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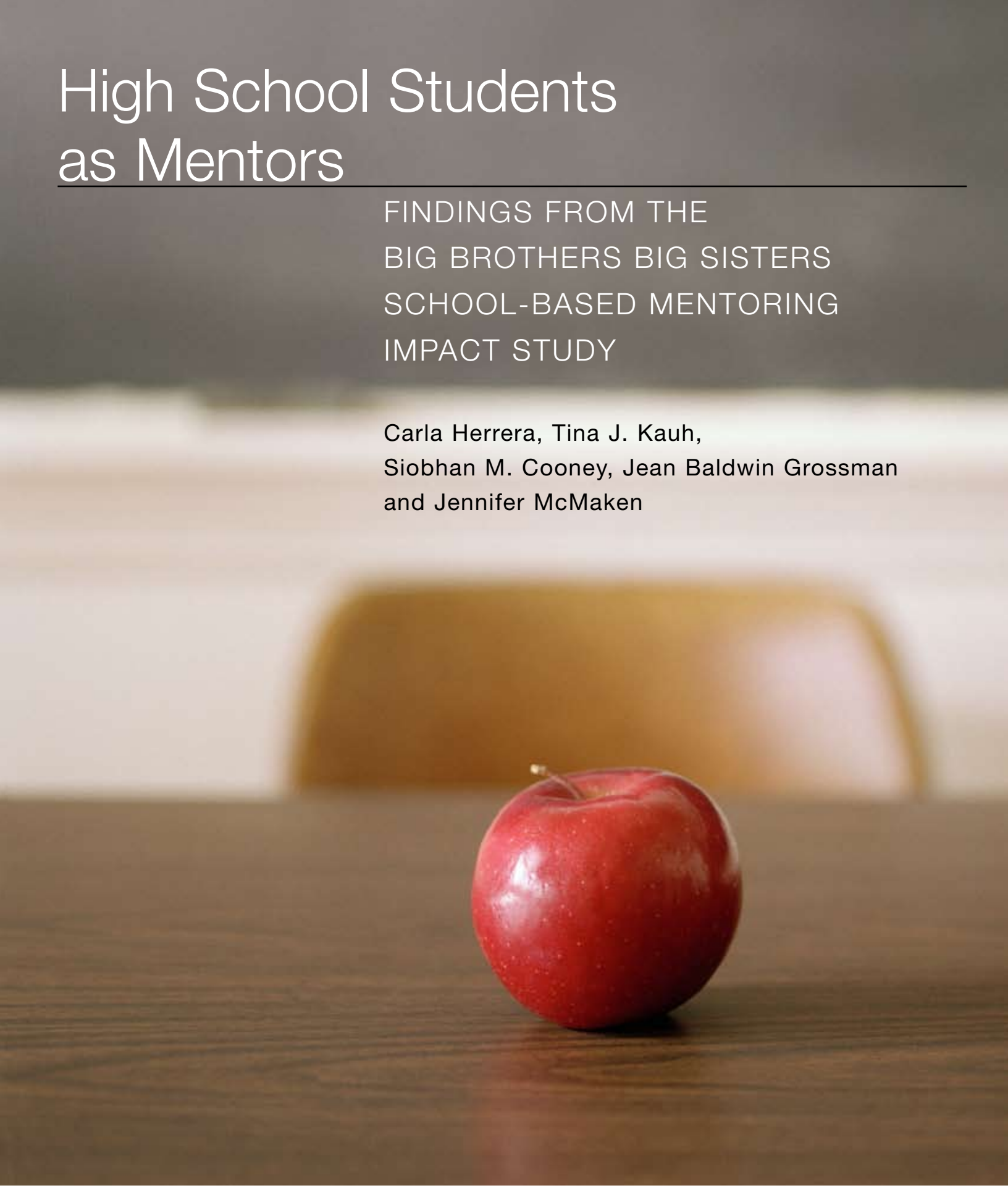

