's Alpha (Fall)	Question Number	Item	Source
Personal Initiative	Delinquency/ Misconduct	0.55	9.a	Finish your homework w/o being reminded	Modified from <i>Michigan State University Early Adolescent Survey II</i> , Michigan State University Cooperative Extension Service
			9.b	Get out of bed w/o others waking you	
			9.c	Clean up after yourself w/o being reminded	
			9.d	Volunteer to help others through church	
			9.e	Volunteer to help others at school	
			9.f	Volunteer to help others in neighborhood	
Delinquency/ Misconduct	Delinquency/Misconduct	0.72	10.a	Break something on purpose	Adapted from <i>21st Century Community Learning Centers Program</i> survey, Mathematica Policy Research
			10.b	Punch, kick or hit someone	
			10.c	Argue with your parents	
			10.d	Lie to your parents about something	
			10.e	Skip school without permission	
			10.f	Steal something from a store or another person	
			10.g	Give teacher a hard time	
			10.h	Carry a weapon	
Gang Involvement	Delinquency/Misconduct	N/A	11	Ever/how a member of a gang	Original Measure
Tobacco Use	Delinquency/Misconduct	N/A	12.a	Cigarette consumption	Adapted from <i>Monitoring the Future</i> , SAMHSA
Alcohol Use	Delinquency/Misconduct	N/A	12.b	Alcohol consumption	Adapted from <i>Monitoring the Future</i> , SAMHSA
Drug Use	Delinquency/Misconduct	N/A	12.c	Drug consumption	Adapted from <i>Monitoring the Future</i> , SAMHSA
Future Orientation	Academics	0.76	13.a	How important is it: graduate HS	Original Scale
			13.b	How important is it: education after HS	
			13.c	How important is it: success in career	
			13.d	How important is it: save money for future	
Survey items that have been crossed out were dropped from composite scales to maximize internal reliability.					

Scale Reliability

Recall that Cronbach's α is a measure of internal reliability. The reader is cautioned to note that, as is evident from Exhibit D.1, many of the original scales did not meet standard minimal criteria for internal reliability. Only two of eight scales had Cronbach's α of above 0.70 based on Student Survey data collected at baseline; and three of eight had Cronbach's α less than 0.60. Analysis of unreliable outcome data increases the likelihood that random noise in the data will bias impact estimates. **Therefore, results on scales with low reliability reported in this section must therefore be considered merely illustrative, supplemental to the impacts presented in the main text.**

Of additional note is the fact that, for seven of eight Student Survey scales, internal reliability increased significantly between baseline data collected in the fall survey, and post-treatment data collected in the spring. In the spring, four of the eight Student Survey scales had Cronbach's α above 0.70, and three more had Cronbach's α between 0.60 and 0.70.

Results

Exhibits D.2-D.4 present the results of our impact analyses for the full student sample based on the original Student Survey outcomes. Exhibits D.5-D.19 present results for student subgroups (boys versus girls, students below age 12 versus students aged 12 and up, students from two-parent families versus students from other family structures, students with self-reported delinquent behaviors at baseline versus students with no self-reported delinquent behaviors at baseline, and students who were proficient in both math and reading/English language arts at baseline versus students who were not).

Results are presented by outcome domain in a format parallel to that for our main findings in Chapter 4, so that the reader may easily compare the two sets of findings. Also as in our main impact findings, we performed the Benjamini-Hochberg correction to control for multiple comparisons, as described in Section 2.9. Results for data abstracted from student records are therefore presented along with the Student Survey outcomes in order to define the appropriate "families" of comparisons across which we wished to adjust.

In general, this alternative approach to defining Student Survey outcome measures did not substantively alter the findings of this study. For the full sample, there were no statistically significant impacts of the Student Mentoring Program on pro-social behaviors, academic engagement and achievement, or participation in high-risk behavior or delinquency.

For our subgroup findings, impacts of the Student Mentoring Program on two measures, Scholastic Efficacy and School Bonding, were positive and statistically significant for girls (but not for boys); differences between girls and boys on these measures were also statistically significant. Additionally, there was a statistically significant impact on Future Orientation for boys, though the differences in impacts between girls and boys on this measure was not statistically significant.

There were a few scattered statistically significant findings in the remainder of our subgroup analyses, though there were no statistically significant differences between subgroups other than the gender differences described above. In particular, the truancy rate was statistically significantly lower in treatment group students below the age of 12 relative to their control group counterparts, but not for

the older student group. There was a statistically significant impact on the Relationships with Other Adults scale for students who were not academically proficient in both math and reading/ELA at baseline, but not for proficient students. Finally, there was a statistically significant impact on Scholastic Efficacy for students who reported any delinquent behaviors at baseline, but not for students without any delinquent behaviors.

Exhibit D.2: Estimated Impact on Interpersonal Relationships, Personal Responsibility, and Community Involvement

Self-Reported Outcomes	Unadjusted Mean Outcome				Estimated Impact			
	Treatment Group		Control Group		Regression Adjusted T-C Group Difference ^b	p-value to Test Difference	BH-Corrected Critical Value ^c	Estimated Effect Size
	Mean	Standard Deviation ^a	Mean	Standard Deviation				
Peer Relationships	2.98	1.31	2.97	1.35	0.03	0.39	0.03	0.03
Parental Relationships	2.95	1.13	2.94	1.12	0.01	0.79	0.05	0.01
Relationships with Other Adults	2.28	1.18	2.18	1.15	0.08*	0.02	0.01	0.09
Personal Initiative	2.74	0.96	2.75	0.91	-0.01	0.66	0.04	-0.02
Number of students	1163	1197						
Percent missing data	≤2%	≤2%						

^a Standard Deviations are only reported for Means or Mean Percents.

^b Regression Adjusted T-C Difference will not necessarily be equal to the difference between the Unadjusted Mean Outcomes.

^c Based on Benjamini-Hochberg test.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005–Spring 2006; Fall 2006–Spring 2007.

Exhibit D.3: Estimated Impact on Attitudinal and Academic Outcomes

	Unadjusted Mean Outcome				Estimated Impact			
	Treatment Group		Control Group		Regression Adjusted T-C Group Difference ^b	p-value to Test Difference	BH-Corrected Critical Value ^c	Estimated Effect Size
Self-Reported Attitudinal Outcomes (Range 1 – 4)	Mean	Standard Deviation ^a	Mean	Standard Deviation				
Scholastic Efficacy	3.02	0.76	2.97	0.80	0.05*	0.02	0.01	0.09
School Bonding	2.96	0.93	2.94	1.00	0.02	0.37	0.03	0.03
Future Orientation	3.85	0.54	3.80	0.63	0.03*	0.04	0.02	0.08
Number of students	1163		1197					
Percent missing data	≤2%		≤3%					
School-Reported Academic Outcomes								
Overall Absenteeism Rate (Percent)^d	5.03	7.71	5.49	9.63	-0.46*	0.04	0.01	-0.09
Number of students	1163		1197					
Percent missing data	15%		18%					
Grades (Range 1–5)^e								
Math	3.19	1.70	3.23	1.67	-0.05	0.23	0.02	-0.05
English Language Arts	3.57	1.78	3.61	1.69	-0.04	0.40	0.04	-0.04
Science	3.52	1.87	3.55	1.86	-0.03	0.48	0.05	-0.03
Social Studies	3.53	1.92	3.56	1.83	-0.01	0.78	0.05	-0.01
Number of students	1163		1197					
Percent missing data	≤35%		≤33%					
State Assessment Tests								
Math—Percent Proficient	45.69		47.10		-1.53	0.41	0.04	0.94 ^f
Reading/ELA—Percent Proficient	49.40		50.76		-1.66	0.37	0.03	0.94 ^f
Number of students	1163		1197					
Percent missing data	≤25%		≤21%					

^a Standard Deviations are only reported for Means or Mean Percents.

^b Regression Adjusted T-C Difference will not necessarily be equal to the difference between the Unadjusted Mean Outcomes.

^c Based on Benjamini-Hochberg test.; figure shown provides the critical value that the “p-value to Test Difference” in the preceding column must be less than in order for the “Regression Adjusted T-C Group Difference” to be statistically significant after controlling for multiple tests.

^d Lower Overall Absenteeism Rates indicate more positive outcomes.

^e Higher scores indicate higher grades; see Appendix F for further explanation of how these scores were derived.

^f Odds-ratio.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit D.4: Estimated Impact on Delinquent Behaviors and Participation in Harmful Activities

	Unadjusted Mean Outcome				Estimated Impact			
	Treatment Group		Control Group		Regression Adjusted T-C Group Difference ^b	p-value to Test Difference	BH-Corrected Critical Value ^c	Estimated Effect Size
	Mean	Standard Deviation ^a	Mean	Standard Deviation				
Self-Reported Behavioral Outcomes								
Delinquency/Misconduct (Range 1–4)	3.41	0.74	3.40	0.74	0.00	0.84	0.05	0.01
Gang Activity—Percent	5.85		5.46		0.49	0.59	0.04	1.09 ^d
Tobacco Use—Percent	6.11		7.51		-1.17	0.24	0.02	0.83 ^d
Alcohol Use—Percent	12.04		13.38		-1.45	0.27	0.02	0.88 ^d
Drug Use—Percent	7.44		8.09		-0.66	0.53	0.04	0.91 ^d
Number of students	1163		1197					
Percent missing data	≤1%		≤1%					
School-Reported Behavioral Outcomes								
Truancy—Unexcused Absence Rate (Percent) ^e	2.04	4.80	2.47	6.91	-0.45*	0.02	0.01	-0.14
Number of students	1163		1197					
Percent missing data	42%		41%					
Misconduct^f								
Percent committing any infraction	25.00		22.91		2.56	0.13	0.01	1.15 ^d
Percent committing repeated infractions (2+)	14.21		15.63		-0.98	0.48	0.03	0.93 ^d
Delinquency^f								
Percent committing any infraction	18.13		20.03		-1.51	0.35	0.03	0.91 ^d
Percent committing repeated infractions (2+)	8.64		9.13		-0.56	0.65	0.05	0.93 ^d
Number of students	1163		1197					
Percent missing data	≤22%		≤23%					

^a Standard Deviations are only reported for Means or Mean Percents.

^b Regression Adjusted T-C Difference will not necessarily be equal to the difference between the Unadjusted Mean Outcomes.

^c Based on Benjamini-Hochberg test.

^d Odds ratio.

^e Based on 27 sites that reported unexcused absences and total days enrolled

^f Lower percents of the school-reported Truancy, Misconduct, and Delinquency items indicate more positive outcomes.

Treatment Group: Missing data ≤38%; Control Group: Missing data ≤36%

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit D.5: Subgroup Findings by Gender: Interpersonal Relationships, Personal Responsibility, and Community Involvement

Self-Reported Outcome	Unadjusted Mean Outcome								Estimated Impact				
	Boys				Girls				Estimated Impact on Boys ^b	Estimated Impact on Girls ^b	Difference in Impacts	p-value to Test Difference	BH-Corrected Critical Value ^c
	Treatment		Control		Treatment		Control						
	Mean	Standard Deviation ^a	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation					
Peer Relationships	3.01	1.29	3.02	1.34	2.95	1.33	2.93	1.36	0.04	0.02	0.02	0.78	0.04
Parental Relationships	2.83	1.16	2.87	1.14	3.06	1.08	3.00	1.08	-0.05	0.05	-0.10	0.07	0.03
Relationships with Other Adults	2.22	1.21	2.15	1.17	2.33	1.16	2.21	1.13	0.07	0.08	0.00	0.95	0.05
Personal Initiative	2.66	0.97	2.74	0.89	2.81	0.94	2.76	0.93	-0.06	0.04	-0.10*	0.03	0.01
Number of students	542	573	621	624									
Percent missing data	≤3%	≤2%	≤3%	≤3%									

^a Standard Deviations are only reported for Means or Mean Percents.

^b Estimated Impacts on Boys and Girls will not necessarily be equal to the differences between the Unadjusted Mean Outcomes for these two groups.

^c Based on Benjamini-Hochberg test.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007.

Exhibit D.6: Subgroup Findings by Gender: Academic Outcomes

	Unadjusted Mean Outcome								Estimated Impact				
	Boys				Girls				Estimated Impact on Boys ^b	Estimated Impact on Girls ^b	Difference in Impacts	p-value to Test Difference	BH-Corrected Critical Value ^c
	Treatment		Control		Treatment		Control						
Self-Reported Outcome (Range 1–4)	Mean	Standard Deviation ^a	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation					
Scholastic Efficacy	2.99	0.74	2.99	0.83	3.05	0.77	2.95	0.78	-0.01	0.10*+	-0.11*+	0.01	0.01
School Bonding	2.85	0.97	2.90	1.02	3.05	0.89	2.97	0.98	-0.05	0.09*+	-0.14*+	0.01	0.01
Future Orientation	3.83	0.52	3.75	0.72	3.86	0.56	3.84	0.53	0.07*+	0.00	0.07*	0.03	0.02
Number of students	542		573		621		624						
Percent missing data	≤2%		≤2%		≤3%		≤3%						
School-Reported Outcome													
Overall Absenteeism Rate (Percent) d	5.06	7.35	5.08	8.24	5.01	8.02	5.86	10.75	-0.12	-0.82*	0.69	0.13	0.03
Number of students	542		573		621		624						
Percent missing data	13%		16%		16%		19%						
Grades (Range 1–5) e													
Math	3.16	1.79	3.19	1.71	3.29	1.74	3.34	1.78	-0.07	-0.04	-0.03	0.74	0.05
English Language Arts	3.54	1.82	3.56	1.78	3.83	2.17	3.92	2.00	-0.08	0.05	-0.13	0.16	0.03
Science	3.47	2.05	3.49	2.11	3.78	2.12	3.83	2.07	-0.04	-0.03	-0.01	0.88	0.05
Social Studies	3.43	1.97	3.37	1.98	3.77	2.11	3.91	2.01	0.01	-0.05	0.06	0.53	0.04
Number of students	542		573		621		624						
Percent missing data	≤39%		≤34%		≤33%		≤35%						
State Assessment Tests													
Math—Percent Proficient	47.44		47.61		44.09		46.60		-2.38	-1.17	-1.21	0.75	0.04
Reading/ELA—Percent Proficient	50.09		48.57		48.78		52.87		1.61	-4.91	6.52	0.08	0.02
Number of students	542		573		621		624						
Percent missing data	≤23%		≤18%		≤25%		≤22%						

^a Standard Deviations are only reported for Means or Mean Percents.

^b Estimated Impacts on Boys and Girls will not necessarily be equal to the differences between the Unadjusted Mean Outcomes for these two groups.

^c Based on Benjamini-Hochberg test.

^d Lower Overall Absenteeism Rates indicate more positive outcomes.

^e Higher scores indicate higher grades; see Appendix F for further explanation of how these scores were derived.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing..

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit D.7: Subgroup Findings by Gender: Delinquent Behaviors and Participation in Harmful Activities

	Unadjusted Mean Outcome								Estimated Impact				
	Boys				Girls				Estimated Impact on Boys ^c	Estimated Impact on Girls ^c	Difference in Impacts	p-value to Test Difference	BH-Corrected Critical Value ^d
	Treatment	Control	Treatment	Control	Treatment	Control	Treatment	Control					
Self-Reported Outcome ^a	Mean	Standard Deviation ^b	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation					
Delinquency/Misconduct (Range 1–4)	3.37	0.74	3.33	0.82	3.45	0.73	3.47	0.65	0.04	-0.02	0.06	0.11	0.02
Gang Activity—Percent	9.38		8.51		2.72		2.66		1.18	-0.09	1.27	0.50	0.04
Tobacco Use—Percent	6.86		8.15		5.44		6.93		-0.76	-2.23	1.48	0.47	0.04
Alcohol Use—Percent	11.99		13.50		12.09		13.27		-1.09	-1.93	0.83	0.75	0.05
Drug Use—Percent	8.65		8.33		6.36		7.88		0.93	-2.55	3.48	0.10	0.01
Number of students	542		573		621		624						
Percent missing data	≤4%		≤5%		≤3%		≤3%						
School-Reported Behavioral Outcome													
Truancy—Unexcused Absence Rate (Percent) ^{e,f}	2.03	4.35	2.13	5.76	2.06	5.24	2.85	7.97	-0.23	-0.76*	0.53	0.20	0.02
Number of students	542		573		621		624						
Percent missing data	37%		36%		47%		47%						
Misconduct ^f													
Percent committing any infraction	31.59		25.64		18.87		20.36		6.33*	-1.21	7.54*	0.03	0.01
Percent committing repeated infractions (2+)	18.13		17.63		10.56		13.76		0.83	-2.55	3.38	0.23	0.03
Delinquency ^f													
Percent committing any infraction	22.73		24.02		13.85		16.30		0.16	-2.55	2.71	0.41	0.03
Percent committing repeated infractions (2+)	10.18		10.58		7.21		7.77		0.61	-0.97	1.59	0.52	0.05
Number of students	542		573		621		624						
Percent missing data	≤19%		≤21%		≤23%		≤23%						

^a Higher scores on the Misconduct and Delinquency scales indicate more positive outcomes.

^b Standard Deviations are only reported for Means or Mean Percents.

^c Estimated Impacts on Boys and Girls will not necessarily be equal to the differences between the Unadjusted Mean Outcomes for these two groups.

^d Based on Benjamini-Hochberg test.

^e Based on 27 sites that reported unexcused absences and total days enrolled.

^f Lower percents of the school-reported Truancy, Misconduct, and Delinquency items indicate more positive outcomes.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit D.8: Subgroup Findings by Age: Interpersonal Relationships, Personal Responsibility, and Community Involvement

Self-Reported Outcome	Unadjusted Mean Outcome								Estimated Impact				
	Students Below Age 12				Students Aged 12 and Older				Estimated Impact on Younger Students ^b	Estimated Impact on Older Students ^b	Difference in Impacts	p-value to Test Difference	BH-Corrected Critical Value ^c
	Treatment		Control		Treatment		Control						
	Mean	Standard Deviation ^a	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation					
Peer Relationships	2.88	1.34	2.88	1.37	3.21	1.16	3.19	1.25	0.02	0.05	-0.03	0.61	0.03
Parental Relationships	3.02	1.13	3.03	1.10	2.79	1.10	2.71	1.09	-0.03	0.10*	-0.13*	0.03	0.01
Relationships with Other Adults	2.22	1.18	2.14	1.19	2.42	1.17	2.29	1.04	0.07	0.09	-0.02	0.76	0.04
Personal Initiative	2.78	0.96	2.80	0.91	2.63	0.94	2.64	0.89	-0.01	-0.02	0.01	0.87	0.05
Number of students	826		833		337		364						
Percent missing data	≤3%		≤3%		≤2%		≤2%						

^a Standard Deviations are only reported for Means or Mean Percents.

^b Estimated Impacts on Younger Students and Older Students will not necessarily be equal to the differences between the Unadjusted Mean Outcomes for these two groups.

^c Based on Benjamini-Hochberg test.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007.

Exhibit D.9: Subgroup Findings by Age: Academic Outcomes

	Unadjusted Mean Outcome								Estimated Impact					
	Students Below Age 12				Students Aged 12 and Older				Estimated Impact on Younger Students ^b	Estimated Impact on Older Students ^b	Difference in Impacts	p-value to Test Difference	BH-Corrected Critical Value ^c	
	Treatment		Control											
	Mean	Standard Deviation ^a	Mean	Standard Deviation ^a	Mean	Standard Deviation	Mean	Standard Deviation						
Self-Reported Outcome (Range 1–4)														
Scholastic Efficacy	3.06	0.74	3.00	0.78	2.93	0.79	2.90	0.85	0.05*	0.03	0.03	0.56	0.02	
School Bonding	3.04	0.90	3.04	0.96	2.76	0.95	2.70	1.01	0.00	0.08	-0.08	0.11	0.01	
Future Orientation	3.87	0.47	3.83	0.59	3.78	0.66	3.74	0.71	0.03	0.04	-0.01	0.84	0.04	
Number of students	826		833		337		364							
Percent missing data	≤3%		≤3%		≤2%		≤2%							
School-Reported Outcome														
Overall Absenteeism Rate (Percent) ^d	4.24	5.99	4.64	7.95	6.94	10.42	7.50	12.18	-0.51*	-0.88	0.37	0.54	0.02	
Number of students	826		833		337		364							
Percent missing data	14%		18%		17%		16%							
Grades (Range 1–5) ^e														
Math	3.37	1.71	3.43	1.65	2.91	1.86	2.89	1.75	-0.07	-0.03	-0.04	0.71	0.03	
English Language Arts	3.85	1.72	3.88	1.66	3.15	1.95	3.16	1.78	-0.04	-0.05	0.01	0.89	0.05	
Science	3.93	1.91	4.00	1.84	3.11	2.18	2.99	1.94	-0.02	-0.02	0.00	0.98	0.05	
Social Studies	3.89	1.99	3.90	1.91	3.11	2.03	3.08	1.72	0.02	-0.01	0.03	0.78	0.03	
Number of students	826		833		337		364							
Percent missing data	≤37%		≤35%		≤34%		≤32%							
State Assessment Tests														
Math—Percent Proficient	50.57		52.84		34.21		33.21		-3.24	1.13	-4.37	0.28	0.01	
Reading/ELA—Percent Proficient	52.96		55.94		40.90		38.39		-1.83	-1.12	-0.71	0.86	0.04	
Number of students	826		833		337		364							
Percent missing data	≤24%		≤20%		≤26%		≤21%							

^a Standard Deviations are only reported for Means or Mean Percents.

^b Estimated Impacts on Younger Students and Older Students will not necessarily be equal to the differences between the Unadjusted Mean Outcomes for these two groups.

^c Based on Benjamini-Hochberg test.

^d Lower Overall Absenteeism Rates indicate more positive outcomes.

^e Higher scores indicate higher grades; see Appendix F for further explanation of how these scores were derived.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing..

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit D.10: Subgroup Findings by Age: Delinquent Behaviors and Participation in Harmful Activities

	Unadjusted Mean Outcome								Estimated Impact				
	Students Below Age 12				Students Aged 12 and Older				Estimated Impact on Younger Students ^b	Estimated Impact on Older Students ^b	Difference in Impacts	p-value to Test Difference	BH-Corrected Critical Value ^d
	Treatment		Control		Treatment		Control						
Self-Reported Outcome ^a	Mean	Standard Deviation ^b	Mean	Standard Deviation ^b	Mean	Standard Deviation	Mean	Standard Deviation					
Delinquency/Misconduct (Range 1–4)	3.49	0.66	3.47	0.71	3.22	0.83	3.25	0.77	0.02	-0.04	0.06	0.14	0.02
Gang Activity—Percent	5.56		4.59		6.54		7.53		0.89	-0.92	1.81	0.41	0.03
Tobacco Use—Percent	4.08		5.47		10.79		12.29		-1.73	0.12	-1.84	0.48	0.04
Alcohol Use—Percent	8.81		9.19		19.46		23.17		-0.21	-3.51	3.31	0.32	0.03
Drug Use—Percent	4.77		5.43		13.66		14.42		-0.70	-1.30	0.60	0.82	0.05
Number of students	826		833		337		364						
Percent missing data	≤4%		≤4%		≤2%		≤3%						
School-Reported Behavioral Outcome													
Truancy—Unexcused Absence Rate (Percent)^{e,f}	1.60	3.67	1.90	5.44	2.98	6.50	3.78	9.06	-0.55*+	-0.84	0.30	0.58	0.04
Number of students	826		833		337		364						
Percent missing data	≤43%		≤43%		≤39%		≤38%						
Misconduct^f													
Percent committing any infraction	22.67		19.49		31.00		31.61		4.11*	-3.03	7.14	0.06	0.01
Percent committing repeated infractions (2+)	12.05		12.63		19.77		23.27		0.46	-6.32*	6.78*	0.03	0.01
Delinquency^f													
Percent committing any infraction	14.75		15.25		26.83		32.18		-0.22	-6.40	6.17	0.12	0.02
Percent committing repeated infractions (2+)	5.01		5.46		17.99		18.47		-0.56	-1.09	0.53	0.87	0.05
Number of students	826		833		337		364						
Percent missing data	≤20%		≤20%		≤24%		≤28%						

^a Higher scores on the Misconduct and Delinquency scales indicate more positive outcomes.

^b Standard Deviations are only reported for Means or Mean Percents.

^c Estimated Impacts on Younger Students and Older Students will not necessarily be equal to the differences between the Unadjusted Mean Outcomes for these two groups.

^d Based on Benjamini-Hochberg test.

^e Based on 27 sites that reported unexcused absences and total days enrolled.