P/PV *A Publication of Public/Private Ventures*

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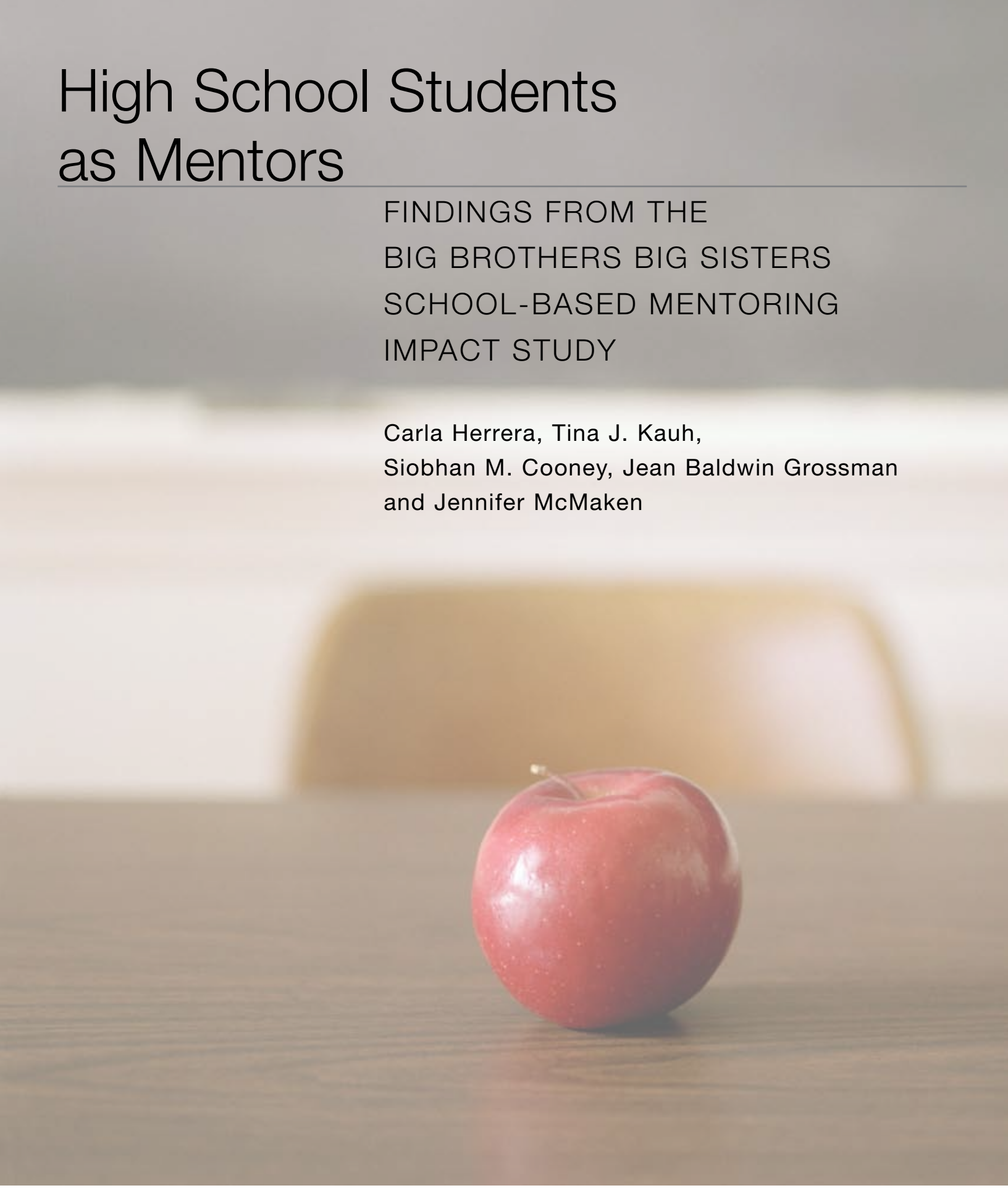

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Public/Private Ventures is a national nonprofit organization that seeks to improve the effectiveness of social policies and programs. P/PV designs, tests and studies initiatives that increase supports, skills and opportunities of residents of low-income communities; works with policymakers to see that the lessons and evidence produced are reflected in policy; and provides training, technical assistance and learning opportunities to practitioners based on documented effective practices.