^f Lower percents of the school-reported Truancy, Misconduct, and Delinquency items indicate more positive outcomes.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit D.11: Subgroup Findings by Family Structure: Interpersonal Relationships, Personal Responsibility, and Community Involvement

	Unadjusted Mean Outcome								Estimated Impact				
	Two-Parent Households				Other Households				Estimated Impact on Two-Parent HHs ^c	Estimated Impact on Other HHs ^b	Difference in Impacts	p-value to Test Difference	BH-Corrected Critical Value ^e
	Treatment		Control		Treatment		Control						
	Mean	Standard Deviation ^a	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation					
Self-Reported Outcome													
Peer Relationships	2.93	1.37	2.88	1.38	3.04	1.22	3.10	1.29	0.09	-0.03	0.11	0.10	0.03
Parental Relationships	3.03	1.09	2.97	1.12	2.85	1.17	2.89	1.10	0.05	-0.06	0.11	0.06	0.01
Relationships with Other Adults	2.25	1.20	2.15	1.13	2.31	1.17	2.22	1.18	0.07	0.07	0.01	0.90	0.05
Personal Initiative	2.77	0.95	2.75	0.90	2.70	0.96	2.76	0.92	0.02	-0.06	0.08	0.13	0.04
Number of students	705		735		549		556						
Percent missing data	≤9%		≤8%		≤11%		≤12%						

^a Standard Deviations are only reported for Means or Mean Percents.

^b Estimated Impacts on Two-Parent Households and Other Households will not necessarily be equal to the differences between the Unadjusted Mean Outcomes for these two groups.

^c Based on Benjamini-Hochberg test.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007.

Exhibit D.12: Subgroup Findings by Family Structure: Academic Outcomes

	Unadjusted Mean Outcome								Estimated Impact				
	Two-Parent Households				Other Households				Estimated Impact on Two-Parent HHs ^b	Estimated Impact on Other HHs ^b	Difference in Impacts	p-value to Test Difference	BH-Corrected Critical Value ^c
	Treatment		Control		Treatment		Control						
	Mean	Standard Deviation ^a	Mean	Standard Deviation ^a	Mean	Standard Deviation	Mean	Standard Deviation					
Self-Reported Outcome (Range 1–4)													
Scholastic Efficacy	3.02	0.78	2.96	0.82	3.02	0.73	2.98	0.79	0.05	0.05	0.00	0.91	0.05
School Bonding	2.99	0.95	2.97	0.97	2.91	0.91	2.89	1.03	0.00	0.03	-0.03	0.60	0.02
Future Orientation	3.85	0.56	3.80	0.62	3.83	0.52	3.81	0.65	0.03	0.03	0.01	0.87	0.04
Number of students	705		735		549		556						
Percent missing data	≤9%		≤8%		≤11%		≤13%						
School-Reported Outcome													
Overall Absenteeism Rate (Percent) ^d	4.37	6.34	4.58	8.01	5.75	8.83	6.52	10.93	-0.19	-0.65*	0.46	0.33	0.01
Number of students	705		735		549		556						
Percent missing data	22%		24%		21%		23%						
Grades (Range 1–5) ^e													
Math	3.32	1.86	3.33	1.82	3.30	1.76	3.25	1.76	-0.09	-0.01	-0.09	0.34	0.01
English Language Arts	3.71	1.91	3.70	1.85	3.61	1.92	3.60	1.67	-0.03	-0.02	-0.01	0.88	0.04
Science	3.80	2.33	3.72	2.29	3.67	2.25	3.61	1.83	-0.04	-0.05	0.01	0.92	0.05
Social Studies	3.82	2.28	3.71	2.23	3.55	2.22	3.62	2.06	0.04	0.02	0.02	0.83	0.03
Number of students	705		735		549		556						
Percent missing data	≤42%		≤41%		≤41%		≤37%						
State Assessment Tests													
Math—Percent Proficient	46.70		50.69		44.29		42.22		-2.38	-1.17	-1.21	0.75	0.03
Reading/ELA—Percent Proficient	48.81		50.39		50.31		51.12		1.61	-4.91	6.52	0.08	0.01
Number of students	705		735		549		556						
Percent missing data	≤41%		≤36%		≤15%		≤12%						

^a Standard Deviations are only reported for Means or Mean Percents.

^b Estimated Impacts on Two-Parent Households and Other Households will not necessarily be equal to the differences between the Unadjusted Mean Outcomes for these two groups.

^c Based on Benjamini-Hochberg test.

^d Lower Overall Absenteeism Rates indicate more positive outcomes.

^e Higher scores indicate higher grades; see Appendix F for further explanation of how these scores were derived.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit D.13: Subgroup Findings by Family Structure: Delinquent Behaviors and Participation in Harmful Activities

	Unadjusted Mean Outcome								Estimated Impact				
	Two-Parent Households				Other Households				Estimated Impact on Two-Parent HHs ^c	Estimated Impact on Other HHs ^c	Difference in Impacts	p-value to Test Difference	BH-Corrected Critical Value ^d
	Treatment	Control	Treatment	Control									
Self-Reported Outcome^a	Mean	Standard Deviation ^b	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation					
Delinquency/Misconduct (Range 1–4)	3.45	0.74	3.43	0.75	3.36	0.72	3.37	0.73	0.00	0.00	-0.01	0.89	0.05
Gang Activity—Percent	5.77		5.60		5.96		5.26		0.12	1.07	-0.96	0.61	0.03
Tobacco Use—Percent	5.41		7.11		7.02		8.05		-1.24	-1.15	-0.10	0.96	0.05
Alcohol Use—Percent	10.24		14.35		14.39		12.06		-3.40*	1.20	-4.60	0.09	0.01
Drug Use—Percent	7.25		7.96		7.68		8.27		-0.14	-0.87	0.73	0.74	0.04
Number of students	705	735	549	556									
Percent missing data	≤10%	≤9%	≤11%	≤13%									
School-Reported Behavioral Outcome													
Truancy—Unexcused Absence Rate (Percent)^{e,f}	1.83	4.07	1.72	4.91	2.33	5.59	3.38	8.59	0.02	0.91*	-0.90*	0.03	0.01
Number of students	705	735	549	556									
Percent missing data	47%	48%	46%	44%									
Misconduct^f													
Percent committing any infraction	21.41		19.67		29.42		27.11		1.76	2.83	-1.07	0.76	0.04
Percent committing repeated infractions (2+)	10.68		13.78		18.31		17.98		-2.16	0.30	-2.46	0.39	0.02
Delinquency^f													
Percent committing any infraction	13.97		17.60		23.06		23.40		-3.56	-0.06	-3.50	0.30	0.02
Percent committing repeated infractions (2+)	6.17		7.60		11.57		11.18		-1.92	0.15	-2.08	0.41	0.03
Number of students	705		735		549		556						
Percent missing data	≤30%		≤31%		≤25%		≤25%						

^a Higher scores on the Misconduct and Delinquency scales indicate more positive outcomes.

^b Standard Deviations are only reported for Means or Mean Percents.

^c Estimated Impacts on Two-Parent Households and Other Households will not necessarily be equal to the differences between the Unadjusted Mean Outcomes for these two groups.

^d Based on Benjamini-Hochberg test.

^e Based on 27 sites that reported unexcused absences and total days enrolled.

^f Lower percents of the school-reported Truancy, Misconduct, and Delinquency items indicate more positive outcomes.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit D.14: Subgroup Findings by Academic Risk: Interpersonal Relationships, Personal Responsibility, and Community Involvement

Self-Reported Outcome	Unadjusted Mean Outcome								Estimated Impact				
	Proficient Students				Not Proficient Students				Estimated Impact on Proficient Students ^b	Estimated Impact on Not Proficient Students ^b	Difference in Impacts	p-value to Test Difference	BH-Corrected Critical Value ^c
	Treatment		Control		Treatment		Control						
	Mean	Standard Deviation ^a	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation					
Peer Relationships	3.04	1.25	3.08	1.26	2.95	1.36	2.91	1.39	0.05	-0.01	0.05	0.47	0.03
Parental Relationships	3.01	1.13	2.92	1.12	2.91	1.11	2.94	1.12	0.03	0.00	0.03	0.60	0.04
Relationships with Other Adults	2.17	1.16	2.11	1.12	2.36	1.18	2.23	1.18	0.01	0.13*+	-0.12	0.09	0.01
Personal Initiative	2.76	0.98	2.78	0.89	2.72	0.95	2.74	0.92	-0.04	-0.02	-0.02	0.71	0.05
Number of students	373		398		550		586						
Percent missing data	≤2%		≤2%		≤3%		≤2%						

^a Standard Deviations are only reported for Means or Mean Percents.

^b Estimated Impacts on Proficient and Not Proficient students will not necessarily be equal to the differences between the Unadjusted Mean Outcomes for these two groups.

^c Based on Benjamini-Hochberg test.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007.

Exhibit D.15: Subgroup Findings by Academic Risk: Academic Outcomes

	Unadjusted Mean Outcome								Estimated Impact				
	Proficient Students				Not Proficient Students				Estimated Impact on Proficient Students ^b	Estimated Impact on Not Proficient Students ^b	Difference in Impacts	p-value to Test Difference	BH-Corrected Critical Value ^c
	Treatment		Control		Treatment		Control						
	Mean	Standard Deviation ^a	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation					
Self-Reported Outcome (Range 1–4)													
Scholastic Efficacy	3.11	0.76	3.07	0.78	2.95	0.73	2.90	0.81	0.05	0.05	0.00	0.98	0.05
School Bonding	2.99	0.96	2.95	0.98	2.93	0.91	2.92	1.01	-0.01	0.03	-0.05	0.39	0.02
Future Orientation	3.88	0.44	3.83	0.60	3.83	0.58	3.79	0.67	0.03	0.04	-0.01	0.73	0.03
Number of students	373		398		550		586						
Percent missing data	≤2%		≤2%		≤3%		≤3%						
School-Reported Outcome													
Overall Absenteeism Rate (Percent) ^d	4.16	6.20	4.91	8.50	5.19	7.55	5.81	9.81	-0.60	-0.72*	0.13	0.79	0.04
Number of students	373		398		550		586						
Percent missing data	6%		10%		10%		14%						
Grades (Range 1–5) ^e													
Math	4.04	1.93	4.12	1.99	3.18	1.84	3.12	1.72	-0.03	-0.02	0.00	0.99	0.05
English Language Arts	4.53	2.60	4.57	2.52	3.61	1.82	3.63	1.72	0.01	-0.07	0.09	0.39	0.01
Science	4.46	2.45	4.61	2.54	3.62	2.21	3.60	2.12	-0.08	-0.04	-0.05	0.66	0.03
Social Studies	4.48	2.81	4.61	2.69	3.43	1.97	3.37	1.98	0.07	0.00	0.07	0.51	0.02
Number of students	373		398		550		586						
Percent missing data	≤34%		≤32%		≤32%		≤31%						
State Assessment Tests													
Math—Percent Proficient	75.04		78.58		26.19		25.36		-3.35	0.33	-3.68	0.33	0.01
Reading/ELA—Percent Proficient	80.50		83.40		28.83		28.46		-1.75	-0.53	-1.23	0.74	0.04
Number of students	373		398		550		586						
Percent missing data	≤5%		≤2%		≤4%		≤4%						

^a Standard Deviations are only reported for Means or Mean Percents.

^b Estimated Impacts on Proficient and Not Proficient students will not necessarily be equal to the differences between the Unadjusted Mean Outcomes for these two groups.

^c Based on Benjamini-Hochberg test.

^d Lower Overall Absenteeism Rates indicate more positive outcomes.

^e Higher scores indicate higher grades; see Appendix F for further explanation of how these scores were derived.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit D.16: Subgroup Findings by Academic Risk: Delinquent Behaviors and Participation in Harmful Activities

	Unadjusted Mean Outcome								Estimated Impact				
	Proficient Students				Not Proficient Students				Estimated Impact on Proficient Students ^c	Estimated Impact on Not Proficient Students ^c	Difference in Impacts	p-value to Test Difference	BH-Corrected Critical Value ^d
	Treatment		Control		Treatment		Control						
Self-Reported Outcome ^a	Mean	Standard Deviation ^b	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation					
Delinquency/Misconduct (Range 1–4)	3.45	0.70	3.43	0.73	3.38	0.75	3.39	0.76	0.02	-0.01	0.03	0.49	0.01
Gang Activity—Percent	4.26		2.97		6.89		6.21		1.24	1.31	-0.07	0.97	0.05
Tobacco Use—Percent	4.34		7.12		6.57		7.81		-1.55	-1.29	-0.27	0.91	0.05
Alcohol Use—Percent	11.10		14.60		11.69		13.34		-3.29	-1.25	-2.03	0.50	0.02
Drug Use—Percent	6.67		9.95		6.59		7.58		-1.72	-1.26	-0.46	0.85	0.04
Number of students	373		398		550		586						
Percent missing data	≤2%		≤2%		≤4%		≤6%						
School-Reported Behavioral Outcome													
Truancy—Unexcused Absence Rate (Percent)^{e,f}	1.24	3.53	1.72	4.88	2.42	4.92	2.98	8.13	-0.38	-0.65*	0.26	0.51	0.02
Number of students	373		398		550		586						
Percent missing data	39%		40%		36%		38%						
Misconduct^f													
Percent committing any infraction	21.02		19.70		25.94		25.77		0.15	1.76	-1.61	0.67	0.03
Percent committing repeated infractions (2+)	12.35		13.76		15.11		17.93		-2.13	-1.67	-0.46	0.89	0.04
Delinquency^f													
Percent committing any infraction	17.15		17.86		18.41		22.48		1.77	-4.24	6.00	0.11	0.01
Percent committing repeated infractions (2+)	6.51		8.84		8.85		10.36		-2.31	-1.75	-0.57	0.84	0.03
Number of students	373		398		550		586						
Percent missing data	≤27%		≤30%		≤13%		≤15%						

^a Higher scores on the Misconduct and Delinquency scales indicate more positive outcomes.

^b Standard Deviations are only reported for Means or Mean Percents.

^c Estimated Impacts on Proficient and Not Proficient students will not necessarily be equal to the differences between the Unadjusted Mean Outcomes for these two groups.

^d Based on Benjamini-Hochberg test.

^e Based on 27 sites that reported unexcused absences and total days enrolled.

^f Lower percents of the school-reported Truancy, Misconduct, and Delinquency items indicate more positive outcomes.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit D.17: Subgroup Findings by Baseline Delinquency: Interpersonal Relationships, Personal Responsibility, and Community Involvement

Self-Reported Outcome	Unadjusted Mean Outcome								Estimated Impact				
	Any Delinquency				No Delinquency				Estimated Impact on Students Reporting Any Delinquency ^b	Estimated Impact on Students Reporting No Delinquency ^a	Difference in Impacts	p-value to Test Difference	BH-Corrected Critical Value ^c
	Treatment		Control		Treatment		Control						
	Mean	Standard Deviation ^a	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation					
Peer Relationships	3.06	1.31	2.97	1.41	2.95	1.31	2.97		0.02	0.00	0.03	0.59	0.03
Parental Relationships	2.69	1.14	2.67	1.20	3.03	1.10	3.03		-0.01	0.01	-0.02	0.78	0.03
Relationships with Other Adults	2.39	1.16	2.27	1.15	2.24	1.19	2.15		0.07	0.07*	-0.01	0.94	0.04
Personal Initiative	2.63	0.94	2.61	0.96	2.77	0.96	2.80		-0.01	-0.01	0.00	0.95	0.05
Number of students	277		310		886		887						
Percent missing data	≤4%		≤2%		≤3%		≤2%						

^a Standard Deviations are only reported for Means or Mean Percents.

^b Estimated Impacts on Any Delinquency and No Delinquency students will not necessarily be equal to the differences between the Unadjusted Mean Outcomes for these two groups.

^c Based on Benjamini-Hochberg test.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007.

Exhibit D.18: Subgroup Findings by Baseline Delinquency: Academic Outcomes

	Unadjusted Mean Outcome								Estimated Impact				
	Any Delinquency				No Delinquency				Estimated Impact on Students Reporting Any Delinquency ^b	Estimated Impact on Students Reporting No Delinquency ^b	Difference in Impacts	p-value to Test Difference	BH-Corrected Critical Value ^c
	Treatment	Control	Treatment	Control	Treatment	Control	Treatment	Control					
	Mean	Standard Deviation ^{a=}	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation					
Self-Reported Outcome (Range 1–4)													
Scholastic Efficacy	2.95	0.71	2.84	0.83	3.04	0.77	3.02	0.78	0.12*+	0.02	0.09*	0.04	0.01
School Bonding	2.77	0.91	2.74	1.03	3.02	0.93	3.01	0.97	0.03	0.02	0.00	0.94	0.05
Future Orientation	3.76	0.69	3.67	0.81	3.87	0.48	3.84	0.55	0.05	0.02	0.03	0.46	0.04
Number of students	277		310		886		887						
Percent missing data	≤3%		≤4%		≤3%		≤3%						
School-Reported Outcome													
Overall Absenteeism Rate (Percent)^d													
Overall Absenteeism Rate (Percent)	6.44	9.47	6.00	11.37	4.56	6.92	5.30	8.87	-0.13	-0.61*	0.49	0.43	0.03
Number of students	277		310		886		887						
Percent missing data	12%		12%		16%		19%						
Grades (Range 1–5)^e													
Math	3.09	1.74	3.06	1.73	3.24	1.70	3.31	1.67	0.00	-0.08	0.07	0.49	0.04
English Language Arts	3.54	2.42	3.50	2.10	3.76	1.83	3.81	1.74	0.06	-0.08	0.14	0.19	0.02
Science	3.32	2.11	3.29	1.93	3.73	1.96	3.74	1.97	0.03	-0.06	0.09	0.44	0.03
Social Studies	3.30	1.99	3.25	1.86	3.74	2.02	3.79	1.93	0.09	-0.07	0.16	0.16	0.01
Number of students	277		310		886		887						
Percent missing data	≤42%		≤36%		≤34%		≤34%						
State Assessment Tests													
Math—Percent Proficient	46.19		43.20		45.55		48.40		2.38	-3.17	5.55	0.21	0.02
Reading/ELA—Percent Proficient	51.83		48.46		48.68		51.52		-0.03	-2.19	2.17	0.63	0.05
Number of students	277		310		886		887						
Percent missing data	≤27%		≤22%		≤23%		≤20%						

^a Standard Deviations are only reported for Means or Mean Percents.

^b Estimated Impacts on Any Delinquency and No Delinquency students will not necessarily be equal to the differences between the Unadjusted Mean Outcomes for these two groups.

^c Based on Benjamini-Hochberg test.

^d Lower Overall Absenteeism Rates indicate more positive outcomes.

^e Higher scores indicate higher grades; see Appendix F for further explanation of how these scores were derived.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing..

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit D.19: Subgroup Findings by Baseline Delinquency: Delinquent Behaviors and Participation in Harmful Activities

	Unadjusted Mean Outcome								Estimated Impact				
	Any Delinquency				No Delinquency				Estimated Impact on Students Reporting Any Delinquency ^c	Estimated Impact on Students Reporting No Delinquency ^c	Difference in Impacts	p-value to Test Difference	BH-Corrected Critical Value ^d
	Treatment		Control		Treatment		Control						
	Mean	Standard Deviation ^b	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation					
Self-Reported Outcome^a													
Delinquency/Misconduct	3.16	0.84	3.12	0.84	3.49	0.66	3.50	0.65	0.02	0.00	0.03	0.59	0.03
Gang Activity	12.26		13.76		3.81		2.60		0.57	1.18	-0.61	0.83	0.04
Tobacco Use	15.91		18.99		3.12		3.71		-3.11	-0.54	-2.56	0.44	0.03
Alcohol Use	29.14		28.92		6.62		8.22		-0.93	-1.72	0.78	0.84	0.05
Drug Use	17.97		20.77		4.06		3.76		-2.83	0.09	-2.92	0.37	0.02
Number of students	277		310		886		887						
Percent missing data	≤6%		≤6%		≤2%		≤3%						
School-Reported Behavioral Outcome													
Truancy Rate^{e,f}	2.69	5.36	3.14	8.37	1.81	4.56	2.20	6.18	-0.53	-0.41	-0.12	0.81	0.04
Number of students	277		310		886		887						
Percent missing data	38%		34%		44%		44%						
Misconduct^f													
Percent committing any infraction	35.54		28.42		21.58		21.06		4.59	1.36	3.22	0.43	0.02
Percent committing repeated infractions (2+)	22.58		18.48		11.49		14.68		2.72	-2.32	5.04	0.16	0.01
Delinquency^f													
Percent committing any infraction	26.04		32.13		15.56		15.97		-4.36	-0.36	-3.99	0.33	0.01
Percent committing repeated infractions (2+)	14.81		16.12		6.64		6.79		-0.53	-0.15	-0.38	0.91	0.05
Number of students	277		310		886		887						
Percent missing data	≤18%		≤25%		≤22%		≤22%						

^a Higher scores on the Misconduct and Delinquency scales indicate more positive outcomes.

^b Standard Deviations are only reported for Means or Mean Percents.

^c Estimated Impacts on Any Delinquency and No Delinquency students will not necessarily be equal to the differences between the Unadjusted Mean Outcomes for these two groups.

^d Based on Benjamini-Hochberg test.

^e Based on 27 sites that reported unexcused absences and total days enrolled.

^f Lower percents of the school-reported Truancy, Misconduct, and Delinquency items indicate more positive outcomes.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Appendix E: Sensitivity Tests

Sensitivity of Impact Estimates to Nonresponse and Attrition

Background

We obtained Student Survey data from students at all 42 Impact Study sites,¹ but student record data were unavailable for some sites. Furthermore, both Student Survey and school records data suffered from item nonresponse. If data were missing from our sample at random, there would be no reason to be concerned about nonresponse. On the other hand, if missing data in sites and/or for students occurred systematically, then our impact estimates would be subject to *selection bias* in how well they represent the full set of grantees and students chosen for the study.²

Suppose, for example, that—among those included in the study—the grantees with poor organization and leadership were less likely to be able to provide outcome data based on school records. If this poor organization and leadership were also associated with a poorly-run mentoring program with relatively small impacts, our estimated impacts would be biased upward, because the sample actually reporting outcome data would have contained disproportionate numbers of well-organized sites with strong leadership compared to the full set of 42 sites.

Similarly, at the student level, suppose that students in the treatment group who disliked school were less likely to answer questions on the Student Survey about Scholastic Efficacy and School Bonding. If these students (when in the treatment group) responded less positively to mentoring than students who enjoyed school, then our impact estimates would be biased upward, because our analytic sample would include a lower proportion of students who disliked school than the sample as a whole.

We therefore wished to examine the sensitivity of our impact estimates to nonresponse bias at both the site and the student levels. The remainder of this section describes our approach to comparing characteristics of students and sites with versus without missing data for each outcome of interest.

Site-Level Nonresponse for School-reported Outcome Data

We were unable to collect school data on student absenteeism for 3 Impact Study sites; math, English language arts, and science grades for another 3 sites; social studies grades for 5 sites; state assessment test scores in math or reading/English language arts (ELA) for 1 site; truancy rate data for 15 sites; and disciplinary infractions data for 12 sites. We therefore wished to examine whether the sites with missing data appeared to differ systematically from sites that did report data for these outcomes, particularly for disciplinary infractions and truancy.

¹ Recall that, because some sites provided data in both years of our study, our sample consisted of 42 groups of students from 32 unique grantees.

² Note that, because our Impact Study sites were purposively selected, even if not subject to selection bias our impact estimates cannot be considered representative of impacts in the full population of 255 ED-funded Student Mentoring Programs. Rather, they characterize just the 32 programs from which the data are drawn. See Chapter 3 for a comparison of characteristics of Impact Study sites to characteristics for a representative sample of grantees.

Our first step was to examine, for each outcome measure of interest, baseline characteristics of students in sites not reporting data in comparison with baseline characteristics of students in sites with data for these measures. Because we had data for all sites from the baseline Student Survey, as well as school-reported demographic characteristics, including gender, age, minority status, family structure, and free- or reduced-price lunch eligibility for students in each site, we were able to calculate site-level means for each of these characteristics.

We then divided the sample into two subgroups for each outcome variable of interest: sites that reported data on the outcome category for some or all students, and sites that did not. Using the site-level weights used to perform the main impact analysis—i.e., weights set proportional to the number of students in each site—we then calculated weighted means for each subgroup. Finally, we performed a t test to determine whether differences in means across the two subgroups were statistically significant.^{3,4}

The results of this exploratory analysis are reported below in Exhibit E.1. We found a number of statistically significant differences in observable student characteristics between sites with and without missing data:

- Sites not reporting truancy data had a lower proportion of boys than sites reporting truancy data.
- Sites missing data on absenteeism, state assessment tests, and math, English language arts, and science grades, had higher proportions of students aged 12 or older than sites reporting data for these outcomes, while sites not reporting data on truancy rates and social studies had lower proportions of older students.
- For all outcomes, sites with missing data had higher proportions of minority students than sites reporting outcome data for some or all students.
- Sites with missing data on disciplinary infractions had a lower proportion of students from two-parent families.
- Sites not reporting data on math, English language arts, and science grades, sites not reporting data on social studies grades, and sites not reporting data on academic proficiency from state assessment tests had higher proportions of students eligible for free- or reduced-price lunches.

³ Note that we did not control for multiple comparisons in this analysis. Of the sixty hypothesis tests performed here, one would expect to reject the null hypothesis in 3 cases due to random chance alone.

⁴ This exploratory analysis could test only for differences in observable student characteristics across sites. Even if no statistically significant differences in observable characteristics between sites with and without missing outcome data were detected, the possibility would remain that these groups of sites differed in characteristics not observable by the researcher that could also influence impacts—or that they differed to a modest degree on measured characteristics but the limited statistical power of the test procedure was unable to detect those differences.

Exhibit E.1

Differences in Student Characteristics between Sites Reporting Outcome Data for Some or All Students and Sites with Missing Data for All Students

Site Missing Data on:	Overall Absenteeism Rate (3 missing sites)			Math, English Language Arts, and Science Grades (3 missing sites)			Social Studies Grades (5 missing sites)			State Assessment Tests, Math and Reading/E/LA (1 missing site)			Truancy Rate (15 missing sites)			Disciplinary Infractions (12 missing sites)		
	Sites With Outcome Data (n=2376)	Sites Without Outcome Data (n=197)	P-value to Test Difference	Sites With Outcome Data (n=2338)	Sites Without Outcome Data (n=235)	P-value to Test Difference	Sites With Outcome Data (n=2182)	Sites Without Outcome Data (n=391)	P-value to Test Difference	Sites With Outcome Data (n=2503)	Sites Without Outcome Data (n=70)	P-value to Test Difference	Sites With Outcome Data (n=1652)	Sites Without Outcome Data (n=921)	P-value to Test Difference	Sites With Outcome Data (n=1847)	Sites Without Outcome Data (n=726)	P-value to Test Difference
Student Characteristics																		
Proportion male	0.48	0.42	0.08	0.47	0.48	0.81	0.47	0.51	0.07	0.47	0.50	0.65	0.51	0.41	0.00*	0.48	0.45	0.21
Proportion aged 12 and older	0.29	0.36	0.01*	0.29	0.38	0.00*	0.30	0.26	0.03*	0.29	0.46	0.00*	0.32	0.27	0.00*	0.28	0.34	0.00*
Proportion White	0.23	0.01	0.00*	0.23	0.06	0.00*	0.22	0.17	0.00*	0.22	0.02	0.00*	0.26	0.14	0.00*	0.23	0.18	0.00*
Proportion two-parent families	0.56	0.59	0.46	0.56	0.58	0.59	0.56	0.59	0.26	0.56	0.59	0.69	0.56	0.58	0.32	0.55	0.61	0.00*
Proportion eligible for free or reduced-price lunch	0.86	0.86	0.76	0.85	0.91	0.00*	0.85	0.89	0.01*	0.85	0.94	0.01*	0.85	0.86	0.30	0.85	0.87	0.17
Baseline Student Survey Measures																		
Pro-social Behaviors	2.87	2.88	0.70	2.88	2.76	0.00*	2.88	2.83	0.10	2.87	2.95	0.20	2.86	2.88	0.50	2.88	2.85	0.27
Scholastic Efficacy and School Bonding	3.15	3.25	0.01*	3.16	3.12	0.27	3.16	3.13	0.42	3.15	3.21	0.35	3.12	3.22	0.00*	3.17	3.10	0.00*
Future Orientation	3.82	3.89	0.01*	3.82	3.85	0.17	3.83	3.80	0.32	3.82	3.92	0.04*	3.80	3.86	0.00*	3.84	3.79	0.00*
Misconduct	3.29	3.36	0.10	3.30	3.26	0.20	3.30	3.29	0.65	3.30	3.33	0.69	3.29	3.32	0.09	3.31	3.29	0.40
Delinquency	3.89	3.93	0.01*	3.89	3.90	0.43	3.89	3.88	0.31	3.89	3.93	0.15	3.88	3.91	0.00*	3.90	3.88	0.07

* Difference was statistically significant at $\alpha=0.05$, two-tailed test

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

- Students in sites not reporting grades in math, English language arts, and science exhibited lower scores on the Pro-social Behaviors scale from the Student Survey at baseline than students in sites reporting data for these outcomes.
- For absenteeism and truancy, students in sites with missing data responded more favorably at baseline on Student Survey scales measuring Scholastic Efficacy and School Bonding and Future Orientation, while students in sites with missing data on disciplinary infractions responded less favorably on these scales.
- Baseline student scores on the Delinquency scale from the Student Survey were higher in sites not reporting data on absenteeism rates and in sites not reporting data on truancy rates than in sites reporting these data.

The previous set of tests was able only to describe *baseline* differences between sites with and without missing data. While these results suggested that some differences between these subgroups of sites did exist, any conjecture about the degree of influence of these differences on *impacts* would necessarily be speculative.

However, because we had Student Survey outcome data for students in all sites, we were able to take our analysis one step further by examining whether impacts on survey-reported outcomes differed between sites with data on school-reported outcomes and all sites. We estimated impacts on our Student Survey outcomes both for the full Impact Study sample of 42 sites, and for the restricted subset of sites reporting data on each outcome measure for at least some or all students.⁵ If the degree of impact estimate selection bias due to site nonresponse (which this procedure measures) is the same for Student Survey-reported outcomes as for school-reported outcomes, what we learn about the former will inform our understanding of the threat presented by the latter.

Each set of impact estimates was calculated as described in Chapter 2, but using a restricted set of sites rather than the full sample. For example, we estimated impacts on the Future Orientation scale from the Student Survey in sites providing data for some or all students on absentee rates.

We then conducted one-sample t tests to test whether the Future Orientation impact estimates in the restricted sample were different from Future Orientation impact estimates for the full set of sites, as presented in the main text. More specifically, the t values were calculated as:

$$[E.1] \quad t = \frac{\hat{\beta}_1^* - \hat{\beta}_1}{\hat{\sigma}_1^*},$$

⁵ In order to estimate impacts, outcome data needed to be available for at least 2 treatment group and 2 control group students.

where

$\hat{\beta}_1^*$ = estimated impact on subgroup of sites with school-reported outcome data on some or all students;

$\hat{\sigma}_1^*$ = estimated standard error of impact on subgroup of sites with school-reported outcome data for some or all students; and

$\hat{\beta}_1$ = impact for all sites⁶.

Exhibit E.2 presents impacts for the full sample of all sites compared to estimated impacts for the restricted sample of sites reporting data for each outcome of interest. There were no statistically significant differences in estimated impacts detected for any Student Survey outcomes. This finding increases our confidence that missing site-level data did not bias our estimated impacts on outcomes abstracted from student record data.

⁶ Although $\hat{\beta}_1$ is an estimated impact, for the purpose of this analysis, we are treating it as a known “population” parameter (i.e., the true average impact for all 42 sites). Hence, it does not have an associated error term.

Exhibit E.2

Estimated Impact on Student Survey Outcomes in All Sites vs. Sites with Data on Outcome Variables from School Records

Student Survey Outcomes	Impact on All Sites	Sites with data on...											
		Overall Absenteeism Rate (3 missing sites)		Math, English Language Arts, and Science Grades (3 missing sites)		Social Studies Grades (5 missing sites)		State Assessment Tests, Math and Reading/ELA (2 missing sites)		Truancy Rate (15 missing sites)		Disciplinary Infractions (12 missing sites)	
		Impact on Sites with Data	P-value to Test Difference	Impact on Sites with Data	P-value to Test Difference	Impact on Sites with Data	P-value to Test Difference	Impact on Sites with Data	P-value to Test Difference	Impact on Sites with Data	P-value to Test Difference	Impact on Sites with Data	P-value to Test Difference
Pro-social Behaviors	-0.01	0.00	0.57	-0.01	0.90	-0.01	0.95	0.00	0.69	0.02	0.17	0.00	0.69
Scholastic Efficacy & School Bonding	0.04	0.03	0.78	0.03	0.71	0.02	0.32	0.04	0.96	0.02	0.59	0.04	0.80
Future Orientation	0.03	0.03	0.98	0.03	0.84	0.03	0.97	0.03	0.91	0.04	0.83	0.04	0.49
Misconduct	0.00	0.00	0.98	0.00	0.94	0.00	0.88	0.00	0.84	0.00	0.90	-0.01	0.83
Delinquency	0.01	0.01	0.88	0.01	0.90	0.01	0.80	0.01	0.93	0.00	0.63	0.00	0.53

* Difference was statistically significant at $\alpha=0.05$, two-tailed test

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Student-Level Nonresponse

In the previous subsection, we discussed potential bias in our impact estimates due to site-level nonresponse. However, even for those sites with school-reported outcome data, not all outcome measures were available for all students within each site. In this subsection, we discuss the sensitivity of our impact measures to this student-level nonresponse within the sites with school-reported outcome data.

Exhibit E.3 shows the range of item response rates by outcome measure for sites with school-reported outcome data on that measure for at least one student. Although, as reported in Chapter 2, response rates as a whole were quite high, it is evident from Exhibit E.3 that response rates for individual outcomes varied widely across sites, particularly for grades, state assessment test scores, and attendance measures. (Outcomes derived from student record data on disciplinary infractions were the exception; for these data, response rates were 100 percent for all sites reporting.)

Exhibit E.3

Item Response Rates, Student Outcomes

Variable	Number Responding		Response Rates in Sites Reporting Data		
	Sites	Students	Total	Site-Level Minimum	Site-Level Maximum
Student Survey Outcomes					
Pro-social Behaviors	42	2298	89.3%	70.0%	97.6%
Scholastic Efficacy & School Bonding	42	2289	89.0%	68.6%	97.5%
Future Orientation	42	2311	89.8%	70.0%	98.4%
Misconduct	42	2329	90.5%	70.0%	100.0%
Delinquency	42	2294	89.2%	67.1%	100.0%
Grades					
Math	39	1677	71.7%	9.4%	100.0%
English Language Arts	39	1692	72.4%	8.2%	100.0%
Science	39	1633	69.8%	11.8%	100.0%
Social Studies	37	1563	71.6%	22.5%	100.0%
State Assessment Tests					
Math	41	1840	73.5%	15.6%	100.0%
Reading/ELA	41	1837	73.4%	25.2%	100.0%
Disciplinary Infractions					
Misconduct	30	1847	100.0%	100.0%	100.0%
Repeated Misconduct	30	1847	100.0%	100.0%	100.0%
Delinquency	30	1847	100.0%	100.0%	100.0%
Repeated Delinquency	30	1847	100.0%	100.0%	100.0%
Attendance					
Overall Absenteeism Rate	39	1978	83.2%	17.5%	100.0%
Truancy Rate	27	1374	83.2%	17.5%	100.0%

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

We therefore wished to examine whether, in sites providing outcome data for some, but not all, students, the students for whom outcome data were unavailable differed from students for whom these data were reported. We restricted the sample for this exploratory analysis to include only students from sites that had reported outcome data for at least one study participant. In this way, we hoped to isolate the phenomenon of *student-level* nonresponse from *site-level* nonresponse as examined in the previous subsection.

We then divided the sample into two subgroups for each outcome measure of interest: one subgroup comprised of students with available data for that outcome measure, and one comprised of students without available data.⁷ Using site-level weights proportional to the number of students in each site, we then calculated weighted means of student baseline characteristics for each subgroup. Finally, we performed a t test to determine whether differences in means on student baseline characteristics across the two subgroups were statistically significant.⁸

This exploratory analysis could test only for differences in observable student characteristics across respondents and non-respondents. Note that our impact estimate regressions control for differences in these observable characteristics—our real concern is that *unobservable* differences between respondents and non-respondents may exist. Even if no statistically significant differences in observable characteristics between sites with and without missing outcome data were detected, the possibility would still remain that these groups of students differed in characteristics not observable by the researcher that could influence impact estimates—and we could not directly test that hypothesis. However, the presence of differences in observable characteristics between respondents and non-respondents could be an indicator that unobservable characteristics were also likely to differ between these groups.

The results of this analysis are presented in Exhibit E.4. We found statistically significant differences in response rates by age, race, and free or reduced-price lunch status. More specifically:

- There were no statistically significant differences in the proportion of boys among students with and without available data for either Student Survey outcomes or outcomes abstracted from school records.
- For 3 out of 5 Student Survey outcomes, students providing data were more likely to be aged 12 or older than students not providing data; students with available student record data were also more likely to be aged 12 or older for 5 out of 8 student record outcome measures.
- There were no differences in the proportion of White students with and without Student Survey data. However, students with data on grades from school records were more likely to be White than students without data on grades, and, conversely, students with data on truancy and absenteeism were less likely to be White than students without data on these attendance measures.

⁷ Note that we did not include outcome data from school records on disciplinary infractions in this analysis, because response rates were 100 percent for these items in all sites reporting any infractions.

⁸ Note that we did not control for multiple comparisons in this analysis. Of the 65 hypothesis tests performed here, one would expect to reject the null hypothesis in 3 to 4 cases due to random chance alone.

Exhibit E.4

Item Nonresponse: Baseline Characteristics of Students in Sites Providing Outcome Data

Variable	Sites Reporting Data	Students in Sites Reporting Data		Proportion Male			Proportion Aged 12 and Older			Proportion White			Proportion of Single-Parent Families			Proportion Eligible for Free or Reduced-Price Lunch		
		Students with Outcome Data	Students without Outcome Data	Students with Outcome Data	Students without Outcome Data	P-value to Test Difference	Students with Outcome Data	Students without Outcome Data	P-value to Test Difference	Students with Outcome Data	Students without Outcome Data	P-value to Test Difference	Students with Outcome Data	Students without Outcome Data	P-value to Test Difference	Students with Outcome Data	Students without Outcome Data	P-value to Test Difference
Student Survey Outcomes																		
Pro-social Behaviors	42	2298	275	0.47	0.48	0.77	0.30	0.26	0.04*	0.22	0.21	0.62	0.57	0.56	0.83	0.86	0.87	0.48
Scholastic Efficacy & School Bonding	42	2289	284	0.47	0.48	0.74	0.30	0.25	0.02*	0.22	0.20	0.30	0.57	0.56	0.89	0.85	0.87	0.40
Future Orientation	42	2311	262	0.47	0.48	0.72	0.30	0.26	0.05	0.22	0.21	0.77	0.57	0.56	0.77	0.86	0.86	0.87
Misconduct	42	2329	244	0.47	0.48	0.73	0.30	0.26	0.07	0.22	0.21	0.79	0.57	0.56	0.93	0.86	0.86	0.58
Delinquency	42	2294	279	0.47	0.49	0.61	0.30	0.26	0.03*	0.22	0.21	0.42	0.57	0.57	0.96	0.86	0.86	0.71
Grades																		
Math	39	1677	661	0.47	0.48	0.58	0.30	0.27	0.03*	0.21	0.29	0.00*	0.55	0.59	0.06	0.86	0.82	0.00*
English Language Arts	39	1692	646	0.47	0.48	0.69	0.30	0.27	0.05	0.21	0.29	0.00*	0.55	0.59	0.07	0.86	0.82	0.00*
Science	39	1633	705	0.47	0.49	0.33	0.30	0.28	0.18	0.20	0.30	0.00*	0.55	0.59	0.07	0.87	0.81	0.00*
Social Studies	37	1563	619	0.46	0.48	0.50	0.31	0.30	0.82	0.20	0.28	0.00*	0.55	0.59	0.07	0.87	0.81	0.00*
State Assessment Tests																		
Math	41	1840	663	0.48	0.44	0.08	0.30	0.27	0.01*	0.22	0.23	0.37	0.56	0.57	0.69	0.85	0.86	0.29
Reading/ELA	41	1837	666	0.48	0.44	0.07	0.30	0.26	0.01*	0.22	0.23	0.57	0.56	0.57	0.66	0.85	0.86	0.53
Attendance																		
Overall Absenteeism Rate	39	1978	398	0.48	0.46	0.48	0.31	0.23	0.00*	0.25	0.16	0.00*	0.56	0.58	0.42	0.85	0.88	0.00*
Truancy Rate	27	1374	278	0.51	0.51	0.99	0.33	0.26	0.00*	0.28	0.17	0.00*	0.55	0.59	0.20	0.84	0.90	0.00*

* Difference was statistically significant at $\alpha=0.05$, two-tailed test

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

- There were no statistically significant differences in the proportion of students from two-parent families between respondents and non-respondents.
- Students without available data on grades from school records were less likely to be eligible for free or reduced-price lunches, while students without data on truancy and absenteeism were more likely to be eligible for free- or reduced-price lunches.

Because we found a number of statistically significant differences in student characteristics between respondents and non-respondents, we wished to determine the degree to which these differences were likely to have biased our impact estimates. Since our data came from a variety of sources, we were able to compare impact estimates on the full sample of students in sites reporting data with impacts based on the restricted sample of students reporting data for each outcome measure.

First, as above, for each outcome measure, we restricted the sample to only those sites reporting data on that measure.⁹ For example, to determine the influence of item nonresponse for math grades, we restricted the sample to only the 39 sites reporting data on math grades for some or all students. This strategy allowed us to isolate the effects of student item nonresponse from the influence of site-level missing data as explained in the previous section. Using this restricted sample, we then estimated impacts on each of the other sixteen school-reported outcome and Student Survey-derived outcome measures for all students in these sites. To the extent that the degree of impact estimate selection bias due to student nonresponse is the same for survey-reported outcomes as for school-reported outcomes, what we learn about the former will inform our understanding of the threat presented by the latter.

Next, we further restricted the sample to include only students who reported data for the school-based outcome of interest, and again estimated the impacts on the other sixteen outcomes. For example, using the case of math grade data once again, we defined the sample to include only students from sites reporting math grades, for which we actually had math grades recorded in our dataset. We then estimated the impacts on Student Survey items, proficiency in math and reading/ELA based on state assessment tests, delinquency and misconduct outcomes from disciplinary infractions records, rates of truancy and absenteeism from attendance data, and grades in every subject except for math.

Finally, we compared the impact estimate based on only those students with data on the outcomes of interest to our originally reported impacts for all students (in sites reporting those outcomes) to determine the influence of item non-response for each school-reported outcome measure on impacts for all other outcome measures. Specifically, as described earlier, we performed a one-sample t test, where t was calculated as

$$[E.2] \quad t = \frac{\hat{\beta}_1^a - \hat{\beta}_1^b}{\hat{\sigma}_1^a},$$

where $\hat{\beta}_1^a$ = estimated impact on students with data on the outcome of interest in sites reporting data on some or all students;

⁹ Note that we did not examine item nonresponse for outcomes derived from disciplinary infraction data in this analysis, because response rates were 100 percent for these items in all sites reporting any infractions.

$\hat{\sigma}_1^a$ = estimated standard error of impact on students with data on the outcome of interest in sites reporting data on some or all students; and

$\hat{\beta}_1^b$ = impact on all students in sites reporting data on some or all students.¹⁰

Exhibits E.5-E.7 show the results of this exploratory analysis.¹¹ Student Survey item nonresponse was not associated with statistically significant changes in impact estimates for other outcome measures, as shown in Exhibit E.5. However, as seen in Exhibit E.6, excluding students for whom data on math, English language arts, and science grades were missing from the sample adversely affected impacts on delinquency and truancy rates from school records. Excluding students missing data on English language arts and science grades also improved impacts on disciplinary infractions due to misconduct. Finally, as shown in Exhibit E.7, item nonresponse for proficiency outcomes from state assessment tests and for attendance data on truancy and absenteeism, respectively, were not associated with any statistically significant differences in impacts between the restricted and full samples.

Overall, despite a few statistically significant differences in impacts, item nonresponse did not appear to greatly influence our impacts on other measures. When statistically differences were found, as in the case of missing student-level records on grades, the direction of the effect was inconsistent: some impacts were adversely affected when students missing data on grades were excluded, while others were improved. These results bolster our confidence that any systematic bias in our results arising from item nonresponse was likely small in magnitude and unlikely to influence the overall conclusions of our study.

Student Survey Nonresponse

In general, in evaluation studies researchers are also concerned with bias in impact estimates due to differential sample attrition in collecting outcome measures from follow-up surveys. If respondents lost to follow-up differ substantially from the full sample in terms of outcome levels or ability to benefit from the Student Mentoring Program, the resulting impact estimates will be biased.

However, in our study, Student Survey response rates were very high. As seen in Chapter 2, spring Student Survey response rates were above 92 percent for both treatment and control groups. Additionally, we did not find statistically significant differences in baseline student characteristics between students who did not complete a spring Student Survey and students who did. We therefore inferred that bias due to differential survey attrition was unlikely to be a major concern for the Impact Study.

¹⁰ Although $\hat{\beta}_1^b$ is an estimated impact, for the purpose of this analysis, we are treating it as a known “population” parameter (i.e., the true average impact for all 42 sites). Hence, it does not have an associated error term.

¹¹ We did not perform a correction for multiple comparisons in this analysis. Note that, of the 208 hypothesis tests we conducted, we would expect to find p-values below 0.05 for roughly 10 items due to random chance alone.

Exhibit E.5: Item Nonresponse: Comparison of Impacts on All Students vs. Impacts on Students with Data on Student Survey Outcomes

Students Missing Student Survey Data on....	Pro-social Behaviors			Scholastic Efficacy & School Bonding			Future Orientation			Misconduct			Delinquency		
	Impact on All Students	Impact on Students With Data	P-value to Test Difference	Impact on All Students	Impact on Students With Data	P-value to Test Difference	Impact on All Students	Impact on Students With Data	P-value to Test Difference	Impact on All Students	Impact on Students With Data	P-value to Test Difference	Impact on All Students	Impact on Students With Data	P-value to Test Difference
Pro-social Behaviors				-0.01	-0.01	0.91	-0.01	-0.01	0.87	-0.01	-0.01	0.92	-0.01	-0.01	0.89
Scholastic Efficacy & School Bonding	0.03	0.03	0.88				0.03	0.03	0.92	0.03	0.03	0.88	0.03	0.03	0.96
Future Orientation	0.03	0.03	1.00	0.03	0.03	0.93				0.03	0.03	0.98	0.03	0.03	0.89
Misconduct	0.00	0.00	0.93	0.00	0.01	0.88	0.00	0.00	0.88				0.00	0.00	0.81
Delinquency	0.01	0.01	0.77	0.01	0.01	0.96	0.01	0.01	0.86	0.01	0.01	0.82			
Math Grades	-0.08	-0.10	0.85	-0.08	-0.11	0.81	-0.08	-0.11	0.87	-0.08	-0.11	0.85	-0.08	-0.10	0.98
English Language Arts Grades	-0.05	-0.01	1.00	-0.05	-0.02	0.81	-0.05	-0.01	0.88	-0.05	-0.01	0.99	-0.05	-0.01	0.96
Science Grades	-0.03	-0.08	0.66	-0.03	-0.09	0.58	-0.03	-0.09	0.61	-0.03	-0.09	0.52	-0.03	-0.08	0.70
Social Studies Grades	-0.06	-0.06	0.97	-0.06	-0.06	0.81	-0.06	-0.05	1.00	-0.06	-0.06	0.97	-0.06	-0.06	0.98
Math Proficiency	0.00	0.00	0.91	0.00	-0.01	0.81	0.00	0.00	0.91	0.00	-0.01	0.87	0.00	0.00	0.82
Reading/ELA Proficiency	-0.03	-0.02	0.87	-0.03	-0.02	0.95	-0.03	-0.02	0.85	-0.03	-0.02	0.76	-0.03	-0.03	0.98
Misconduct	0.00	0.00	0.87	0.00	0.00	0.96	0.00	0.00	0.74	0.00	0.00	0.81	0.00	0.00	0.99
Repeated Misconduct	0.00	0.00	0.32	0.00	0.00	0.58	0.00	0.00	0.43	0.00	0.00	0.42	0.00	0.00	0.61
Delinquency	0.03	0.03	0.87	0.03	0.04	0.83	0.03	0.04	0.76	0.03	0.04	0.79	0.03	0.04	0.60
Repeated Delinquency	-0.01	-0.01	0.93	-0.01	-0.01	0.97	-0.01	-0.01	0.95	-0.01	-0.01	0.94	-0.01	-0.01	0.99
Overall Absenteeism Rate	-0.01	-0.02	0.88	-0.01	-0.01	0.83	-0.01	-0.01	0.81	-0.01	-0.01	0.65	-0.01	-0.01	0.66
Truancy Rate	-0.01	-0.01	0.95	-0.01	0.00	0.76	-0.01	0.00	0.77	-0.01	0.00	0.76	-0.01	0.00	0.81

* Difference was statistically significant at $\alpha=0.05$, two-tailed test

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit E.6: Item Nonresponse: Comparison of Impacts on All Students vs. Impacts on Students with Data on Grades from School Records