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BBBS of Central Ohio, in Columbus, OH
Katie McKee, Jennifer Voit, Julianna Nemeth
Executive Director (ED): Edward Cohn

BBBS of Colorado, Inc., in Denver, CO
Sandy Karr, Jim Davis
CEO (through November 2004): Katherine Balsley
CEO (beginning February 2005): Dave DeForest-Stalls

BBBS of Eastern Maine, in Ellsworth, ME
Lucy Barnhart
Program Director (PD): Pat Saunders

BBBS of Eastern Missouri, Inc., in St. Louis, MO
Kristen Slaughter, Jessica Deslauriers, Bridget Shea, Kate Dopuch
CEO: Becky James

BBBS of Greater Cleveland, in Cleveland, OH
Rebecca Kodysh, Phyllis Harris, Kristi Shaw
ED: Michael Mayse

BBBS of Island County, in Oak Harbor, WA
Lenora Vincent
ED: Peggy Dyer

BBBS of North Texas, in Dallas, TX
Mike O'Teter, Naomi Scott, Kelly Adams
CEO: Charles Pierson

BBBS of Northeastern Arizona, in Show Low, AZ
Karen Burchwell
ED: Doris Raspa

BBBS of Northwest Georgia Mountains, Inc., in Dalton, GA
Staci Halyak, Kim Parrish
ED: Willa Dendy

BBBS of The Bridge, in Wilkes-Barre, PA
Joe Swortz, Tanya Olaviany
PD: Ronald Evans

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Heidi Jacobs provided final copyediting for the report. Malish & Pagonis designed the report, and Chelsea Farley and Laura Johnson, as always, did an excellent job coordinating its publication.

Contents

Executive Summary

School-based mentoring (SBM) is one of the fastest growing forms of mentoring in the US. SBM programs ask volunteers from the community to develop relationships with students by meeting regularly with them at their school. Meetings typically take place for about an hour a week during or after school, focus on a range of social and academic activities and continue for approximately one school year.

Recently, SBM programs have begun to match participants with high school student volunteers. Big Brothers Big Sisters of America (BBBSA) began using these volunteers in earnest about seven years ago, in 2001. Today their program has close to 50,000 high school volunteers mentoring younger students. However, little is known about whether and how these volunteers might benefit youth. Their age could make them particularly well suited to relate to younger youth; yet their own developmental needs may prevent them from investing in a relationship that, at times, offers little in return. These characteristics likely require distinct program practices to support matches involving high school mentors and may translate into distinct benefits for mentored youth.

The BBBS School-Based Mentoring Impact Study

To explore the quality of these matches, the program practices that support them and their benefits to youth, we drew on data from a large-scale, random-assignment impact study of the Big Brothers Big Sisters (BBBS) SBM program conducted by Public/Private Ventures (P/PV) in collaboration with BBBSA. The study aimed to assess impacts as well as to describe the structure of these programs and the support provided to matches. (See Herrera, Grossman, Kauh, Feldman, McMaken and Jucovy, 2007, for the findings from the study.) Ten BBBS agencies participated in the evaluation, involving 1,139 youth in 71 schools nationwide. Half of the youth (the "Littles") were randomly selected to be matched with volunteer mentors (their "Bigs"), while the other half did not receive mentoring during the study but were placed on the agency's wait list to be matched when the study ended, 15 months later. The youth, their teachers and their mentors were surveyed at three time points: as youth were beginning their program involvement in Fall 2004 (the baseline), at the end of the 2004-05 school year (the first follow-up), and again in late Fall 2005 of the next school year (the second follow-up). We also surveyed and spoke with BBBS staff and interviewed teachers, principals and school liaisons.

Findings in the Herrera et al. (2007) report reflect impacts and programmatic implications for all youth participating in the study. However, close to half the Littles in the study were matched with volunteers who were in high school at the time of their involvement (a proportion that is fairly reflective of BBBS programs at a national level). This enabled us to use the data from the study to address several questions specific to high school mentors and their matches:

- How do matches with high school Bigs differ from those with adult volunteers?
- How do the Littles and their mentors benefit from the match?
- What are the characteristics of the BBBS mentoring programs that use high school Bigs? Are practices within these programs associated with match success?

The study is one of the first large-scale, national evaluations of high school volunteers in SBM programs.

BBBS School-Based Mentoring with High School Bigs: Key Findings

Almost half of the high school volunteers (49 percent) were juniors, and about one quarter (26 percent) were seniors when they were matched with their Littles. An additional quarter were either sophomores or freshman in high school. The high school volunteers often participated with a larger group of high school students, as part of a class or community service requirement (two fifths received credit for their participation).

1. Results from the study suggest that high school volunteers have several valuable strengths.

They bring to the match extensive exposure to, and experience with, children. About half (49 percent) reported having had "a lot" of contact with youth ages 9 to 14 in the year before they volunteered, 47 percent reported having mentored informally in the past, and 18 percent had previous experience mentoring in a formal program like BBBS.

The high school Bigs showed hints of approaching their matches in ways that could potentially be linked to match success. For example, they involved their Littles in decision-making more often than adults, an important indicator of match success (Morrow and Styles 1995). And they engaged in academic activities with their Littles less often than adults—a type of activity that has been linked with lower levels of mentor satisfaction and weaker youth benefits (Karcher 2004; Karcher 2007).

Overall, Littles' relationships with high school Bigs were similar in length and quality to those with adults. Their matches at the second follow-up were the same length as those of adults; at the first follow-up, they were, on average, slightly longer than those of adults. Littles matched with high school Bigs, like those matched with adult volunteers, reported fairly high-quality relationships, and the high school and adult Bigs reported similar levels of relationship quality.

2. However, high school Bigs also present challenges.

Relative to adults, high school Bigs were less consistent in attending match meetings and less likely to "carry over" their matches into the subsequent school year. High school Bigs missed significantly more match meetings over the course of the school year (an average of 4.8 meetings) than adult mentors (an average of 3.5 meetings). High school seniors and those who received school credit for their participation were less likely than younger high school mentors and those who did not receive credit to carry over their match. Bigs in "high-school-only" programs (90 percent of our sample) were also less likely to carry over their match than those high school Bigs in programs with both high school and adult volunteers.

Littles matched with high school Bigs improved relative to their non-mentored peers in only one measure, teacher-reported social acceptance. By contrast, youth matched with adult Bigs performed better than their non-mentored peers in 12 of the 31 outcomes tested, including academic performance, school behavior and attendance. Additionally, when directly comparing the size of these impacts, youth matched with adult Bigs benefited significantly more than those matched with high school Bigs in six social and school-related outcomes: college expectations, youth-reported grades, parent-youth relationship quality, classroom effort, positive social (i.e., "prosocial") behavior and classroom misbehavior. Youth matched with high school Bigs benefited more than those matched with adults in only two social outcomes: social acceptance and assertiveness. Thus, on average, those youth matched with high school mentors in the first year of their program involvement benefited very little from their mentoring experience, at least in those outcomes we tested (most of which focused on school-related areas). However, this was not true across all high school Bigs programs.

3. Practices varied among the high school Bigs programs in this study, and particular practices were linked with match success.

Those high school Bigs who met in the presence of other matches in one large space, such as the school gym, (78 percent of all high school Bigs) reported several benefits to this meeting structure, and their matches lasted longer than those meeting independently. However, their Littles reported lower levels of youth centeredness, possibly resulting from high school Bigs having difficulty focusing on their Littles' needs while in the presence of their own peers.