Students Missing Student Record Data on Grades in....	Math			English Language Arts			Science			Social Studies		
	Impact on All Students	Impact on Students With Data	P-value to Test Difference	Impact on All Students	Impact on Students With Data	P-value to Test Difference	Impact on All Students	Impact on Students With Data	P-value to Test Difference	Impact on All Students	Impact on Students With Data	P-value to Test Difference
Estimated Impacts on:												
Pro-social Behaviors	-0.01	-0.04	0.16	-0.01	-0.02	0.85	-0.01	-0.04	0.24	-0.01	-0.02	0.87
Scholastic Efficacy & School Bonding	0.02	0.01	0.73	0.02	0.00	0.55	0.02	0.02	0.63	0.01	0.02	0.43
Future Orientation	0.03	0.00	0.04*	0.03	0.01	0.17	0.03	0.03	0.68	0.03	0.03	0.67
Misconduct	0.00	-0.01	0.89	0.00	-0.01	0.63	0.00	-0.02	0.31	0.00	-0.01	0.96
Delinquency	0.01	0.01	0.95	0.01	0.01	0.86	0.01	0.00	0.36	0.01	0.01	0.97
Math Grades				-0.08	-0.07	0.89	-0.08	-0.08	0.88	-0.06	-0.05	0.92
English Language Arts Grades	-0.05	-0.08	0.76				-0.05	-0.09	0.55	-0.01	-0.05	0.53
Science Grades	-0.03	-0.03	0.95	-0.03	-0.01	0.90				0.00	0.00	0.90
Social Studies Grades	-0.06	-0.06	0.99	-0.06	-0.04	0.96	-0.06	-0.06	0.92			
Math Proficiency	0.00	-0.01	0.97	0.00	0.00	0.90	0.00	-0.01	0.95	0.00	-0.02	0.46
Reading/ELA Proficiency	-0.03	-0.04	0.64	-0.03	-0.03	0.82	-0.03	-0.03	0.68	-0.02	-0.02	0.89
Misconduct	0.00	0.00	0.09	0.00	-0.01	0.00*	0.00	0.00	0.02*	0.00	0.00	1.00
Repeated Misconduct	0.00	0.00	0.45	0.00	0.00	0.40	0.00	0.00	0.60	0.00	0.00	0.38
Delinquency	0.04	0.08	0.04*	0.04	0.08	0.00*	0.04	0.08	0.01*	0.04	0.07	0.07
Repeated Delinquency	-0.01	0.00	0.37	-0.01	0.00	0.23	-0.01	0.00	0.26	-0.01	-0.02	0.63
Overall Absenteeism Rate	-0.02	0.01	0.10	-0.02	0.00	0.07	-0.02	0.01	0.08	-0.02	-0.01	0.62
Truancy Rate	-0.01	0.03	0.00*	-0.01	0.02	0.00*	-0.01	0.03	0.00*	-0.01	0.01	0.06

* Difference was statistically significant at $\alpha=0.05$, two-tailed test

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit E.7: Item Nonresponse: Comparison of Impacts on All Students vs. Impacts on Students with Data on State Assessment Tests and Attendance from School Records

Students Missing Student Record Data on	School Records - State Assessment Test Scores						School Records - Attendance					
	Math			Reading/ELA			Overall Absenteeism Rate			Truancy Rate		
	Impact on All Students	Impact on Students With Data	P-value to Test Difference	Impact on All Students	Impact on Students With Data	P-value to Test Difference	Impact on All Students	Impact on Students With Data	P-value to Test Difference	Impact on All Students	Impact on Students With Data	P-value to Test Difference
Estimated impacts on:												
Pro-social Behaviors	-0.01	-0.03	0.68	-0.01	-0.02	0.68	0.00	-0.01	0.83	0.01	0.00	0.95
Scholastic Efficacy & School Bonding	0.03	0.03	0.77	0.03	0.03	0.80	0.03	0.04	0.51	0.01	0.02	0.56
Future Orientation	0.03	0.04	0.67	0.03	0.04	0.73	0.03	0.05	0.48	0.03	0.03	0.63
Misconduct	0.01	0.01	0.98	0.01	0.01	0.98	0.00	0.01	0.51	0.00	0.00	0.78
Delinquency	0.01	0.02	0.65	0.01	0.02	0.72	0.01	0.01	0.96	0.00	0.00	0.97
Math Grades	-0.08	-0.02	0.28	-0.08	-0.03	0.26	-0.07	-0.04	0.69	-0.04	0.00	0.57
English/Language Arts Grades	-0.05	-0.03	0.99	-0.05	-0.04	0.89	-0.06	-0.05	0.81	-0.04	-0.04	0.84
Science Grades	-0.03	-0.04	0.73	-0.03	-0.04	0.83	-0.03	-0.02	0.87	0.02	0.02	0.97
Social Studies Grades	-0.06	-0.05	0.99	-0.06	-0.03	0.76	-0.06	-0.07	0.82	-0.04	-0.03	0.91
Math Proficiency				0.00	0.00	0.94	-0.01	-0.02	0.51	0.00	-0.01	0.52
Reading/ELA Proficiency	-0.03	-0.02	0.83				-0.03	-0.04	0.58	0.00	0.00	0.79
Misconduct	0.00	0.00	0.58	0.00	-0.01	0.28				0.00	0.00	0.99
Repeated Misconduct	0.00	0.00	0.81	0.00	0.00	0.88	0.00	0.00	0.99			
Delinquency	0.03	0.02	0.79	0.03	0.02	0.83	0.03	0.05	0.36	0.03	0.05	0.24
Repeated Delinquency	-0.01	-0.02	0.76	-0.01	-0.02	0.76	-0.01	-0.01	0.72	0.00	-0.01	0.70
Overall Absenteeism Rate	-0.01	-0.01	0.36	-0.01	-0.01	0.36	-0.02	-0.01	0.66	-0.03	-0.02	0.42
Truancy Rate	-0.01	-0.02	0.36	-0.01	-0.01	0.61	-0.01	-0.02	0.42	-0.01	-0.01	0.45

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Sensitivity of Impact Estimates to Alternative Weighting Methods

As explained in Chapter 2, we applied weights proportional to the sample size in each site when averaging site-level impact estimates to obtain the aggregate treatment effect. As a sensitivity test, we wished to examine the influence of our choice of weighting methodology on our estimates.

In this section of Appendix E, we therefore present a comparison of our main results to estimates based on three alternative weighting approaches: weighting by the total number of treatment students, weighting each site equally, and weighting by the inverse of the sampling variance. Each alternative methodology attaches a different relative importance to each site-level unit, reflecting a different conceptual framework for estimating the aggregate effect.

Weights Proportional to the Site-Level Sample Size

We begin by reviewing the weighting methodology employed in calculating our main impact estimates, as first presented in Chapter 2: weighting each site proportionally to the total number of treatment and control group students in that site. Under this weighting scheme, the site-level weight W_j^N for each site j is defined as:

$$[E.5] \quad W_j = W_j^N = \frac{N_j}{\sum_{j=1}^J N_j}$$

Then the average impact estimate $\hat{\beta}$ and its sampling variance $\hat{\sigma}^2$ are given by:

$$[E.6] \quad \hat{\beta} = \sum_{j=1}^J W_j \hat{\beta}_j$$

$$[E.7] \quad \hat{\sigma}^2 = \sum_{j=1}^J W_j^2 \hat{\sigma}_j^2$$

where

J = the total number of sites in the study;

$\hat{\beta}_j$ = the estimated treatment effect for site j ;

$\hat{\sigma}_j^2$ = the estimated sampling variance for site j ; and

N_j = the total number of treatment and control students in site j .

Estimates incorporating this weighting methodology reflect the average treatment effect per student eligible to receive mentoring.

Weights Proportional to the Site-Level Treatment Group Size

Suppose we were instead interested in determining the average treatment effect per student assigned to treatment. Intuitively, the appropriate weighting scheme would then weight sites proportionally to the size of the treatment group:

$$[E.8] \quad W_j = W_j^T = \frac{T_j}{\sum_{j=1}^J T_j},$$

where

T_j = the number of students in the treatment group in site j .

The aggregate impact estimate and sampling variance are then calculated just as in equations [E.6] and [E.7] above, substituting the treatment group weight W_j^T for the sample size weight W_j^N .

No Site-Level Weights

Next, suppose conceptually we wish to emphasize each site's contribution to the total impact estimate equally, regardless of its size. In this framework, we would weight each site proportionally—which is equivalent to taking the simple average across sites. The aggregate impact estimate and sampling variance are then given by:

$$[E.9] \quad \hat{\beta} = \sum_{j=1}^J \hat{\beta}_j$$

$$[E.10] \quad \hat{\sigma}^2 = \sum_{j=1}^J \sigma_j^2$$

Weights Proportional to the Inverse of the Sampling Variance

Finally, we consider a fourth weighting method that is generally employed for statistical efficiency purposes. This method defines the weights proportionally to the inverse of the sampling variance for each site. By assigning greater importance to sites with less variation, this method provides an efficient estimator of the overall treatment effect (i.e., it has the lowest sampling variance of all possible impact estimators formed as weighted averages of the full set of site-specific impact estimates). That is:

$$[E.11] \quad W_j = W_j^V = \frac{1/\sigma_j^2}{\sum_{j=1}^J 1/\sigma_j^2}$$

As above, these site-level weights are substituted into equations [E.6] and [E.7] to obtain our estimate of the aggregate treatment effect.

Comparison of Alternative Weighting Schemes

Exhibits E.8 to E.10 present impact estimates calculated using each of these four weighting approaches. In general, weighting by the total sample size, weighting by the total treatment group size, and weighting by the inverse of the variance produce very similar results, since each of these three weighting methods attach greater importance to larger programs. The latter two weighting approaches yield findings of similar magnitude and the same level of statistical significance as the results weighted by the total sample size presented in the main analysis. In contrast, the method using uniform weights for sites attaches equal importance to each program, and yields no significant impacts. In other words, none of the null hypotheses are rejected in estimates incorporating uniform weights.

Exhibit E.8: Estimated Impact on Interpersonal Relationships, Personal Responsibility, and Community Involvement by Different Weighting Methods

	Weights Set Proportional to											
	A. Total number of Treatment and Control Students in Site (Main Impact Findings)			B. Number of Students in Treatment Group			C. Uniform (Weights =1)			D. 1/Variance		
Self-Reported Outcome	Impact	(SE)	P	Impact	(SE)	P	Impact	(SE)	P	Impact	(SE)	P
Pro-social Behaviors	-0.008	(0.020)	0.670	-0.011	(0.020)	0.578	-0.014	(0.021)	0.497	-0.008	(0.020)	0.692

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007.

Exhibit E.9: Estimated Impact on Academic Outcomes by Different Weighting Methods

	Weights Set Proportional to											
	A. Total number of Treatment and Control Students in Site (Main Impact Findings)			B. Number of Students in Treatment Group			C. Uniform (Weights =1)			D. 1/Variance		
	Impact	(SE)	P	Impact	(SE)	P	Impact	(SE)	P	Impact	(SE)	P
Self-Reported Outcome (Scale Score: Range 1–4)												
Scholastic Efficacy and School Bonding	0.036	(0.021)	0.077	0.039	(0.021)	0.059	0.029	(0.022)	0.178	0.037	(0.021)	0.074
Future Orientation	0.031*	(0.016)	0.045	0.033*	(0.016)	0.034	0.030	(0.016)	0.067	0.031*	(0.016)	0.045
School-Reported Outcome												
Overall Absenteeism Rate	-0.463*	(0.228)	0.042	-0.445	(0.231)	0.054	-0.281	(0.267)	0.294	-0.466*	(0.228)	0.041
<i>Grades (Range 1–5)</i>												
Math	-0.053	(0.044)	0.230	-0.059	(0.045)	0.190	-0.082	(0.051)	0.108	-0.051	(0.044)	0.245
English Language Arts	-0.037	(0.044)	0.397	-0.049	(0.045)	0.271	-0.048	(0.053)	0.360	-0.038	(0.044)	0.393
Science	-0.033	(0.045)	0.460	-0.039	(0.046)	0.396	-0.030	(0.053)	0.574	-0.032	(0.045)	0.470
Social Studies	-0.013	(0.046)	0.784	-0.030	(0.047)	0.525	-0.060	(0.055)	0.272	-0.013	(0.046)	0.783
<i>State Assessment Tests</i>												
Math Proficiency	-1.534	(1.851)	0.407	-1.936	(1.889)	0.305	-0.495	(2.190)	0.821	-1.667	(1.849)	0.367
Reading/ELA Proficiency	-1.667	(1.871)	0.373	-2.030	(1.910)	0.288	-2.526	(2.124)	0.234	-1.743	(1.869)	0.351

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit E.10: Estimated Impact on Delinquent Behaviors and Participation in Harmful Activities by Different Weighting Methods

	Weights Set Proportional to											
	A. Total Number of Treatment and Control Students in Site (Main Impact Findings)			B. Number of Students in Treatment Group			C. Uniform (Weights =1)			D. 1/Variance		
	Impact	(SE)	P	Impact	(SE)	P	Impact	(SE)	P	Impact	(SE)	P
Self-Reported Behavioral Outcomes												
Misconduct	-0.001	(0.021)	0.954	-0.003	(0.021)	0.874	0.005	(0.022)	0.835	-0.001	(0.021)	0.962
Delinquency	0.010	(0.009)	0.285	0.009	(0.009)	0.321	0.011	(0.010)	0.280	0.010	(0.009)	0.284
School-Reported Behavioral Outcome												
<i>Truancy Rate</i> ^a	-0.450*	(0.200)	0.024	-0.428*	(0.202)	0.034	-0.425	(0.225)	0.059	-0.450*	(0.200)	0.024
<i>Misconduct</i>												
Percent committing any infraction	2.560	(1.688)	0.129	2.330	(1.703)	0.171	3.311	(1.767)	0.061	2.542	(1.688)	0.132
Percent committing repeated infractions (2+)	-0.981	(1.400)	0.483	-0.857	(1.412)	0.544	-1.077	(1.465)	0.462	-1.004	(1.400)	0.473
<i>Delinquency</i>												
Percent committing any infraction	-1.510	(1.627)	0.353	-1.637	(1.641)	0.319	-1.239	(1.703)	0.467	-1.504	(1.627)	0.355
Percent committing repeated infractions (2+)	-0.559	(1.215)	0.645	-0.532	(1.225)	0.664	-0.765	(1.271)	0.547	-0.571	(1.215)	0.638

^a Based on 27 sites that reported unexcused absences and total days enrolled

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Sensitivity of Impact Estimates to Heteroscedasticity-Robust Standard Errors

In the context of regression, *heteroscedasticity* occurs when the variance of the error term is not constant—that is, in cases where different values of the dependent variable are associated with a wider or narrower distribution of error terms. The presence of heteroscedasticity violates one of the fundamental assumptions of linear regression modeling; failing to correct for it will lead to biased standard errors, invalidating the researcher’s hypothesis tests. (Note that heteroscedasticity will *not* bias the point estimate of the treatment effect coefficient—only the standard errors of the estimate will be affected.)

In the context of the Student Mentoring Program, we were concerned about the possible presence of heteroscedasticity because of the wide range of observed baseline characteristics we saw across students. If, for example, students with greater tendencies toward delinquent behavior experience a wider variance in observed disciplinary infractions over time than students with less delinquency risk, our estimates could inappropriately reject the null hypothesis.

We therefore performed White’s test to check for the presence of heteroscedasticity in our data. Recall from Chapter 2 that our WLS regression specification was given by:

$$[E.12] \quad \omega_{ij} Y_{ij} = \sum_{j=1}^J \omega_{ij} \beta_{1j} T_{ij} S_j + \sum_{j=1}^J \omega_{ij} \beta_{2j} S_j + \sum_{j=1}^J \omega_{ij} \beta_3 X_{ij} + \omega_{ij} \varepsilon_{ij},$$

and our estimated variance by

$$[E.13] \quad \text{Var}(\hat{\beta}_{1j}) = \frac{\hat{\sigma}_j^2}{\sum_{i=1}^N (T_{ij} - \bar{T}_{ij})^2} \text{ for each given program } j = [1 \dots J], \text{ where}$$

$$[E.14] \quad \hat{\sigma}_j^2 = \sum_{i=1}^N \frac{\hat{\varepsilon}_{ij}^2}{N - K + 1}$$

$$[E.15] \quad \hat{\varepsilon}_{ij}^2 = (Y_i - \hat{\beta}_{1j} T_{ij} - \hat{\beta}_{2j} - \hat{\beta}_3 X_{ij})^2,$$

where,

ω_{ij} is the inverse of the probability of being randomly assigned to one’s treatment status for student i in program j ,

Y_{ij} is the outcome of interest Y for student i in program j ,

T_{ij} is the treatment indicator for student i in program j ($T_{ij} = 1$ if student i is assigned to the treatment group; $T_{ij} = 0$ otherwise),

S_j is a program indicator equal to 1 for students randomized at program j and to 0 otherwise ($j = 1 \dots J$),

β_{1j} is the estimated average ITT treatment effect for program j ,

β_{2j} is the program fixed effect at program j (i.e., the average untreated outcome level of a student at program j),

X_{ij} is a vector of student characteristics measured for each student i in program j ,

β_{3j} represents the vector of coefficients indicating how student characteristics affect student outcomes at program j , and

ε_{ij} represents a random error term for student i in program j , which is assumed to be independent and identically distributed across students.

We were concerned that the random error term was not in fact independent and identically distributed across students, in violation of one of the key assumptions of our model. To test for this possibility, we first estimated the above model in order to obtain the squared residual term, $\hat{\varepsilon}_{ij}^2$. We then regressed this term on the dependent variables from equation E.12 above, their squared values, and their cross products. White's statistic is then calculated as the product of the R^2 from this regression and the sample size n .

$$[E.16] \quad \text{White's statistic} = n \cdot R^2$$

This statistic has a chi-square distribution, with degrees of freedom equal to $k - 1$, where k is the number of independent variables in the regression. Exhibit E.11 displays the values and associated p-values for White's statistic for each outcome in our study. As is evident from this table, we reject the null hypothesis that residuals were homoscedastic for 14 of our 17 outcome measures.

Exhibit E.11**White's Test for Heteroscedasticity**

Variable	White's Statistic	Chi- square Degrees of Freedom	P-value
<i>Interpersonal Relationships, Personal Responsibility, and Community Involvement</i>			
Pro-social Behaviors	496.78	533	0.87
<i>Academic Outcome</i>			
<i>Self-Reported Outcome</i>			
Scholastic Efficacy and School Bonding	584.48	534	0.06
Future Orientation	749.71	533	0.00
<i>School-Reported Outcome</i>			
Overall Absenteeism Rate	1243.82	485	0.00
Grades (Range 1–5)			
Math	445.43	474	0.82
English Language Arts	494.41	467	0.18
Science	520.11	463	0.03
Social Studies	509.63	444	0.02
State Assessment Tests			
Math Proficiency	570.71	500	0.02
Reading/ELA Proficiency	637.98	503	0.00
<i>Delinquency Outcome</i>			
<i>Self-Reported Outcome</i>			
Misconduct	624.84	535	0.00
Delinquency	616.72	534	0.01
<i>School-Reported Outcome</i>			
Truancy Rate	693.36	345	0.00
Misconduct			
Percent committing any infraction	620.26	389	0.00
Percent committing repeated infractions(2+)	548.54	380	0.00
Delinquency			
Percent committing any infraction	597.20	392	0.00
Percent committing repeated infractions(2+)	615.32	370	0.00

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

We therefore employed the White method (White, 1980) to calculate heteroscedasticity-robust standard errors for our impact estimates. This method takes advantage of the fact that the squared residuals $\hat{\varepsilon}_{ij}^2$ represent a consistent estimate of the underlying unknown error variance σ_{ij}^2 . The residuals are applied to adjust the variance term as follows:

$$[5] \text{Var}_{robust}(\hat{\beta}_{1j}) = \frac{\sum_{i=1}^N r_{1ij} \hat{\varepsilon}_{ij}^2}{\left(\sum_{i=1}^N (T_{ij} - \bar{T}_j)^2 \right)^2} \text{ for each given program } j = [1 \dots J],$$

where $\hat{\varepsilon}_{ij}^2$ and T_{ij} are defined as in the original model, and

r_{1ij} = the i th residual from regressing T_{ij} on all other dependent variables in the model.

Exhibit E.12 reports the resulting heteroscedasticity-robust standard errors and associated p-values alongside the non-robust standard errors and p-values for our impact estimates reported in the main text. In general, and consistently with our expectation, robust standard errors were slightly larger than the non-robust standard errors. However, the magnitude of the difference was not sufficient to influence overall statistical significance of our estimates.

Exhibit E.12

Estimated Impacts, Comparison of Standard and Heteroscedasticity-Robust Standard Errors

	Unadjusted Mean Outcome		Estimated Impact				
	Treatment Group	Control Group	Impact on All Students	(SE)	P-value	(Robust SE)	Robust P-value
<i>Interpersonal Relationships, Personal Responsibility, and Community Involvement</i>							
Pro-social Behaviors	2.79	2.80	-0.01	0.02	0.67	0.02	0.68
<i>Academic</i>							
<i>Self-Reported Outcome (Range 1–4):</i>							
Scholastic Efficacy and School Bonding	3.06	3.03	0.04	0.02	0.08	0.02	0.08
Future Orientation	3.85	3.80	0.03*#	0.02	0.05	0.02	0.05
<i>School-Reported Outcome</i>							
Overall Absenteeism Rate	5.04	5.52	-0.46*#	0.23	0.04	0.23	0.05
Grades (Range 1–5)							
Math	3.19	3.23	-0.05	0.04	0.23	0.04	0.24
English Language Arts	3.57	3.61	-0.04	0.04	0.40	0.05	0.41
Science	3.52	3.55	-0.03	0.04	0.46	0.05	0.46
Social Studies	3.53	3.56	-0.01	0.05	0.78	0.05	0.79
State Assessment Tests							
Math Proficiency	45.69	47.10	-1.53	1.85	0.41	1.89	0.42
Reading/ELA Proficiency	49.40	50.76	-1.67	1.87	0.37	1.89	0.38
<i>Delinquent Behaviors and Participation in Harmful Activities</i>							
<i>Self-Reported Behavioral Outcome</i>							
Misconduct	3.20	3.20	0.00	0.02	0.95	0.02	0.95
Delinquency	3.87	3.85	0.01	0.01	0.28	0.01	0.29
<i>School-Reported Behavioral Outcome</i>							
Truancy Rate	2.05	2.46	-0.45*#	0.20	0.02	0.20	0.03
Misconduct							
Percent committing any infraction	25.00	22.91	2.56	1.69	0.13	1.71	0.13
Percent committing repeated infractions (2+)	14.21	15.63	-0.98	1.40	0.48	1.41	0.49
Delinquency							
Percent committing any infraction	18.13	20.03	-1.51	1.63	0.35	1.65	0.36
Percent committing repeated infractions (2+)	8.64	9.13	-0.55	1.21	0.65	1.23	0.65

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

Robust p-value (of adjusted difference in means) < 0.05, two-tailed test.

Source: Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Appendix F: Standard Errors and Confidence Intervals of Main Effects

Exhibit F.1

Standard Errors and Confidence Intervals for Estimated Impact on Interpersonal Relationships, Personal Responsibility, and Community Involvement

Self-Reported Outcome	Estimated Impact	Standard Error	95% Confidence Interval
Pro-social Behaviors	-0.01	(0.02)	-0.05 — 0.03

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007.

Exhibit F.2

Standard Errors and Confidence Intervals for Estimated Impacts on Academic Outcomes

Self-Reported Outcome	Estimated Impact	Standard Error	95% Confidence Interval
Scholastic Efficacy and School Bonding	0.04	(0.02)	0.00 — 0.08
Future Orientation	0.03*	(0.02)	0.00 — 0.06
School-Reported Outcome			
Overall Absenteeism Rate (Percent)	-0.46*	(0.23)	-0.91 — -0.02
Grades (Range 1–5)			
Math	-0.05	(0.04)	-0.14 — 0.03
English Language Arts	-0.04	(0.04)	-0.12 — 0.05
Science	-0.03	(0.04)	-0.12 — 0.06
Social Studies	-0.01	(0.05)	-0.10 — 0.08
State Assessment Tests			
Math—Percent Proficient	-1.53	(1.85)	-5.16 — 2.10
Reading/ELA—Percent Proficient	-1.67	(1.87)	-5.33 — 2.00

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit F.3**Standard Errors and Confidence Intervals for Estimated Impacts on Delinquent Behaviors and Participation in Harmful Activities**

Self-Reported Outcome	Estimated Impact	Standard Error	95% Confidence Interval
Misconduct	0.00	(0.02)	-0.04 — 0.04
Delinquency	0.01	(0.01)	-0.01 — 0.03
School-Reported Behavioral Outcome			
<i>Truancy—Unexcused Absence Rate (Percent)</i> ^a	-0.45*	(0.20)	-0.84 — -0.06
<i>Misconduct</i>			
Percent committing any infraction	2.56	(1.69)	-0.75 — 5.87
Percent committing repeated infractions (2+)	-0.98	(1.40)	-3.72 — 1.76
<i>Delinquency</i>			
Percent committing any infraction	-1.51	(1.63)	-4.70 — 1.68
Percent committing repeated infractions (2+)	-0.56	(1.21)	-2.94 — 1.82

^a Based on 27 of 42 sites that reported unexcused absences and total days enrolled

* p-value (of adjusted difference in means) < 0.05, two-tailed test

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit F.4: Subgroup Findings by Gender: Interpersonal Relationships, Personal Responsibility, and Community Involvement

Self-Reported Outcome	Boys			Girls			Difference		
	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval
Pro-social Behaviors	-0.06*+	(0.03)	-0.12 — 0.00	0.04	(0.03)	-0.01 — 0.09	-0.10*	(0.04)	-0.18 — -0.03

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007.