High school Bigs who received at least two hours of training (42 percent of all high school Bigs) reported experiencing higher-quality and closer relationships with their Littles than those who received less training. Their Littles also reported

higher-quality relationships. Additionally, by the second follow-up, their matches had lasted longer than those with Bigs who had received less training.

Those high school Bigs who reported receiving higher-quality training were more likely to carry over their match into a second school year and had longer matches by the second follow-up. High school Bigs' reports of higher training quality were also associated with their own reports of higher-quality relationships at the first follow-up. Bigs' reports of higher-quality support from BBBS staff yielded similar associations.

Frequent communication with BBBS staff was associated with positive outcomes for Littles matched with high school Bigs. Relative to Littles in programs where the high school Bigs had infrequent communication with BBBS staff, Littles in programs with more frequent communication experienced larger benefits in five social and academic outcomes.

Conclusions and Recommendations

Although there are challenges in using high school volunteers, there are also many indications that carefully outlining the parameters of high school mentoring programs could improve their ability to benefit youth. This suggestion is in line with past work that found more consistent impacts yielded by high school mentors. For example, Karcher (2005) found that high school volunteers benefited their mentees in both school and parent connectedness. However, the focus of his evaluation was a very structured program that involved extensive orientation and training, relied on structured activities and a curriculum focused on connectedness, involved parents in the program and provided extensive support to the high school volunteers (Karcher, in press).

The high school Bigs programs in this study were not drastically different from those involving adult Bigs. Yet high school students come to the program with their own set of developmental needs, including facing a major developmental transition (for seniors) and a desire for peer interaction that, in some cases, appeared to have been met at the expense of focusing on their Littles. Although a few of the programs involved in this study were structured to accommodate some of the differences between adult and high school volunteers, the programs do not have a standardized set of practices that reflect the distinct needs of these younger volunteers. Our analyses suggest that young volunteers may need very different types of support, training and structure to be successful in their matches.

Our recommendations are as follows:

1. Consider how to use high school Bigs' natural strengths.

Although the Littles matched with high school Bigs improved relative to their non-mentored peers in only one area (social acceptance), their impacts in one additional peer-related area (assertiveness) were significantly bigger than those experienced by Littles matched with adults. These benefits correspond with mentor reports of what they focused on in their match meetings: Adult mentors reported focusing on academics more than the high school Bigs, whereas the high school volunteers focused more on improving the Littles' relationships with others. High school Bigs' understanding of how to help their mentees improve in peer-related areas—or helping them improve in these areas simply by virtue of their age and status—may be an important strength that programs should try to capitalize on.

2. Ensure that young volunteers understand the importance of consistency.

High school Bigs were more likely than their adult counterparts to miss meetings, and a majority of BBBS staff working with high school Bigs reported that consistent attendance was a challenge for them. Inconsistent mentoring, in many cases, could be worse for a child's self-esteem than no mentoring at all (Karcher 2005). Thus, training for high school volunteers should make this a central focus, and, if the students receive school credit for volunteering, this credit should be made contingent on consistent attendance.

3. Provide matches with opportunities to interact with other youth; however, use a group setting for match meetings only with significant supports in place.

Although the high school Bigs reported many benefits to meeting in the presence of other matches, their Littles reported lower levels of youth centeredness than those who met outside of this context. This type of meeting structure may require significant supervision to ensure that the high school volunteers focus attention on their Littles as opposed to their own peers.

4. Provide significant communication with, and support for, high school Bigs.

Both adults and high school Bigs appeared to benefit from strong training and support. However, support seemed to be particularly beneficial to matches with high school Bigs. For example, stronger support by program staff was associated with match length only in the high school sample. In addition, Littles matched with high school Bigs in programs with relatively frequent communication with BBBS staff benefited more than their non-mentored peers in several outcomes, and many of these benefits were significantly bigger than those received by Littles in programs with less staff communication.

5. Provide a *minimum* of two hours of training (pre-match and ongoing) to high school mentors.

Those high school Bigs who had received at least two hours of training by the first follow-up had longer lasting matches by the second follow-up and had higher-quality and closer relationships with their Littles. Training content should be carefully considered to ensure that high school volunteers not only feel prepared to mentor a child but also have the necessary skills, attitudes and knowledge base.