Exhibit F.5: Subgroup Findings by Gender: Academic Outcomes

	Boys			Girls			Difference		
	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval
Self-Reported Outcome (Range 1–4)									
Scholastic Efficacy and School Bonding	-0.03	(0.03)	-0.09 — 0.03	0.10*+	(0.03)	0.04 — 0.15	-0.12*+	(0.04)	-0.21 — -0.04
Future Orientation	0.07*+	(0.02)	0.02 — 0.12	0.00	(0.02)	-0.04 — 0.04	0.07*+	(0.03)	0.01 — 0.13
School-Reported Outcome									
Overall Absenteeism Rate (Percent)	-0.12	(0.30)	-0.72 — 0.47	-0.82*	(0.34)	-1.49 — -0.14	0.69	(0.46)	-0.21 — 1.59
Grades (Range 1–5)									
Math	-0.07	(0.07)	-0.20 — 0.06	-0.04	(0.06)	-0.16 — 0.08	-0.03	(0.09)	-0.21 — 0.15
English Language Arts	-0.08	(0.07)	-0.21 — 0.05	0.05	(0.06)	-0.07 — 0.17	-0.12	(0.09)	-0.31 — 0.05
Science	-0.04	(0.07)	-0.17 — 0.09	-0.03	(0.06)	-0.15 — 0.10	-0.01	(0.09)	-0.20 — 0.17
Social Studies	0.01	(0.07)	-0.13 — 0.15	-0.05	(0.06)	-0.18 — 0.07	0.06	(0.09)	-0.13 — 0.24
State Assessment Tests									
Math—Percent Proficient	-2.38	(2.74)	-7.75 — 2.98	-1.17	(2.61)	-6.28 — 3.94	-1.28	(3.78)	-8.62 — 6.20
Reading/ELA—Percent Proficient	1.61	(2.69)	-3.67 — 6.88	-4.91	(2.66)	-10.12 — 0.30	6.52	(3.78)	-0.89 — 13.93

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit F.6: Subgroup Findings by Gender: Delinquent Behaviors and Participation in Harmful Activities

	Boys			Girls			Difference		
	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval
Self-Reported Outcome									
Misconduct	0.02	(0.03)	-0.04 — 0.09	-0.01	(0.03)	-0.07 — 0.04	0.04	(0.04)	-0.05 — 0.12
Delinquency	0.01	(0.02)	-0.02 — 0.04	0.01	(0.01)	-0.01 — 0.03	-0.01	(0.02)	-0.04 — 0.03
School-Reported Behavioral Outcome									
Truancy—Unexcused Absence Rate (Percent)^a	-0.23	(0.24)	-0.70 — 0.24	-0.76*	(0.33)	-1.40 — -0.11	0.53	(0.41)	-0.27 — 1.33
Misconduct									
Percent committing any infraction	6.33	(2.65)	1.14 — 11.52	-1.21	(2.12)	-5.37 — 2.95	7.54*	(3.39)	0.89 — 14.19
Percent committing repeated infractions (2+)	0.83	(2.19)	-3.46 — 5.11	-2.55	(1.79)	-6.07 — 0.97	3.38	(2.83)	-2.17 — 8.93
Delinquency									
Percent committing any infraction	0.16	(2.66)	-7.01 — 7.34	-2.55	(2.04)	-6.55 — 1.45	2.71	(3.30)	-3.77 — 9.19
Percent committing repeated infractions (2+)	0.61	(3.04)	-5.35 — 6.57	-0.97	(1.52)	-3.95 — 2.00	1.59	(2.46)	-3.24 — 6.41

^a Based on 27 sites that reported unexcused absences and total days enrolled.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit F.7: Subgroup Findings by Age: Interpersonal Relationships, Personal Responsibility, and Community Involvement

Self-Reported Outcome	Students Below Age 12			Students Aged 12 and Older			Difference		
	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval
Pro-social Behaviors	-0.02	(0.02)	-0.07 — 0.03	0.03	(0.03)	-0.04 — 0.10	-0.05	(0.04)	-0.13 — 0.03

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007.

Exhibit F.8: Subgroup Findings by Age: Academic Outcomes

	Students Below Age 12			Students Aged 12 and Older			Difference		
	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval
Self-Reported Outcome									
Scholastic Efficacy and School Bonding	0.02	(0.02)	-0.03 — 0.07	0.08*	(0.04)	0.00 — 0.16	-0.06	(0.05)	-0.15 — 0.03
Future Orientation	0.03	(0.02)	0.00 — 0.07	0.04	(0.03)	-0.02 — 0.10	-0.01	(0.04)	-0.08 — 0.06
School-Reported Outcome									
Overall Absenteeism Rate (Percent)	-0.51*	(0.21)	-0.93 — -0.10	-0.88	(0.56)	-1.98 — 0.23	0.37	(0.60)	-0.81 — 1.55
Grades (Range 1–5)									
Math	-0.07	(0.05)	-0.17 — 0.04	-0.03	(0.10)	-0.22 — 0.17	-0.04	(0.11)	-0.26 — 0.18
English Language Arts	-0.04	(0.05)	-0.14 — 0.07	-0.05	(0.09)	-0.22 — 0.12	0.01	(0.10)	-0.19 — 0.22
Science	-0.02	(0.06)	-0.13 — 0.09	-0.02	(0.08)	-0.18 — 0.14	0.00	(0.10)	-0.20 — 0.19
Social Studies	0.02	(0.06)	-0.10 — 0.13	-0.01	(0.09)	-0.18 — 0.15	0.03	(0.10)	-0.17 — 0.23
State Assessment Tests									
Math—Percent Proficient	-3.24	(2.25)	-7.65 — 1.17	1.13	(3.33)	-5.40 — 7.66	-4.37	(4.02)	-12.25 — 3.51
Reading/ELA—Percent Proficient	-1.83	(2.23)	-6.20 — 2.54	-1.12	(3.50)	-7.98 — 5.74	-0.71	(4.15)	-8.85 — 7.43

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit F.9: Subgroup Findings by Age: Delinquent Behaviors and Participation in Harmful Activities

	Students Below Age 12			Students Aged 12 and Older			Difference		
	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval
Self-Reported Outcome									
Misconduct	0.01	(0.02)	-0.03 — 0.06	-0.04	(0.04)	-0.12 — 0.04	0.06	(0.05)	-0.04 — 0.15
Delinquency	0.01	(0.01)	-0.01 — 0.03	0.02	(0.02)	-0.02 — 0.06	-0.01	(0.02)	-0.06 — 0.03
School-Reported Behavioral Outcome									
Truancy—Unexcused Absence Rate (Percent)^a	-0.55*+	(0.18)	-0.91 — -0.19	-0.84	(0.48)	-1.78 — 0.09	0.30	(0.51)	-0.71 — 1.30
Misconduct									
Percent committing any infraction	4.11*	(1.96)	0.26 — 7.96	-3.03	(3.20)	-9.30 — 3.24	7.14	(3.75)	-0.21 — 14.50
Percent committing repeated infractions (2+)	0.46	(1.57)	-2.61 — 3.52	-6.32*	(2.79)	-11.79 — -0.86	6.78*	(3.20)	0.51 — 13.04
Delinquency									
Percent committing any infraction	-0.22	(1.83)	-3.82 — 3.37	-6.40	(3.48)	-13.21 — 0.42	6.17	(3.93)	-1.53 — 13.88
Percent committing repeated infractions (2+)	-0.56	(1.19)	-2.90 — 1.77	-1.09	(3.05)	-7.07 — 4.88	0.53	(3.27)	-5.88 — 6.95

^a Based on 27 sites that reported unexcused absences and total days enrolled.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit F.10: Subgroup Findings by Family Structure: Interpersonal Relationships, Personal Responsibility, and Community Involvement

Self-Reported Outcome	Two-Parent Households			Other Households			Difference		
	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval
Pro-social Behaviors	0.02	(0.03)	-0.04 — 0.07	-0.04	(0.03)	-0.10 — 0.02	-0.06	(0.04)	-0.02 — 0.14

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007.

Exhibit F.11: Subgroup Findings by Family Structure: Academic Outcomes

	Two-Parent Households			Other Households			Difference		
	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval
Self-Reported Outcome									
Scholastic Efficacy and School Bonding	0.03	(0.03)	-0.03 — 0.08	0.05	(0.03)	-0.02 — 0.11	-0.02	(0.04)	-0.10 — 0.06
Future Orientation	0.03	(0.02)	-0.01 — 0.07	0.03	(0.02)	-0.02 — 0.08	0.01	(0.03)	-0.06 — 0.07
School-Reported Outcome									
Overall Absenteeism Rate (Percent)	-0.19	(0.25)	-0.68 — 0.30	-0.65	(0.40)	-1.44 — 0.13	0.46	(0.47)	-0.46 — 1.39
Grades (Range 1–5)									
Math	-0.09	(0.06)	-0.21 — 0.02	-0.01	(0.07)	-0.14 — 0.13	-0.09	(0.09)	-0.27 — 0.09
English Language Arts	-0.03	(0.06)	-0.15 — 0.09	-0.02	(0.07)	-0.15 — 0.12	-0.01	(0.09)	-0.19 — 0.16
Science	-0.04	(0.06)	-0.16 — 0.08	-0.05	(0.07)	-0.18 — 0.09	0.01	(0.09)	-0.17 — 0.19
Social Studies	0.04	(0.06)	-0.09 — 0.16	0.02	(0.07)	-0.12 — 0.16	0.02	(0.10)	-0.17 — 0.21
State Assessment Tests									
Math—Percent Proficient	-2.38	(2.74)	-7.75 — 2.98	-1.17	(2.61)	-6.28 — 3.94	-1.21	(3.78)	-8.62 — 6.20
Reading/ELA—Percent Proficient	1.61	(2.69)	-3.67 — 6.88	-4.91	(2.66)	-10.12 — 0.30	6.52	(3.78)	-0.89 — 13.93

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit F.12: Subgroup Findings by Family Structure: Delinquent Behaviors and Participation in Harmful Activities

	Two-Parent Households			Other Households			Difference		
	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval
Self-Reported Outcome									
Misconduct	-0.01	(0.03)	-0.06 — 0.05	0.00	(0.03)	-0.06 — 0.06	-0.01	(0.04)	-0.09 — 0.08
Delinquency	0.01	(0.01)	-0.01 — 0.04	0.00	(0.01)	-0.02 — 0.03	0.01	(0.02)	-0.03 — 0.05
School-Reported Behavioral Outcome									
Truancy—Unexcused Absence Rate (Percent)^a	0.02	(0.20)	-0.36 — 0.41	-0.90	(0.37)	-1.63 — -0.16	0.92	(0.42)	0.09 — 1.75
Misconduct									
Percent committing any infraction	1.76	(2.23)	-2.62 — 6.14	2.83	(2.67)	-2.39 — 8.06	-1.07	(3.48)	-7.89 — 5.74
Percent committing repeated infractions (2+)	-2.16	(1.80)	-5.68 — 1.37	0.30	(2.24)	-4.09 — 4.69	-2.46	(2.87)	-8.08 — 3.17
Delinquency									
Percent committing any infraction	-3.56	(3.66)	-10.73 — 3.62	-0.06	(2.64)	-5.24 — 5.12	-3.50	(3.36)	-10.08 — 3.09
Percent committing repeated infractions (2+)	-1.92	(3.04)	-7.89 — 4.04	0.15	(2.04)	-3.85 — 4.15	-2.08	(2.52)	-7.02 — 2.86

^a Based on 27 sites that reported unexcused absences and total days enrolled.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit F.13: Subgroup Findings by Academic Risk: Interpersonal Relationships, Personal Responsibility, and Community Involvement

Self-Reported Outcome	Proficient Students			Not Proficient Students			Difference		
	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval
Pro-social Behaviors	-0.01	(0.03)	-0.08 — 0.06	-0.01	(0.03)	-0.07 — 0.05	0.00	(0.04)	-0.09 — 0.09

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007.

Exhibit F.14: Subgroup Findings by Academic Risk: Academic Outcomes

	Proficient Students			Not Proficient Students			Difference		
	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval
Self-Reported Outcome									
Scholastic Efficacy and School Bonding	0.01	(0.03)	-0.06 — 0.08	0.05	(0.03)	-0.01 — 0.11	-0.04	(0.05)	-0.13 — 0.05
Future Orientation	0.03	(0.02)	-0.01 — 0.08	0.04	(0.02)	0.00 — 0.09	-0.01	(0.03)	-0.08 — 0.05
School-Reported Outcome									
Overall Absenteeism Rate (Percent)	-0.60	(0.36)	-1.29 — -0.10	-0.72*	(0.32)	-1.34 — -0.10	0.13	(0.48)	-0.81 — 1.06
Grades (Range 1–5)									
Math	-0.03	(0.08)	-0.18 — 0.13	-0.02	(0.07)	-0.15 — 0.11	0.00	(0.10)	-0.20 — 0.20
English Language Arts	0.01	(0.08)	-0.14 — 0.16	-0.07	(0.07)	-0.20 — 0.06	0.09	(0.10)	-0.11 — 0.29
Science	-0.08	(0.08)	-0.24 — 0.07	-0.04	(0.07)	-0.17 — 0.09	-0.05	(0.10)	-0.25 — 0.16
Social Studies	0.07	(0.08)	-0.09 — 0.23	0.00	(0.07)	-0.14 — 0.13	0.07	(0.11)	-0.14 — 0.28
State Assessment Tests									
Math—Percent Proficient	-3.35	(2.94)	-9.11 — 2.42	0.33	(2.39)	-4.36 — 5.02	-3.68	(3.79)	-11.11 — 3.75
Reading/ELA—Percent Proficient	-1.75	(2.73)	-7.11 — 3.60	-0.53	(2.53)	-5.49 — 4.44	-1.23	(3.73)	-8.53 — 6.08

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit F.15: Subgroup Findings by Academic Risk: Delinquent Behaviors and Participation in Harmful Activities

	Proficient Students			Not Proficient Students			Difference		
	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval
Self-Reported Outcome									
Misconduct	0.02	(0.03)	-0.05 — 0.09	-0.02	(0.03)	-0.08 — 0.04	0.04	(0.05)	-0.05 — 0.13
Delinquency	0.01	(0.02)	-0.03 — 0.04	0.01	(0.01)	-0.02 — 0.04	0.00	(0.02)	-0.05 — 0.04
School-Reported Behavioral Outcome									
Truancy—Unexcused Absence Rate (Percent)^a	-0.38	(0.26)	-0.89 — 0.12	-0.65*	(0.31)	-1.25 — -0.05	0.26	(0.40)	-0.52 — 1.05
Misconduct									
Percent committing any infraction	0.15	(3.01)	-5.75 — 6.05	1.76	(2.36)	-2.86 — 6.38	-1.61	(3.82)	-9.11 — 5.88
Percent committing repeated infractions (2+)	-2.13	(2.58)	-7.19 — 2.94	-1.67	(1.98)	-5.56 — 2.21	-0.46	(3.26)	-6.84 — 5.93
Delinquency									
Percent committing any infraction	1.77	(3.66)	-5.41 — 8.94	-4.24	(2.33)	-8.80 — 0.33	6.00	(3.77)	-1.39 — 13.40
Percent committing repeated infractions (2+)	-2.31	(3.04)	-8.28 — 3.65	-1.75	(1.73)	-5.14 — 1.64	-0.57	(2.77)	-6.00 — 4.87

^a Based on 27 sites that reported unexcused absences and total days enrolled.

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit F.16: Subgroup Findings by Self-Reported Baseline Delinquency: Interpersonal Relationships, Personal Responsibility, and Community Involvement

Self-Reported Outcome	Any Delinquency			No Delinquency			Difference		
	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval
Pro-social Behaviors	-0.02	0.04	-0.10 — 0.06	-0.01	0.02	-0.05 — 0.04	-0.01	(0.05)	-0.10 — 0.08

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007.

Exhibit F.17: Subgroup Findings by Self-Reported Baseline Delinquency: Academic Outcomes

Self-Reported Outcome	Any Delinquency			No Delinquency			Difference		
	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval
Scholastic Efficacy and School Bonding	0.07	(0.04)	-0.02 — 0.15	0.03	(0.02)	-0.02 — 0.07	0.04	(0.05)	-0.06 — 0.14
Future Orientation	0.05	(0.04)	-0.03 — 0.13	0.02	(0.02)	-0.01 — 0.05	0.03	(0.04)	-0.05 — 0.12
School-Reported Outcome									
Overall Absenteeism Rate (Percent)	-0.13	(0.56)	-1.22 — 0.96	-0.61*	(0.25)	-1.09 — -0.13	0.49	(0.61)	-0.71 — 1.68
Grades (Range 1–5)									
Math	0.00	(0.09)	-0.19 — 0.18	-0.08	(0.05)	-0.18 — 0.02	0.07	(0.11)	-0.14 — 0.28
English Language Arts	0.06	(0.09)	-0.12 — 0.24	-0.08	(0.05)	-0.18 — 0.03	0.14	(0.11)	-0.07 — 0.35
Science	0.03	(0.09)	-0.16 — 0.21	-0.06	(0.05)	-0.16 — 0.04	0.09	(0.11)	-0.12 — 0.30
Social Studies	0.09	(0.10)	-0.10 — 0.28	-0.07	(0.05)	-0.17 — 0.04	0.16	(0.11)	-0.06 — 0.38
State Assessment Tests									
Math—Percent Proficient	2.38	(3.91)	-5.29 — 10.04	-3.17	(2.13)	-7.34 — 1.00	5.55	(4.45)	-3.18 — 14.27
Reading/ELA—Percent Proficient	-0.03	(4.02)	-7.90 — 7.85	-2.19	(2.14)	-6.38 — 2.00	2.17	(4.55)	-6.76 — 11.09

* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing.

Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

Exhibit F.18: Subgroup Findings by Self-Reported Baseline Delinquency: Delinquent Behaviors and Participation in Harmful Activities

Self-Reported Outcome	Any Delinquency			No Delinquency			Difference		
	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval	Estimated Impact	Standard Error	95% Confidence Interval
Misconduct	0.02	(0.05)	-0.07 — 0.11	-0.01	(0.02)	-0.06 — 0.03	0.03	(0.05)	-0.07 — 0.13
Delinquency	0.03	(0.03)	-0.03 — 0.08	0.00	(0.01)	-0.01 — 0.02	0.02	(0.03)	-0.03 — 0.08
School-Reported Behavioral Outcome									
<i>Truancy—Unexcused Absence Rate (Percent)^a</i>	-0.53	(0.46)	-1.44 — 0.38	-0.41	(0.22)	-0.84 — 0.02	-0.12	(0.51)	-1.12 — 0.88
Misconduct									
Percent committing any infraction	4.59	(3.67)	-2.60 — 11.78	1.36	(1.88)	-2.33 — 5.06	3.22	(4.12)	-4.86 — 11.31
Percent committing repeated infractions (2+)	2.72	(3.21)	-3.57 — 9.01	-2.32	(1.53)	-5.32 — 0.67	5.04	(3.55)	-1.92 — 12.01
Delinquency									
Percent committing any infraction	-4.36	(3.66)	-11.53 — 2.82	-0.36	(1.79)	-3.87 — 3.14	-3.99	(4.08)	-11.99 — 4.00
Percent committing repeated infractions (2+)	-0.53	(3.04)	-6.49 — 5.43	-0.15	(1.26)	-2.61 — 2.32	-0.38	(3.29)	-6.84 — 6.07

^a Based on 27 sites that reported unexcused absences and total days enrolled.

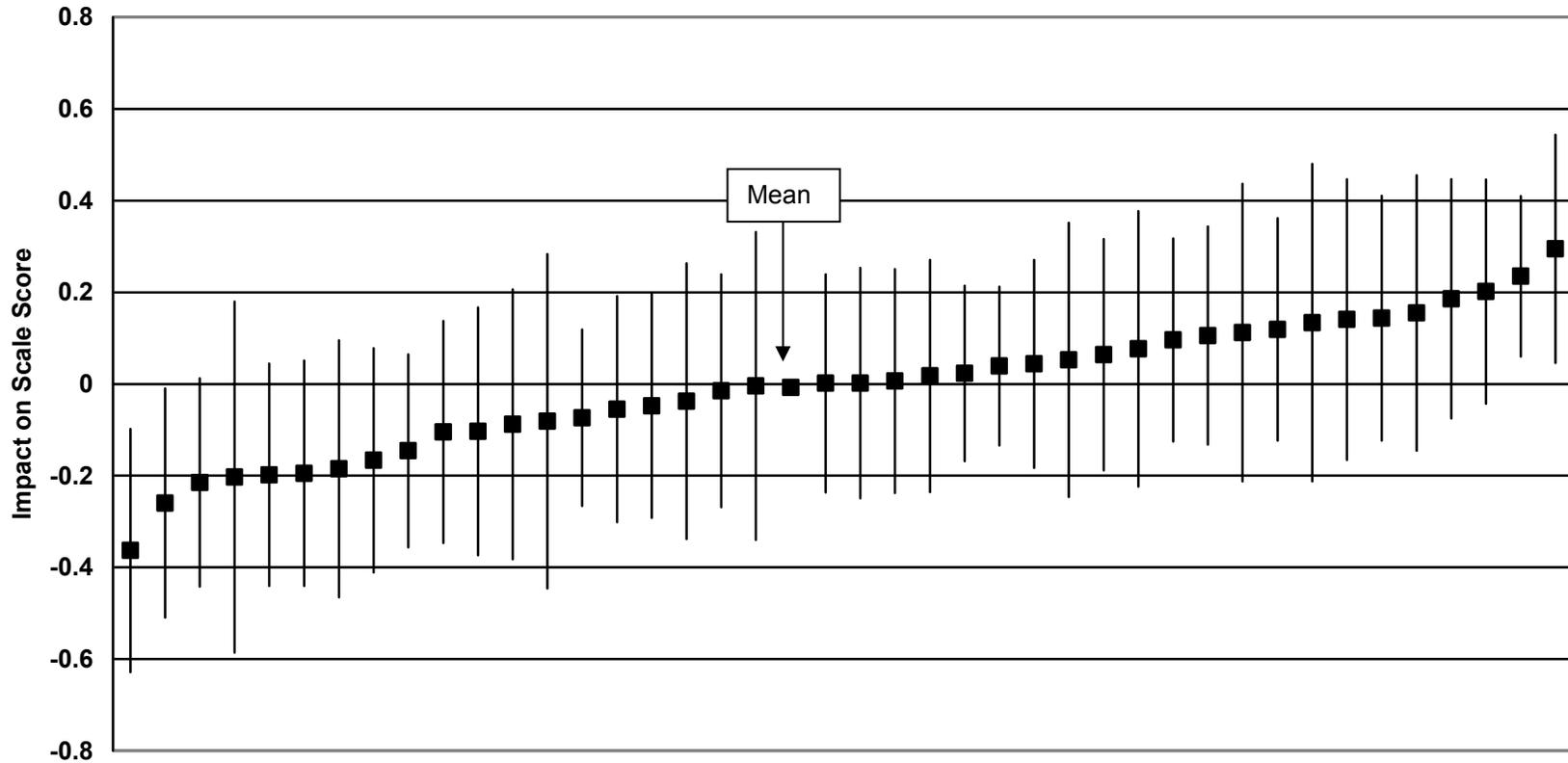
* p-value (of adjusted difference in means) < 0.05, two-tailed test.

+ p-value (of adjusted difference in means) < BH-Corrected Critical Value → statistically significant at the 0.05 level correcting for the false discovery rate under multiple testing

Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program—Student Survey, Fall 2005 and Spring 2006; Fall 2006 and Spring 2007; School Records, SY 2004-2005, SY 2005-2006, SY 2006-2007.

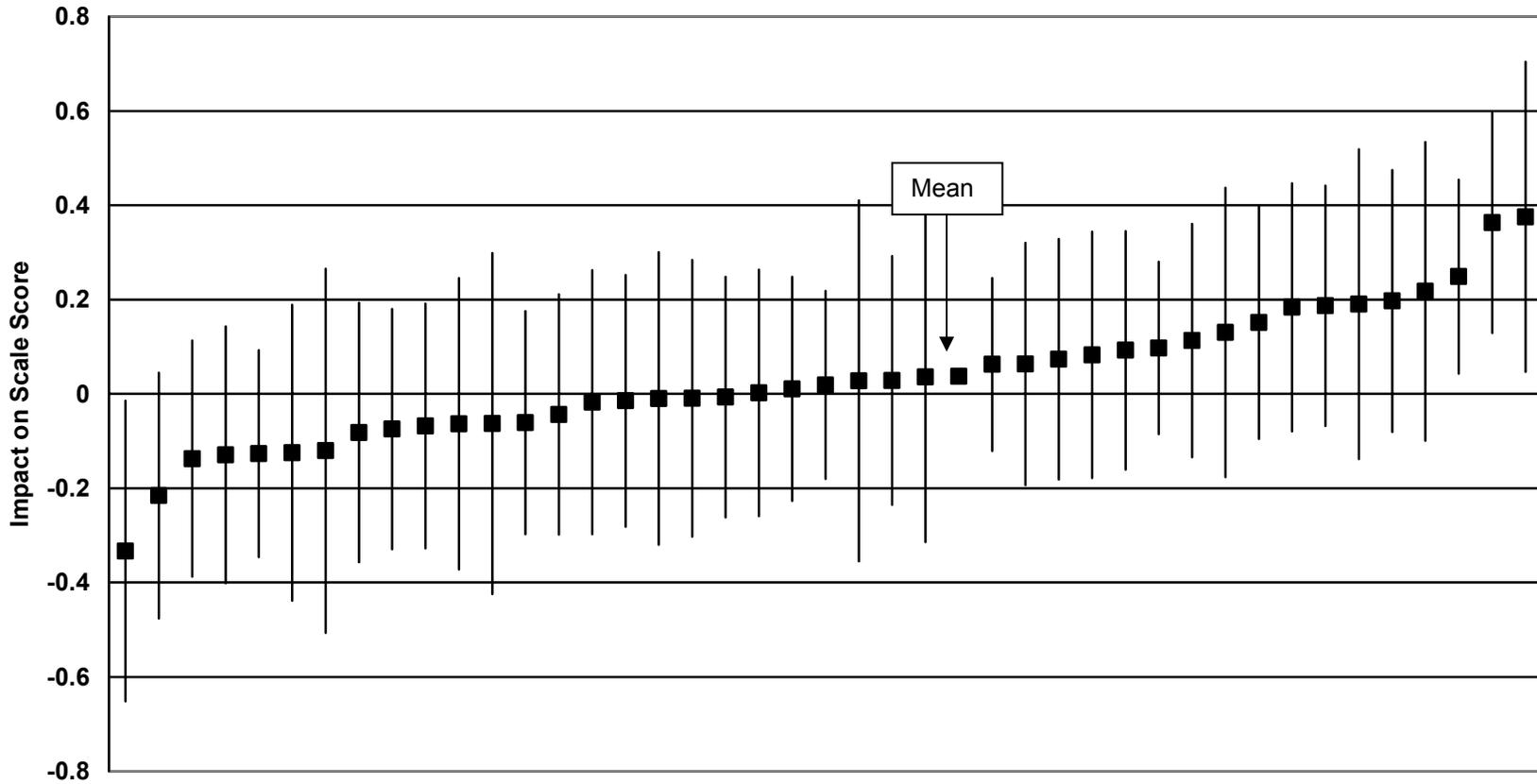
Appendix G: Site-Level Predictors and Impacts

Exhibit G.1: Site-Level Impact Estimates on Parental Relationships, Personal Responsibility, and Community Involvement with 95 Percent Confidence Intervals



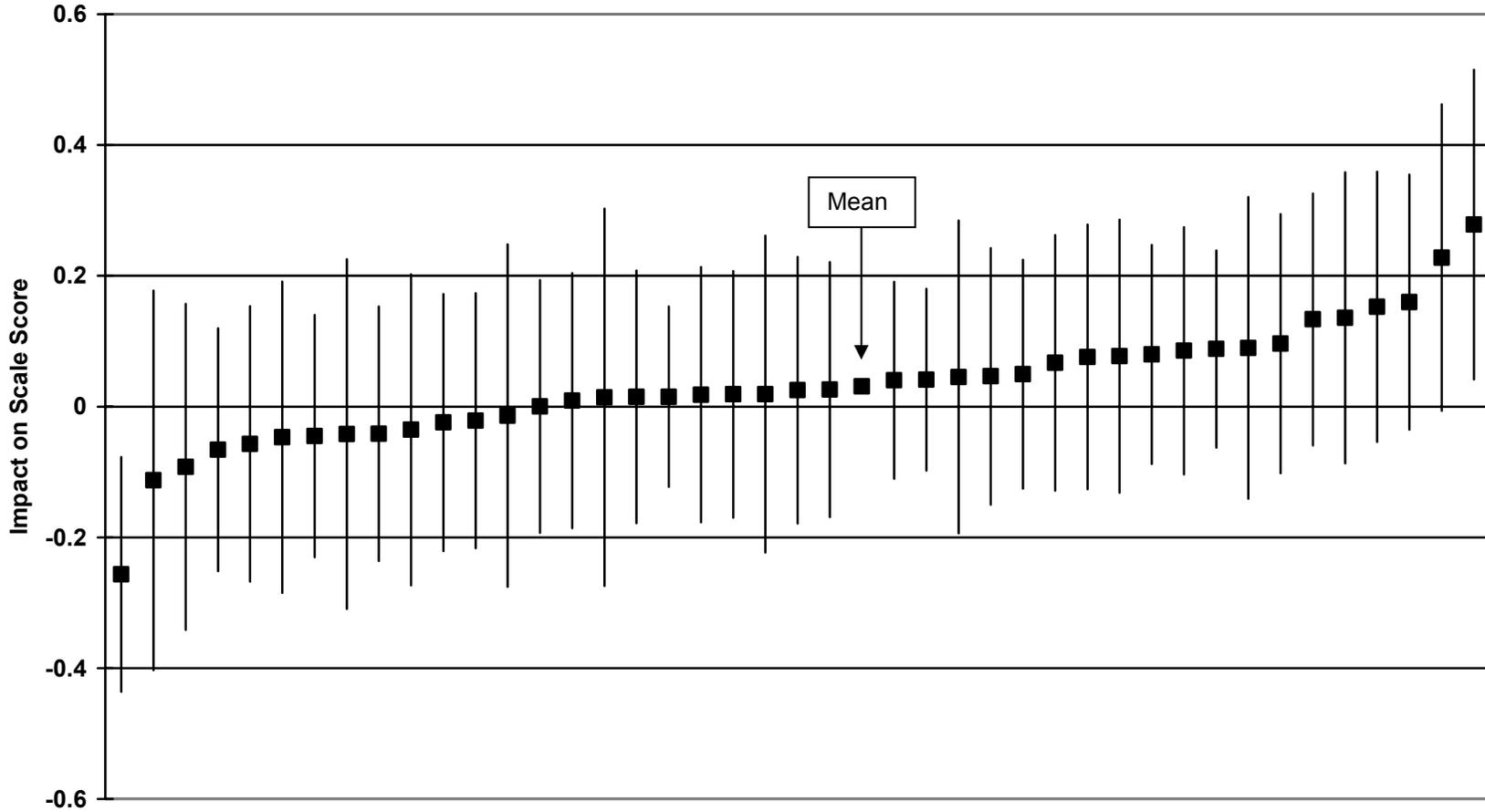
Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 25 to 115.
Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program – Student Survey, Spring 2006 and Spring 2007

Exhibit G.2: Site-Level Impact Estimates on Scholastic Efficacy and School Bonding with 95 Percent Confidence Intervals



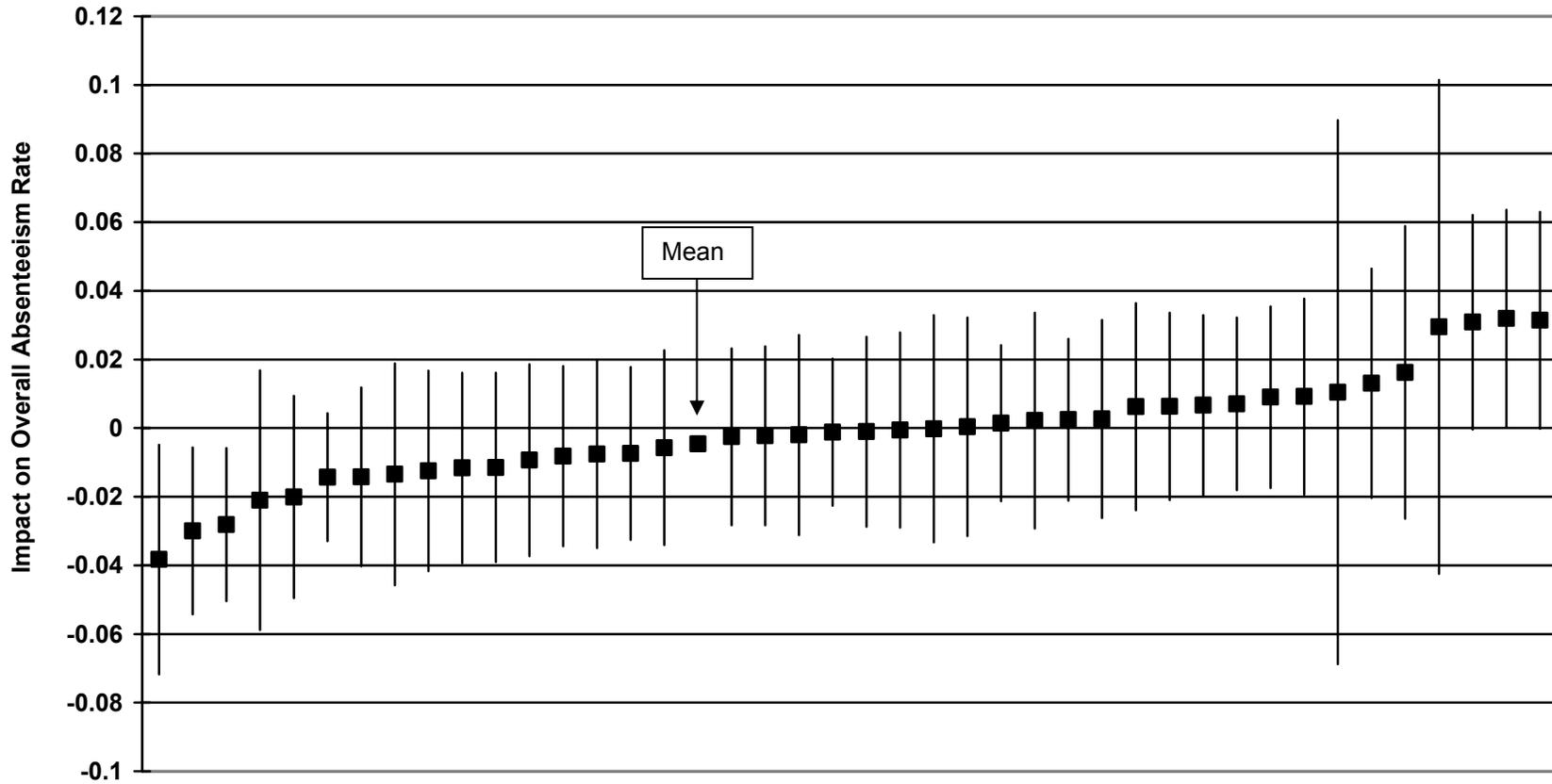
Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 25 to 114.
Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program – Student Survey, Spring 2006 and Spring 2007

Exhibit G.3: Site-Level Impact Estimates on Future Orientation with 95 Percent Confidence Intervals

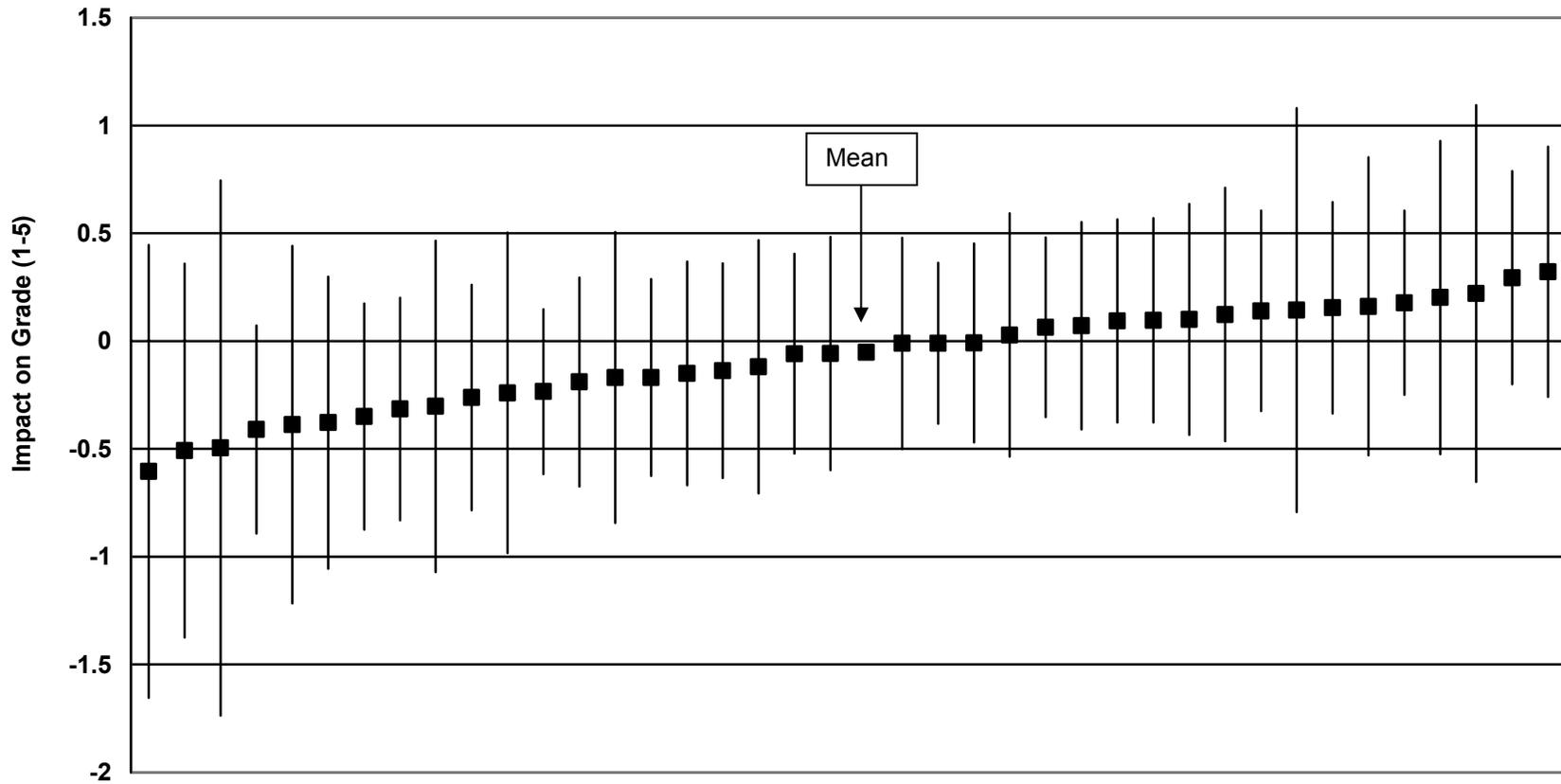


Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 26 to 114.
Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program – Student Survey, Spring 2006 and Spring 2007

Exhibit G.4: Site-Level Impact Estimates on Overall Absenteeism Rate with 95 Percent Confidence Intervals

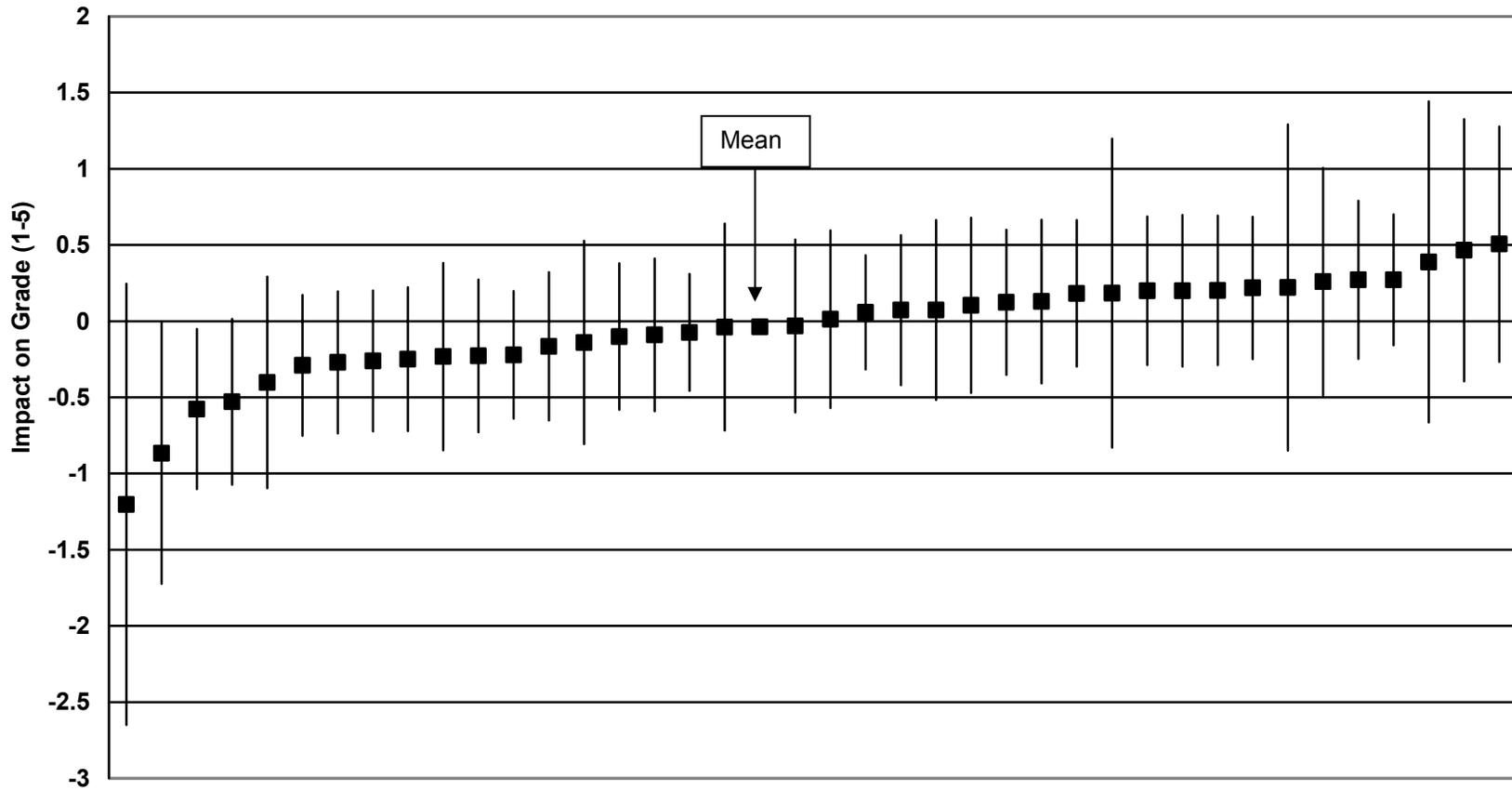


Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 9 to 122.
Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program –School Records, Spring 2006 and Spring 2007

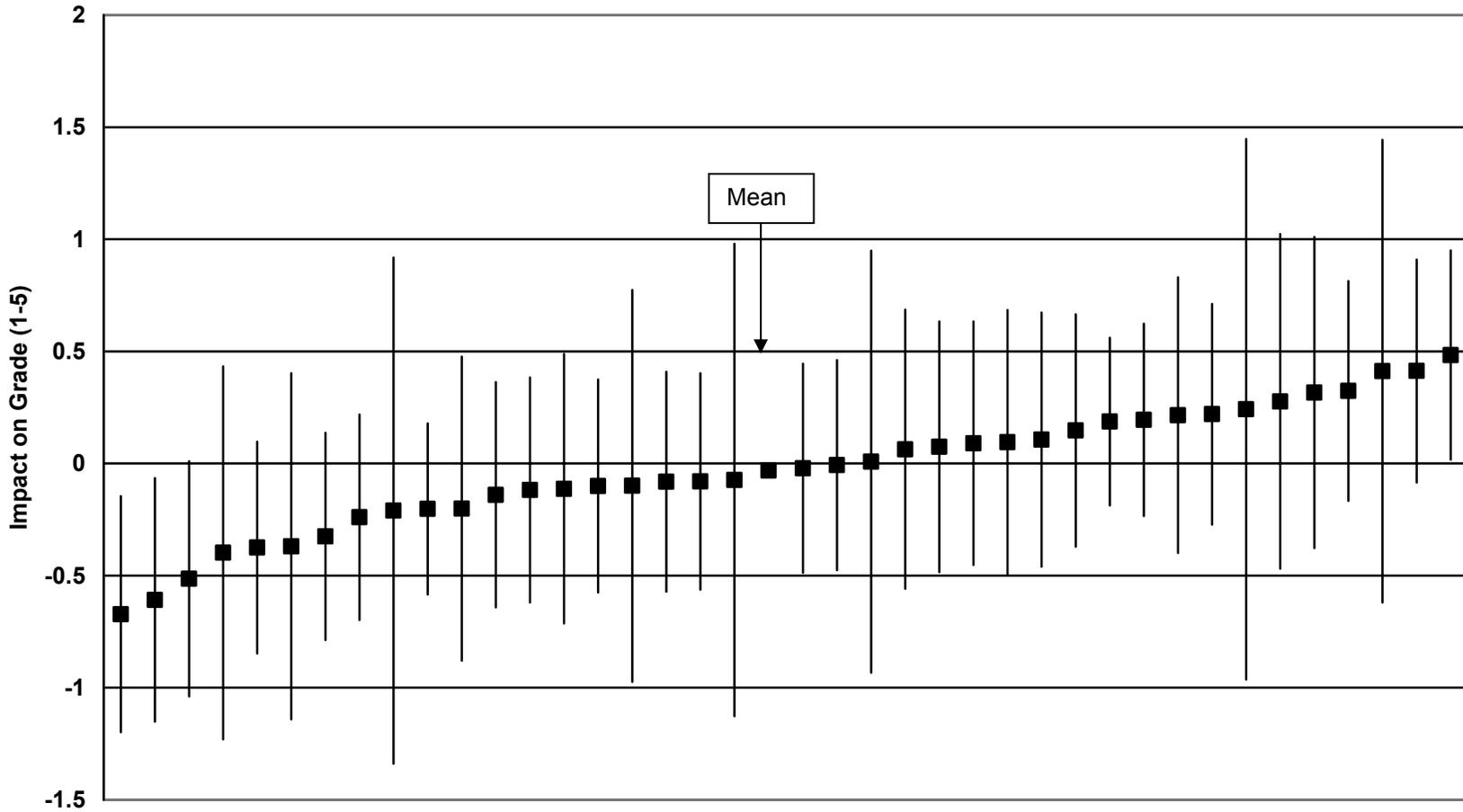
Exhibit G.5: Site-Level Impact Estimates on Math Grades with 95 Percent Confidence Intervals

Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 17 to 93.
Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program – School Records, Spring 2006 and Spring 2007

Exhibit G.6: Site-Level Impact Estimates on English Language Arts Grades with 95 Percent Confidence Intervals

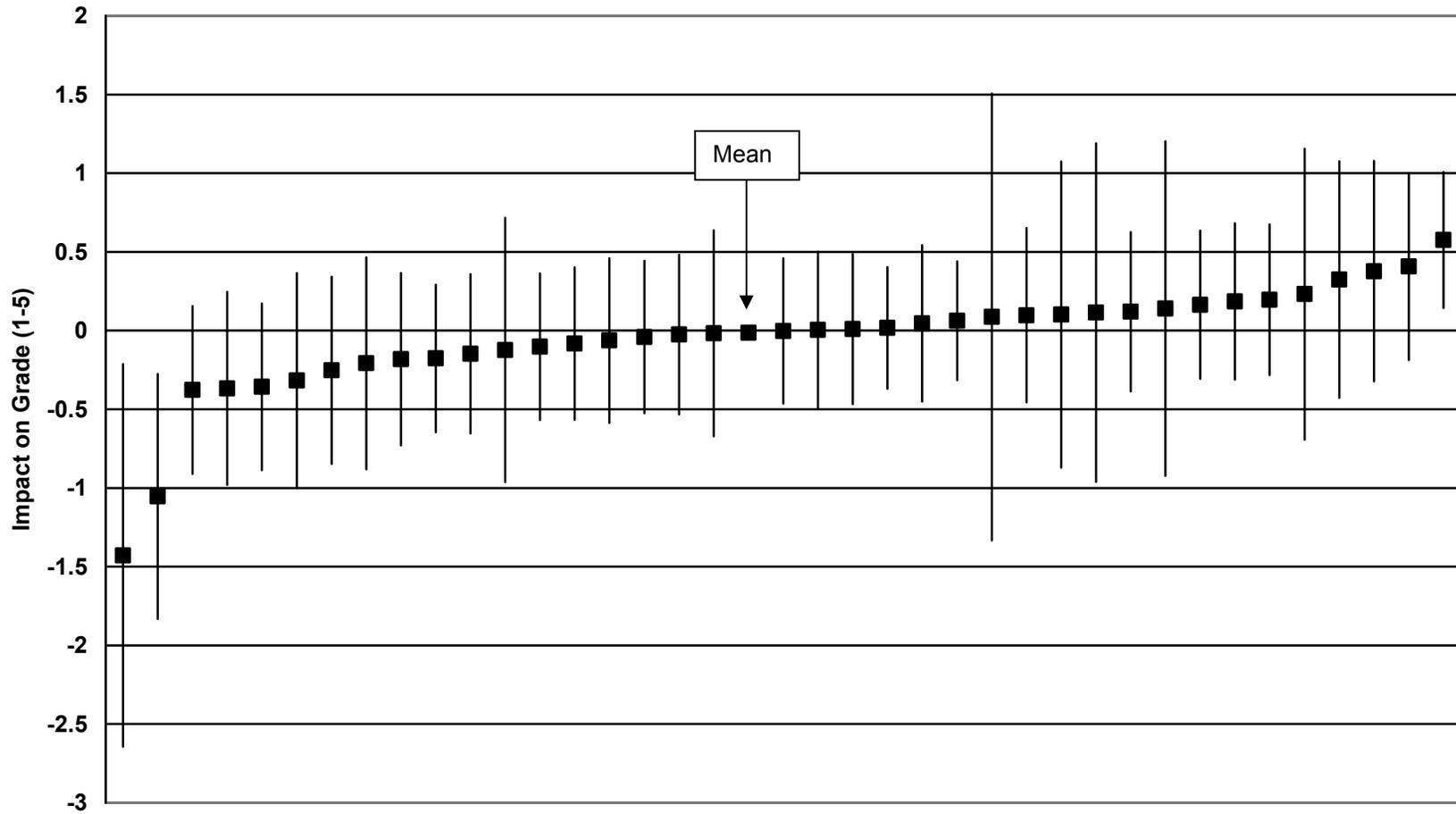


Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 16 to 93.
Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program – School Records, Spring 2006 and Spring 2007

Exhibit G.7: Site-Level Impact Estimates on Science Grades with 95 Percent Confidence Intervals

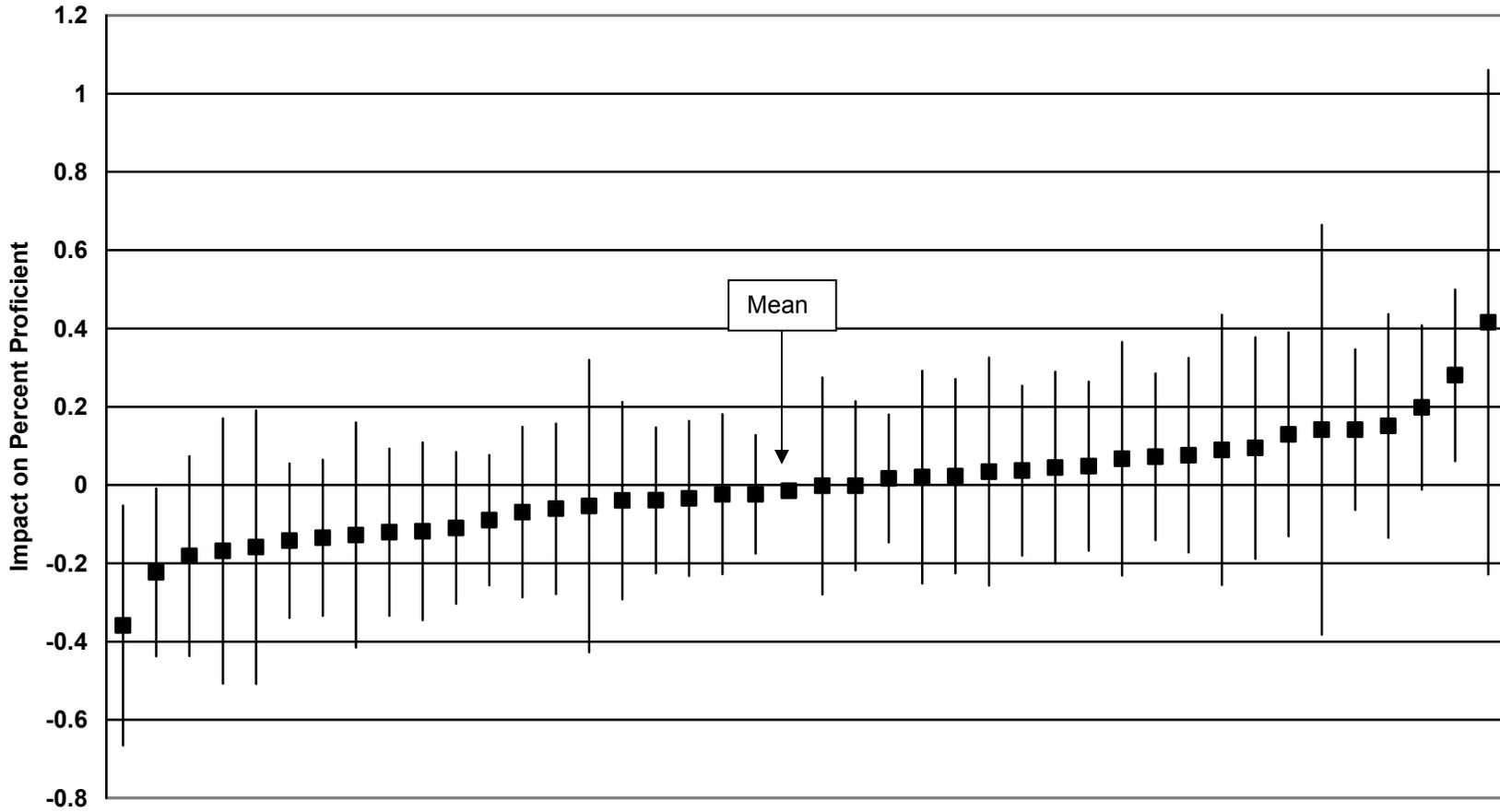
Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 13 to 93.
Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program – School Records, Spring 2006 and Spring 2007

Exhibit G.8: Site-Level Impact Estimates on Social Studies Grades with 95 Percent Confidence Intervals



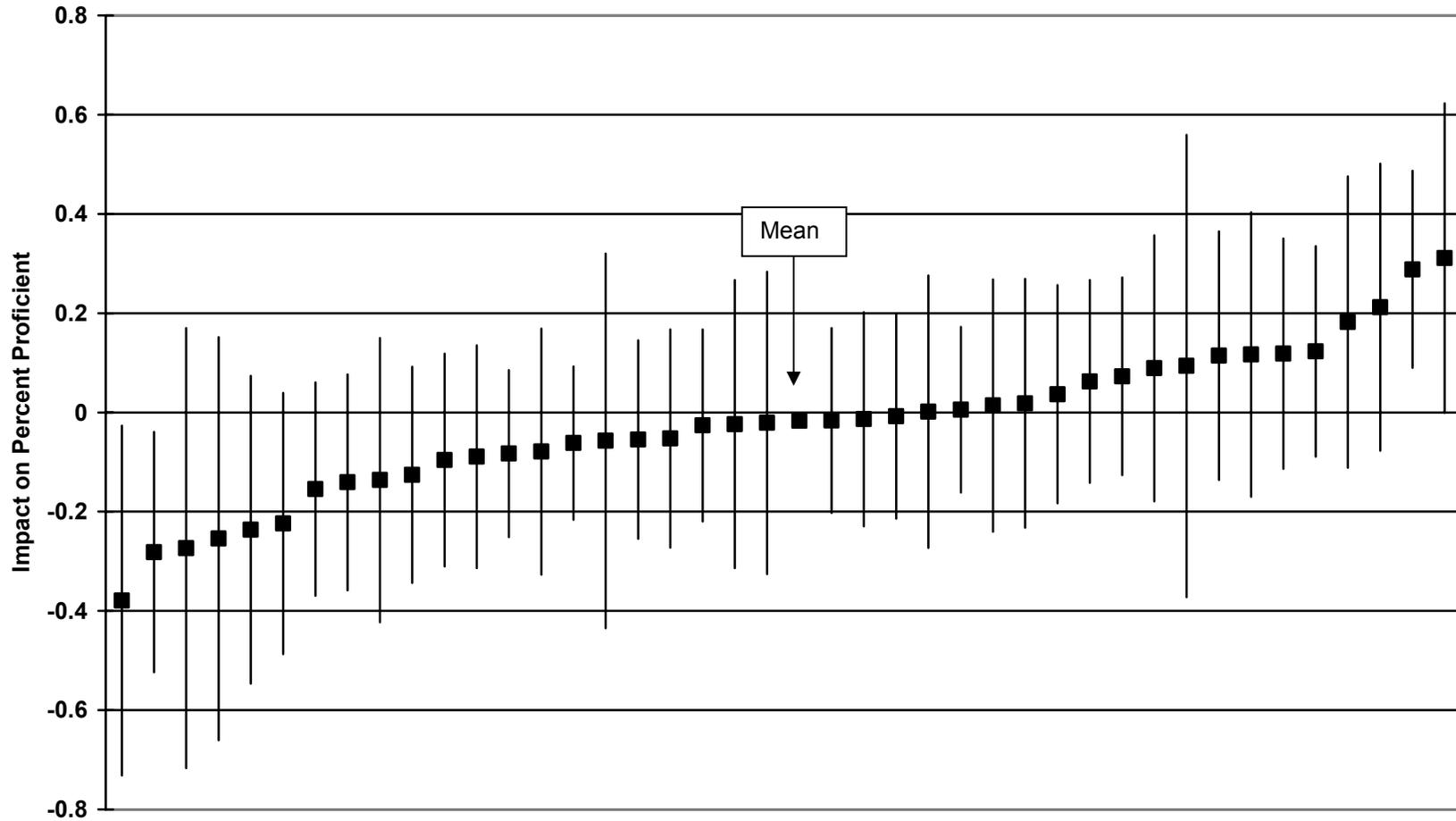
Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 13 to 93.
Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program – School Records, Spring 2006 and Spring 2007

Exhibit G.9: Site-Level Impact Estimates on Percent Students Proficient in Math with 95 Percent Confidence Intervals

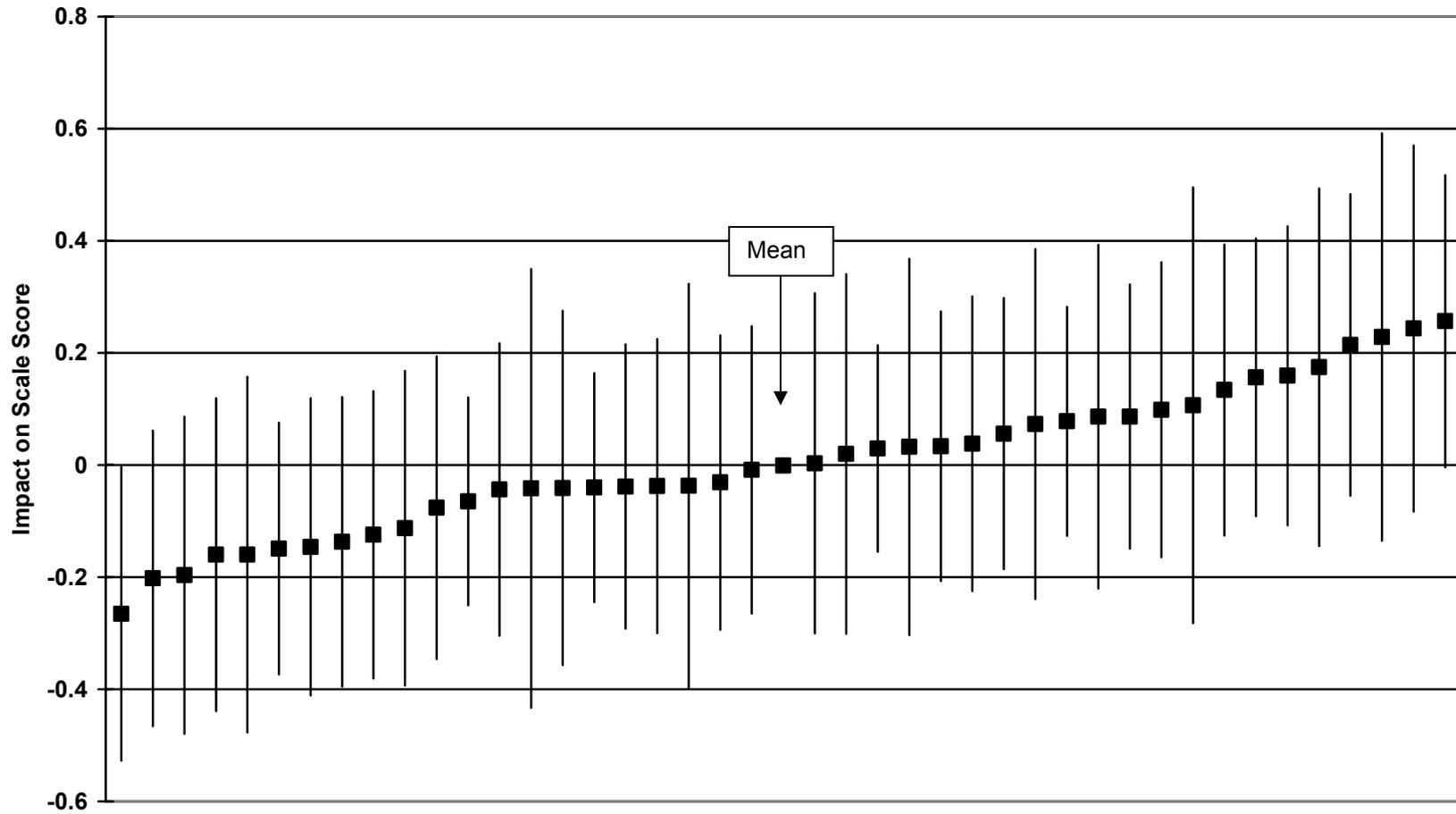


Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 16 to 115.
Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program – School Records, Spring 2006 and Spring 2007

Exhibit G.10: Site-Level Impact Estimates on Percent Students Proficient in Reading/English Language Arts (ELA) with 95 Percent Confidence Intervals

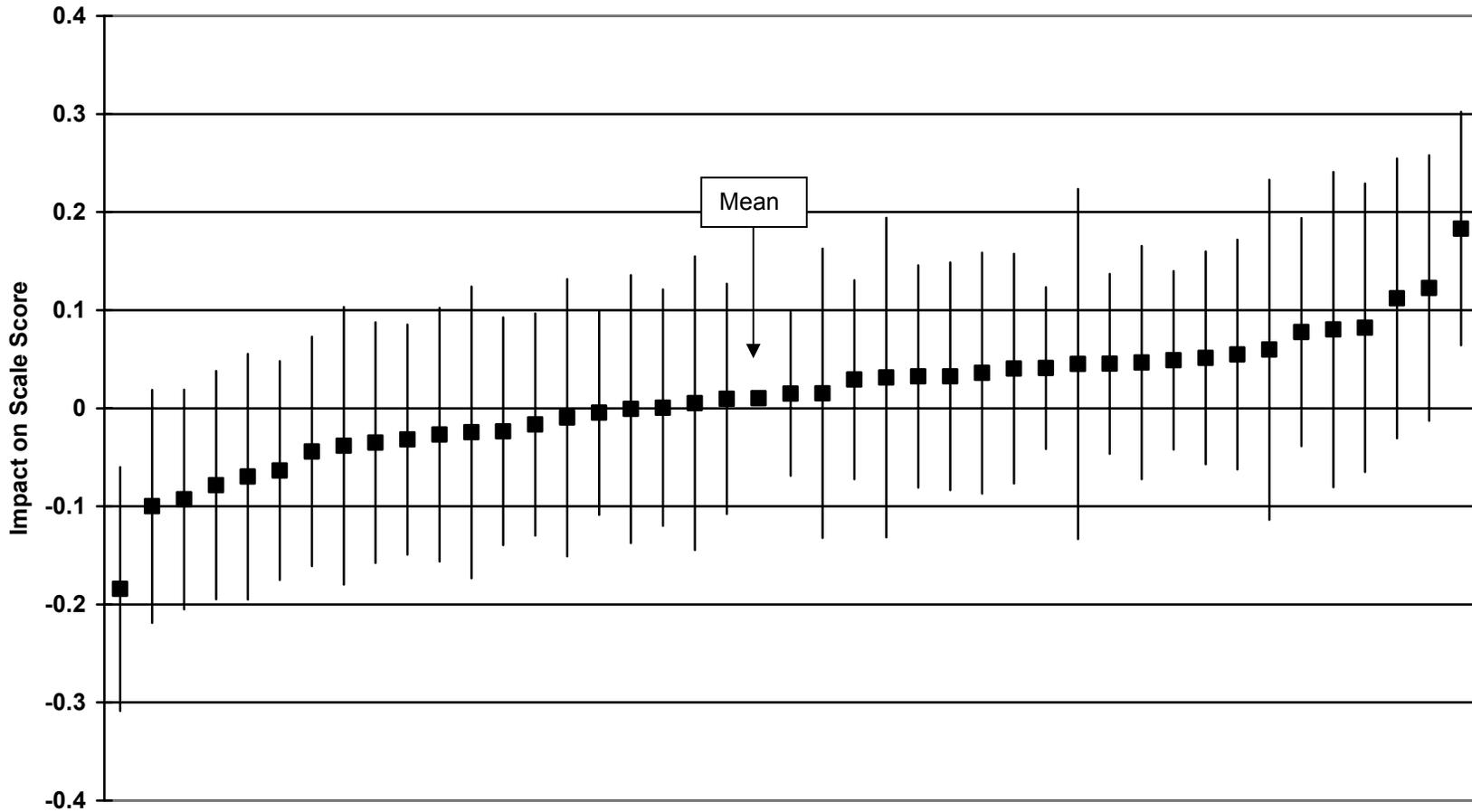


Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 16 to 114.
Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program – School Records, Spring 2006 and Spring 2007

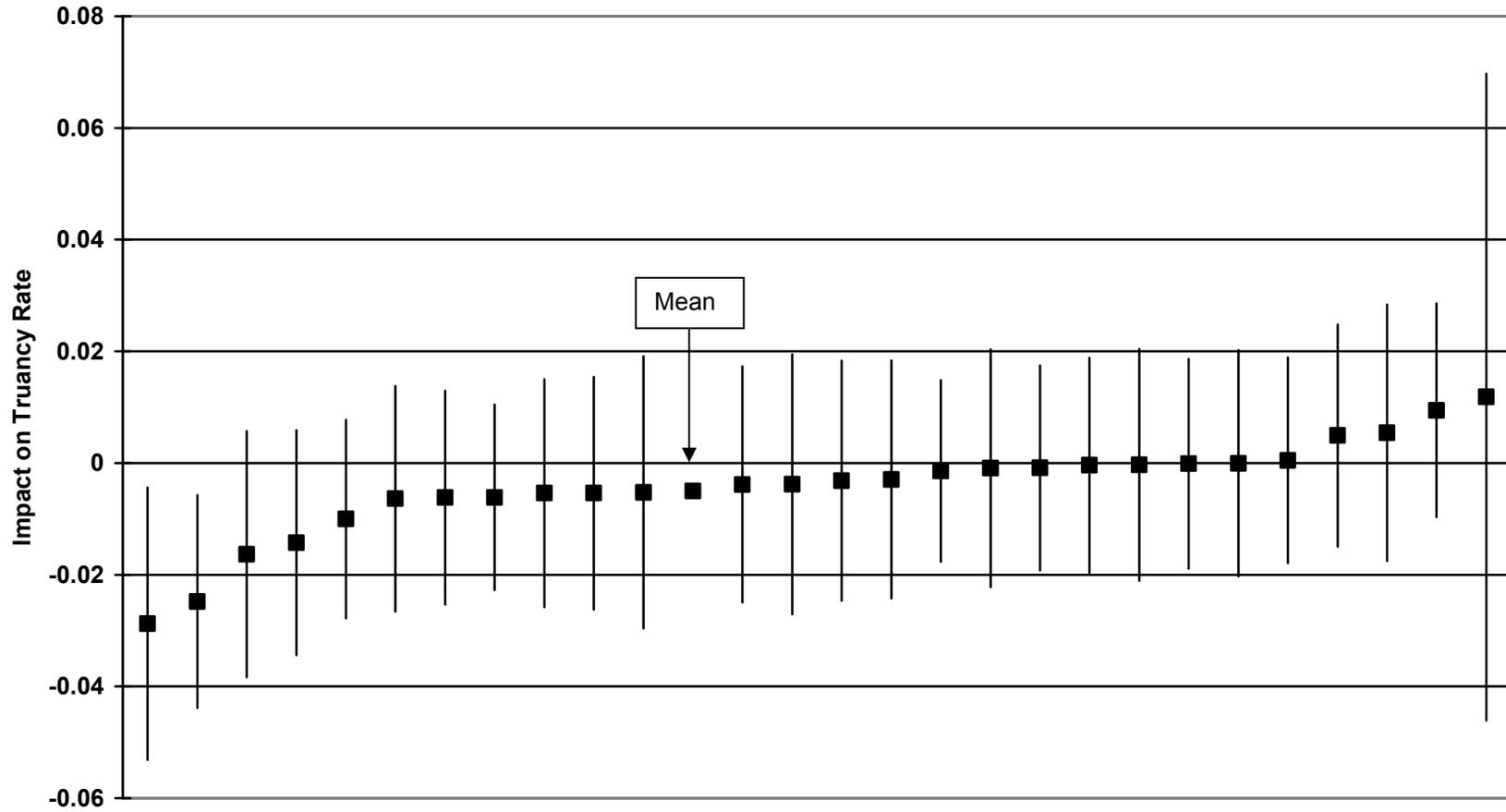
Exhibit G.11: Site-Level Impact Estimates on Self-Reported Misconduct with 95 Percent Confidence Intervals

Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 26 to 116.
Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program – Student Survey, Spring 2006 and Spring 2007

Exhibit G.12: Site-Level Impact Estimates on Self-Reported Delinquency with 95 Percent Confidence Intervals

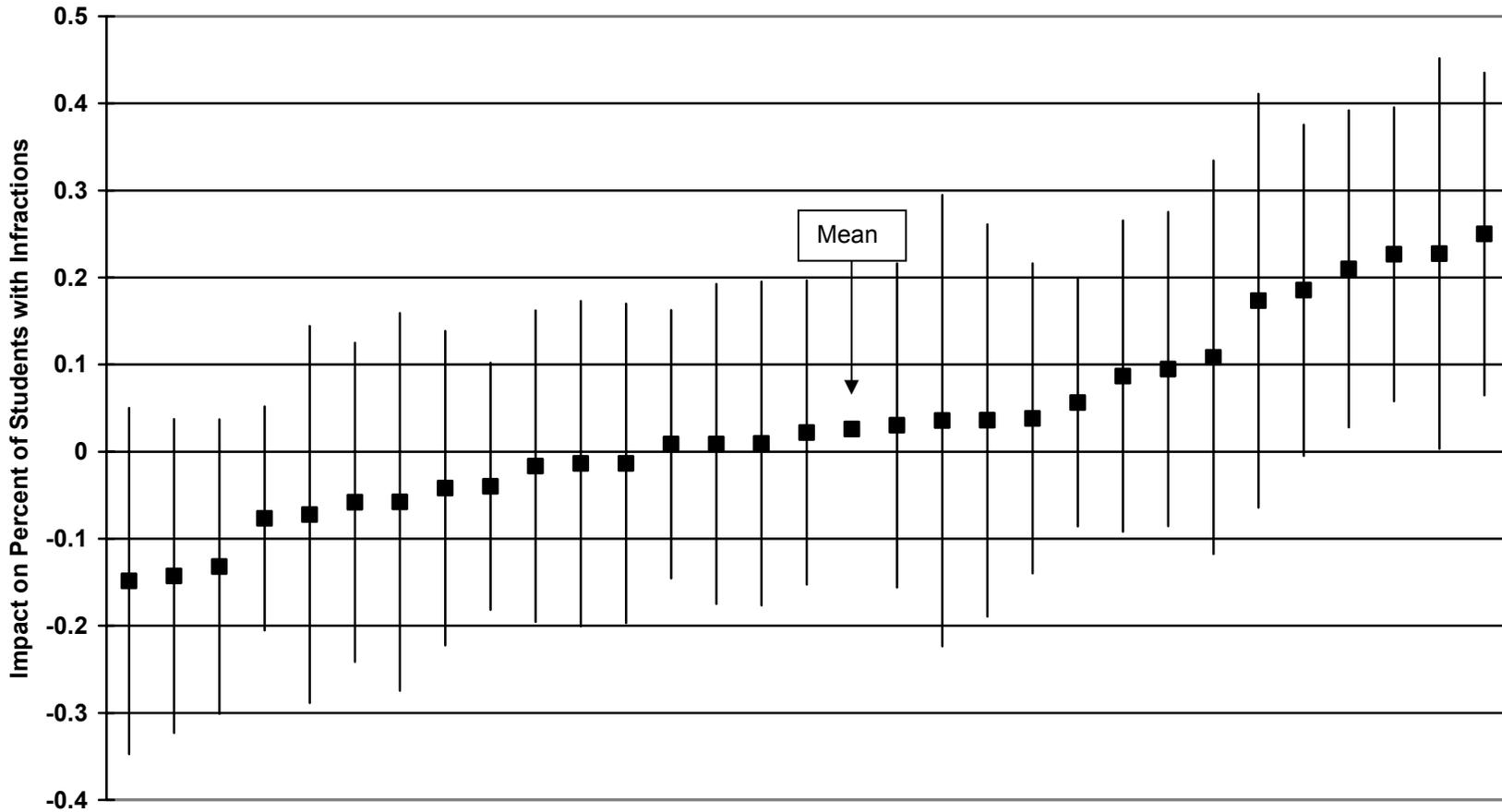


Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 26 to 115.
Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program –Student Survey, Spring 2006 and Spring 2007

Exhibit G.13: Site-Level Impact Estimates on Truancy Rate with 95 Percent Confidence Intervals

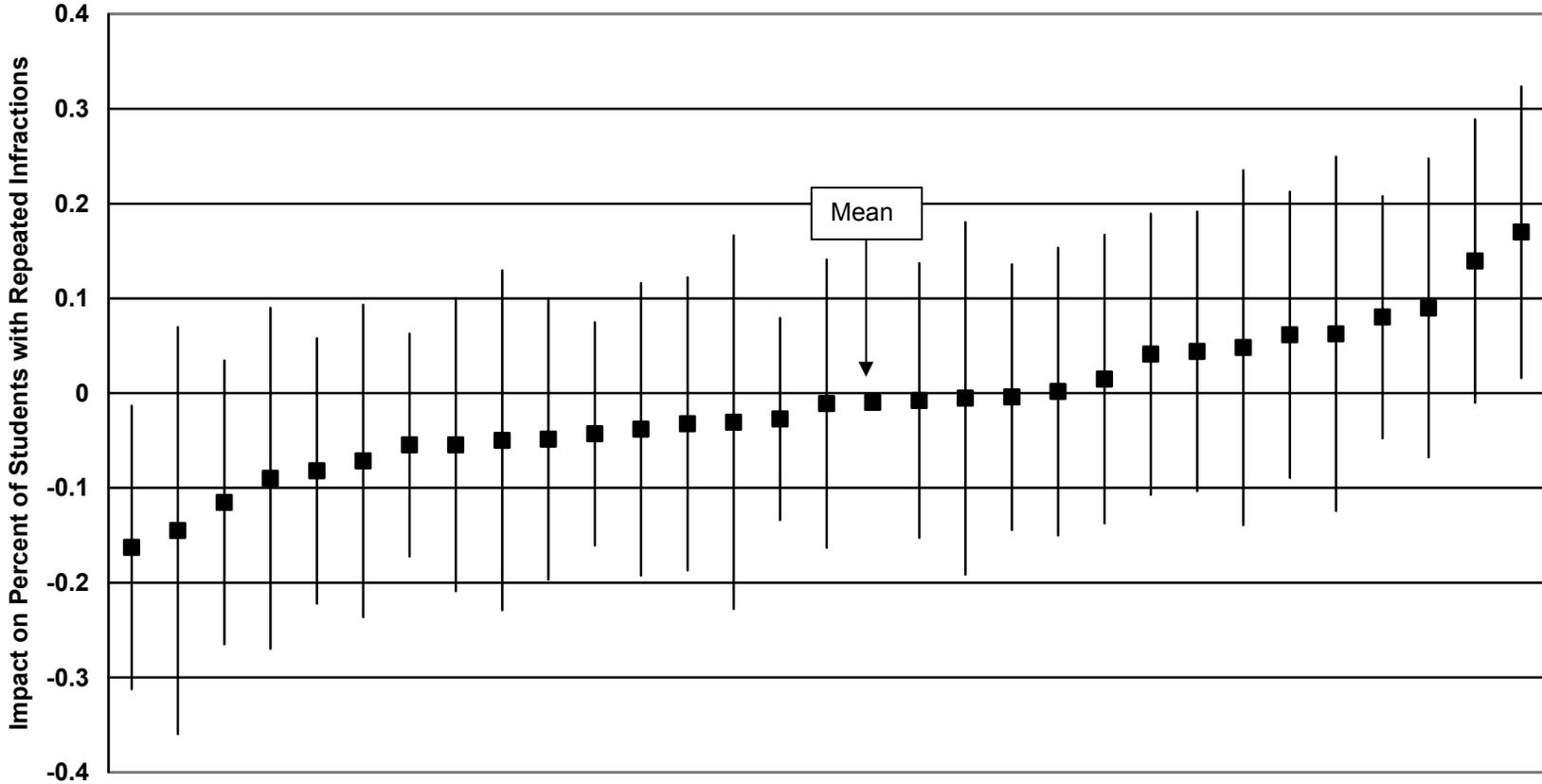
Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 9 to 85.
Source: Impact Evaluation of the U.S. Department of Education's Student Mentoring Program – School Records, Spring 2006 and Spring 2007

Exhibit G.14: Site-Level Impact Estimates on School-Reported Misconduct, Any Infraction with 95 Percent Confidence Intervals



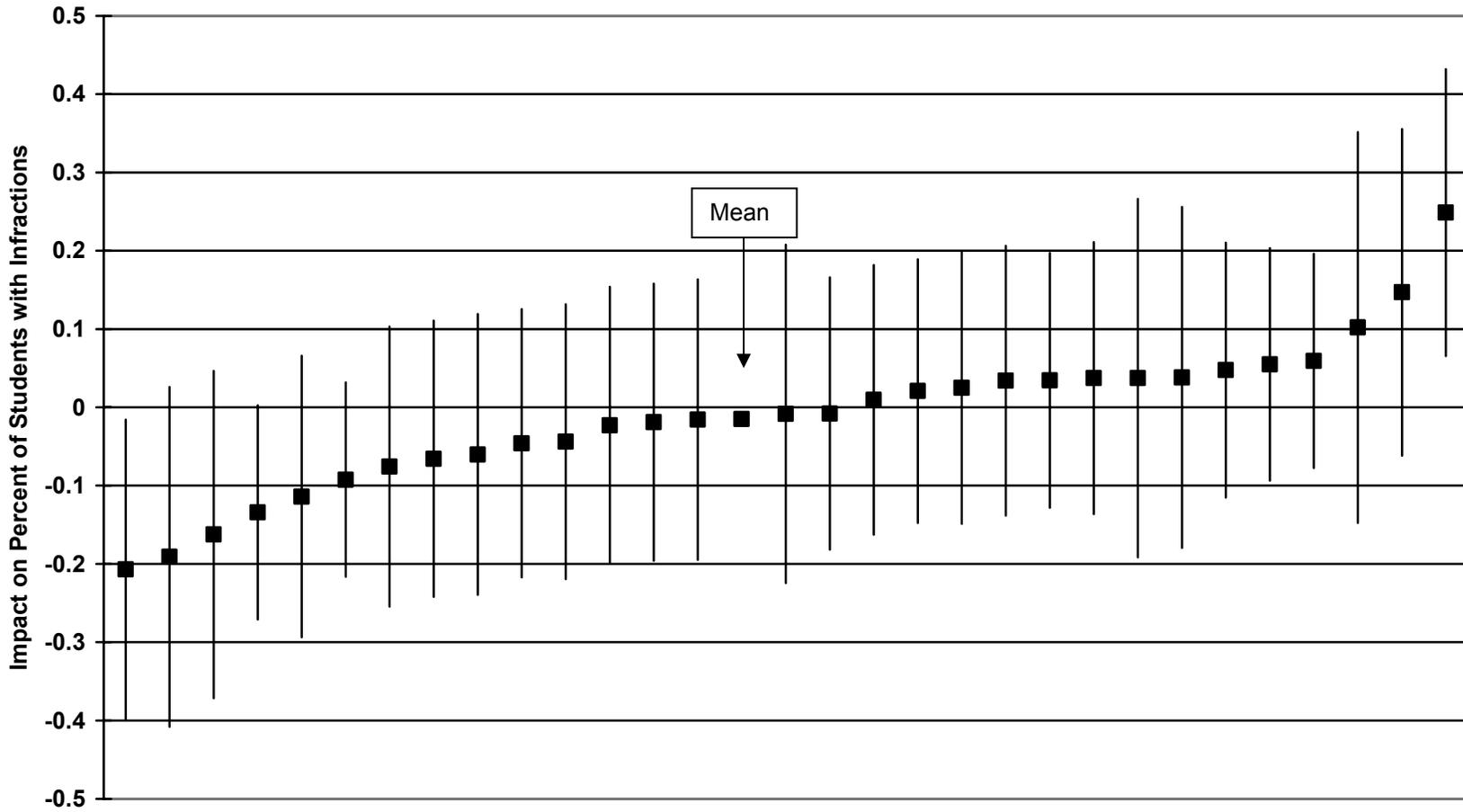
Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 30 to 122.
Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program – School Records, Spring 2006 and Spring 2007

Exhibit G.15: Site-Level Impact Estimates on School-Reported Misconduct—Repeated Infractions with 95 Percent Confidence Intervals



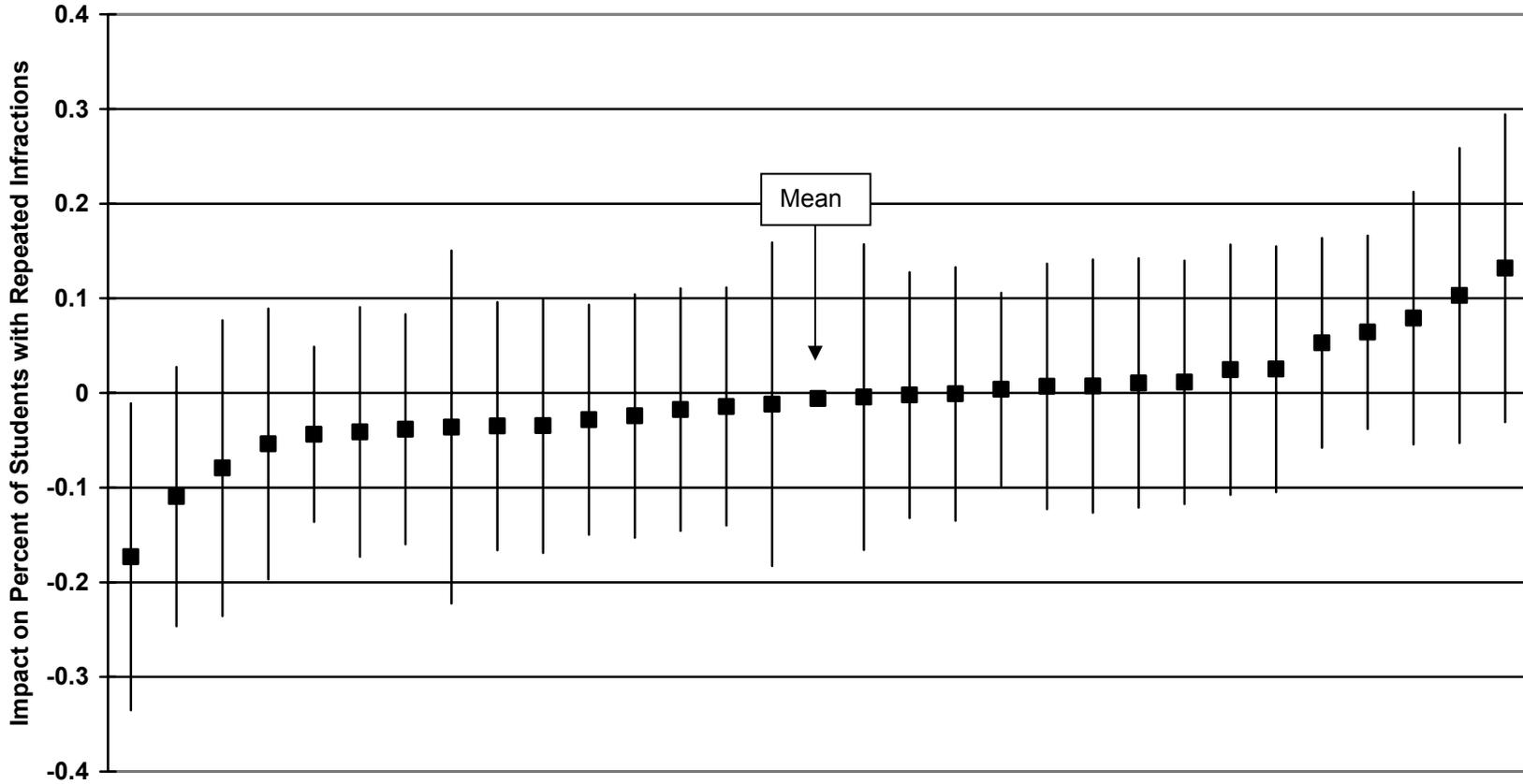
Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 30 to 122.
Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program – School Records, Spring 2006 and Spring 2007

Exhibit G.16: Site-Level Impact Estimates on School-Reported Delinquency—Any Infraction with 95 Percent Confidence Intervals



Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 30 to 122.
Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program – School Records, Spring 2006 and Spring 2007

Exhibit G.17: Site-Level Impact Estimates on School-Reported Delinquency—Repeated Infractions with 95 Percent Confidence Intervals



Notes: Site-level impact estimates based on regression-adjusted differences between treatment and control group means. Site-level Ns range from 30 to 122.
Source: Impact Evaluation of the U.S. Department of Education’s Student Mentoring Program – School Records, Spring 2006 and Spring 2007

Exhibit G.18

Site-Level Associations: Relationship between Program Characteristics and Pro-social Behaviors

	Bivariate Specifications (p-values)	Multivariate Specification (p-values)
<i>Program Delivery (based on pre-intervention activities or characteristics of mentors)</i>		
Average hours of mentor pre-match training provided to mentors	-0.01 (0.33)	0.00 (0.86)
Percent of mentors 22 years or below	0.13 (0.08)	0.06 (0.48)
Percent of mentor/student matches of the same race/ethnicity	0.09 (0.31)	0.07 (0.54)
<i>Program Delivery (based on aggregated mentor reports post-intervention)</i>		
Amount of ongoing mentor support (average frequency of mentor-supervisor meetings)	-0.08* (0.01)	-0.08* (0.02)
Frequency of working on relationship building in student-mentor meetings	0.07 (0.63)	0.16 (0.33)
Percent of mentor/student matches lasting 6 months or longer	-0.06 (0.53)	-0.03 (0.76)
Average total hours of mentor/student meetings per month	0.00 (0.50)	0.01 (0.28)
<i>Student Characteristics</i>		
Percent of students with self-reported delinquent behaviors at baseline	0.03 (0.90)	-0.12 (0.61)
Percent of students scoring "not proficient" in either math or reading/ELA at baseline	-0.10 (0.31)	-0.06 (0.62)
<i>Percent of Control Group Students Receiving Mentoring</i>		
	0.08 (0.72)	0.14 (0.51)
* p-value<.05, two-tailed test		

Exhibit G.19

Site-Level Associations: Relationship between Program Characteristics and Academic Outcomes

	Scholastic Efficacy & School Bonding		Future Orientation		Overall Absenteeism Rate		Math Grades		English Language Arts Grades		Science Grades		Social Studies Grades		Math Proficiency		Reading/ELA Proficiency	
	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)
Program Delivery (based on pre-intervention activities or characteristics of mentors)																		
Average hours of mentor pre-match training provided to mentors	-0.01 (0.46)	0.00 (0.74)	-0.01 (0.30)	-0.01 (0.30)	0.00 (0.17)	0.00 (0.15)	-0.01 (0.42)	-0.03 (0.06)	0.01 (0.73)	0.01 (0.75)	0.00 (0.98)	-0.01 (0.79)	-0.02 (0.48)	-0.02 (0.40)	0.00 (0.93)	0.00 (0.71)	-0.01 (0.58)	-0.01 (0.29)
Percent of mentors 22 years or below	0.05 (0.47)	0.05 (0.57)	-0.02 (0.71)	-0.03 (0.62)	0.00 (0.31)	0.01 (0.10)	-0.19 (0.12)	-0.29 (0.04)	0.19 (0.29)	0.23 (0.25)	-0.12 (0.40)	-0.13 (0.49)	0.19 (0.31)	0.08 (0.71)	0.06 (0.36)	0.06 (0.46)	0.02 (0.83)	-0.05 (0.61)
Percent of mentor/student matches of the same race/ethnicity	-0.02 (0.82)	-0.01 (0.96)	0.00 (0.99)	0.02 (0.80)	0.00 (0.97)	-0.01 (0.51)	0.02 (0.88)	0.29 (0.12)	0.28 (0.21)	0.56* (0.04)	-0.11 (0.55)	0.18 (0.48)	-0.02 (0.92)	0.06 (0.83)	-0.06 (0.51)	-0.03 (0.83)	0.12 (0.21)	0.12 (0.39)
Program Delivery (based on aggregated mentor reports post-intervention)																		
Amount of ongoing mentor support (average frequency of mentor-supervisor meetings)	-0.01 (0.72)	-0.01 (0.71)	-0.02 (0.23)	-0.03 (0.17)	0.00 (0.95)	0.01 (0.50)	-0.07 (0.15)	-0.11 (0.05)	-0.03 (0.64)	0.03 (0.67)	-0.07 (0.22)	-0.06 (0.41)	-0.19* (0.01)	-0.22* (0.01)	-0.05 (0.06)	-0.05 (0.13)	-0.01 (0.70)	-0.02 (0.55)
Frequency of working on academic skills or homework in student-mentor meetings	-0.02 (0.89)	0.00 (0.99)	-0.07 (0.43)	-0.07 (0.53)	-0.01 (0.49)	-0.01 (0.35)	-0.08 (0.73)	-0.03 (0.90)	-0.09 (0.79)	-0.27 (0.47)	-0.51 (0.07)	-0.45 (0.22)	-0.44 (0.24)	0.00 (0.99)	-0.11 (0.42)	0.07 (0.69)	0.03 (0.84)	0.01 (0.94)
Percent of mentor/student matches lasting 6 months or longer	0.01 (0.91)	0.11 (0.38)	0.08 (0.18)	0.13 (0.09)	-0.06* (0.01)	-0.04* (0.05)	0.14 (0.36)	0.09 (0.63)	-0.26 (0.25)	-0.26 (0.32)	0.00 (0.99)	0.12 (0.64)	-0.04 (0.87)	0.30 (0.31)	-0.11 (0.21)	0.02 (0.86)	-0.07 (0.45)	-0.08 (0.53)
Average total hours of mentor/student meetings per month	0.01 (0.08)	0.02 (0.08)	0.01 (0.07)	0.01* (0.04)	-0.01 (0.44)	-0.01 (0.48)	-0.03 (0.01)	-0.03* (0.02)	-0.05* (0.00)	-0.06* (0.00)	-0.01 (0.38)	-0.01 (0.59)	0.00 (0.98)	-0.01 (0.55)	0.00 (0.62)	-0.01 (0.40)	0.00 (0.91)	-0.01 (0.45)
Student Characteristics																		
Percent of students with self-reported delinquent behaviors at baseline	-0.04 (0.86)	-0.15 (0.57)	0.09 (0.50)	0.04 (0.82)	0.01 (0.31)	0.00 (0.77)	-0.07 (0.85)	0.22 (0.54)	-0.09 (0.86)	0.09 (0.86)	-0.10 (0.80)	-0.07 (0.89)	0.88 (0.08)	1.39* (0.02)	0.25 (0.21)	0.37 (0.12)	0.30 (0.15)	0.32 (0.23)

Exhibit G.19

Site-Level Associations: Relationship between Program Characteristics and Academic Outcomes

	Scholastic Efficacy & School Bonding		Future Orientation		Overall Absenteeism Rate		Math Grades		English Language Arts Grades		Science Grades		Social Studies Grades		Math Proficiency		Reading/ELA Proficiency	
	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)	Bivariate Specifications (p-value)	Multivariate Specifications (p-value)
Percent of students scoring “not proficient” in either math or reading/ELA at baseline	0.06 (0.54)	0.11 (0.44)	-0.01 (0.88)	0.01 (0.88)	-0.00* (0.03)	0.00 (0.15)	0.06 (0.71)	0.08 (0.66)	0.09 (0.71)	0.27 (0.32)	0.29 (0.15)	0.28 (0.29)	0.01 (0.98)	0.02 (0.96)	0.16 (0.10)	0.17 (0.19)	-0.08 (0.49)	-0.10 (0.49)
Percent of Control Group Students Receiving Mentoring	0.04 (0.84)	0.12 (0.62)	-0.11 (0.41)	0.03 (0.86)	0.01 (0.77)	0.01 (0.75)	-0.17 (0.63)	0.01 (0.97)	0.42 (0.40)	-0.11 (0.82)	0.07 (0.86)	0.14 (0.77)	-0.38 (0.48)	0.13 (0.83)	0.06 (0.75)	0.09 (0.69)	0.09 (0.69)	0.04 (0.87)

* p-value<.05, two-tailed test

Exhibit G.20

Site-Level Associations: Relationship between Program Characteristics and Delinquent Behaviors/Participation in Harmful Activities

	Misconduct (Student Survey)		Delinquency (Student Survey)		Truancy Rate		Any Misconduct (School Records)		Repeated Misconduct (School Records)		Any Delinquency (School Records)		Repeated Delinquency (School Records)	
	Bivariate Specifications (p-value)	Multivariate Specification (p-value)	Bivariate Specifications (p-value)	Multivariate Specification (p-value)	Bivariate Specifications (p-value)	Multivariate Specification (p-value)	Bivariate Specifications (p-value)	Multivariate Specification (p-value)						
Program Delivery (based on pre-intervention activities or characteristics of mentors)														
Average hours of mentor pre-match training provided to mentors	0.01 (0.50)	0.01 (0.16)	0.00 (0.50)	0.00 (0.82)	0.06 (0.39)	0.07 (0.35)	0.01 (0.41)	0.00 (0.76)	0.00 (0.64)	-0.01 (0.31)	0.01 (0.21)	0.01 (0.25)	0.00 (0.46)	0.01 (0.30)
Percent of mentors 22 years or below	0.02 (0.75)	0.02 (0.75)	0.02 (0.52)	-0.01 (0.81)	0.42 (0.46)	0.27 (0.66)	-0.04 (0.49)	-0.01 (0.88)	-0.02 (0.73)	-0.03 (0.60)	0.01 (0.81)	0.09 (0.19)	0.01 (0.88)	0.03 (0.51)
Percent of mentor/student matches of the same race/ethnicity	0.09 (0.27)	0.04 (0.69)	0.00 (0.92)	-0.04 (0.44)	-0.60 (0.42)	-0.87 (0.28)	0.06 (0.44)	0.00 (0.99)	0.05 (0.42)	-0.03 (0.72)	0.01 (0.94)	-0.14 (0.20)	-0.05 (0.25)	-0.03 (0.65)
Program Delivery (based on aggregated mentor reports post-intervention)														
Amount of ongoing mentor support (average frequency of mentor-supervisor meetings)	-0.04 (0.10)	-0.06 (0.06)	-0.01 (0.48)	-0.02 (0.21)	0.05 (0.83)	0.07 (0.78)	0.03 (0.23)	0.04 (0.37)	0.02 (0.33)	0.03 (0.17)	0.04 (0.05)	0.07* (0.03)	-0.01 (0.61)	0.01 (0.69)
Frequency of working on delinquency risk avoidance in student-mentor meetings	0.04 (0.73)	0.12 (0.42)	0.08 (0.22)	0.12 (0.13)	0.23 (0.84)	0.30 (0.79)	0.01 (0.93)	0.01 (0.94)	-0.07 (0.44)	-0.03 (0.76)	0.02 (0.89)	-0.15 (0.31)	-0.13 (0.08)	-0.10 (0.34)
Percent of mentor/student matches lasting 6 months or longer	0.01 (0.94)	0.04 (0.68)	0.01 (0.84)	-0.01 (0.83)	-0.73 (0.29)	-0.59 (0.43)	-0.06 (0.53)	-0.12 (0.44)	-0.10 (0.09)	-0.12 (0.12)	0.09 (0.25)	0.02 (0.86)	-0.06 (0.18)	-0.04 (0.63)
Average total hours of mentor/student meetings per month	0.01 (0.14)	0.01 (0.14)	0.01 (0.06)	0.01 (0.05)	-0.05 (0.31)	-0.01 (0.83)	0.01 (0.42)	0.00 (0.84)	0.01* (0.02)	0.00 (0.41)	0.00 (0.50)	0.00 (0.68)	0.00 (0.61)	0.00 (0.80)
Student Characteristics														
Percent of students with self-reported delinquent behaviors at baseline	0.21 (0.24)	0.07 (0.73)	0.04 (0.67)	0.00 (0.96)	-4.16* (0.00)	-3.37* (0.02)	0.21 (0.34)	0.15 (0.58)	0.43* (0.00)	0.35* (0.02)	-0.11 (0.56)	-0.07 (0.70)	-0.03 (0.79)	-0.05 (0.73)

Exhibit G.20

Site-Level Associations: Relationship between Program Characteristics and Delinquent Behaviors/Participation in Harmful Activities

	Misconduct (Student Survey)		Delinquency (Student Survey)		Truancy Rate		Any Misconduct (School Records)		Repeated Misconduct (School Records)		Any Delinquency (School Records)		Repeated Delinquency (School Records)	
	Bivariate Specifications (p-value)	Multivariate Specification (p-value)	Bivariate Specifications (p-value)	Multivariate Specification (p-value)	Bivariate Specifications (p-value)	Multivariate Specification (p-value)	Bivariate Specifications (p-value)	Multivariate Specification (p-value)						
Percent of students scoring “not proficient” in either math or reading/ELA at baseline	-0.02 (0.85)	0.06 (0.61)	-0.06 (0.17)	-0.08 (0.20)	-0.02 (0.98)	-0.56 (0.47)	0.02 (0.86)	-0.06 (0.76)	0.03 (0.63)	-0.11 (0.27)	-0.11 (0.20)	-0.17 (0.23)	0.06 (0.25)	0.02 (0.81)
Percent of Control Group Students Receiving Mentoring	0.01 (0.97)	0.02 (0.93)	-0.08 (0.36)	-0.05 (0.66)	3.33* (0.02)	2.72 (0.10)	0.16 (0.33)	0.07 (0.78)	0.16 (0.17)	0.15 (0.25)	0.04 (0.80)	0.11 (0.53)	0.01 (0.87)	-0.02 (0.90)

* p-value<.05, two-tailed test