6. Try to involve high school mentors before their senior year.

Not surprisingly, seniors were less likely than younger high school students to carry over their match into a subsequent school year. Programs that want to keep their volunteers past one school year should make this goal explicit to seniors to ensure that this is possible for them.

7. If providing high school Bigs with class credit, consider providing credit only after two semesters of service or after they carry their match over into a subsequent school year.

In this study, those high school Bigs who received class credit were less likely to carry over their match than those who did not. It is likely that students volunteered until the end of the commitment required for receiving credit, but no longer. Thus, making credit contingent on a full year (or more) of service may be important in keeping young volunteers on board.

8. Consider mixing adult and high school programs.

High school Bigs in programs that also used adult Bigs stayed with the program longer than those with only other high school volunteers. Perhaps this difference reflects differences in mentors' original motivation for volunteering (e.g., high school volunteers may have participated in large part for the group experience). However, the high school volunteers could have also been positively influenced by the presence of adults, who tended to be more consistent mentors. In mixed programs, adults could also be trained to serve as role models to the high school Bigs.

These types of changes in the BBBS high school Bigs model will require significant effort and may increase the cost of the high school Bigs program. However, there are several reasons to invest such efforts in the program. First, and most importantly, high school volunteers have the potential to make a substantial difference in their Littles' lives, as evidenced both in evaluations of more structured programs and in those programs in the current study with very strong staff support. Second, high school volunteers represent an efficient way to reach many children through school-based programs. And although they do require more and different kinds of support than adults, they also have many unique strengths. Finally, high school volunteers may also benefit from the

experience themselves and are more likely to volunteer in the future than their peers without volunteering experience (Toppe et al. 2002).

Although findings from this study suggest several strategies for improving SBM programs, they should be considered preliminary until further studies can confirm that their implementation significantly improves outcomes for youth mentored by high-school-age volunteers. SBM programs that do not yet recruit high school mentors should wait to start such programs until clear guidelines are put in place. Similarly, those that are currently using high school volunteers should wait to expand until the field can provide guidance on how to design these programs and shape their expansion.

BBBSA is already initiating several of the changes suggested in this study in its high school Bigs program. The organization has convened a group of six of its strongest BBBS agencies to review these and other findings and share their own experiences and strategies to improve their current model. Our findings suggest that these changes will be well worth the effort.

Introduction

Chapter I

School-based mentoring (SBM) is one of the fastest growing forms of mentoring in the US today, with close to 870,000 adults mentoring students in schools (MENTOR 2006). In SBM, volunteers from the community meet with students at their school for about an hour a week during or after school. Their interactions typically focus on a range of social and academic activities and last approximately one school year.

One of the biggest challenges for SBM programs is finding enough volunteers to mentor the many youth who could benefit from their friendship and guidance. Recently, programs have begun to rely on high school students to fill this gap. High school students have many characteristics that make them attractive to SBM programs: They are often located in nearby schools, are eager for the experience and can provide youth with friendship from an older peer—an important asset for those many children lacking in peer social skills or experiences. Their age also makes high school students particularly well suited for understanding what is enjoyable to youth. Additionally, parents who are uncomfortable with an adult mentor may allow their child to be matched with an older peer—enabling SBM programs to reach some youth they would otherwise have missed using only adult mentors. Finally, the high school students themselves are likely to benefit from the experience, allowing mentoring programs to touch the lives of two young people with each match served.

Big Brothers Big Sisters of America (BBBSA), the oldest and most established mentoring organization in the country, began using high school volunteers in earnest about seven years ago, in 2001; today, close to 50,000 high school volunteers are mentoring youth in their SBM programs. High school students likely bring unique perspectives to the match, engage their mentees in distinct activities and ultimately develop relationships with them that differ in many ways from those with adult mentors—differences that may translate into distinct benefits for involved youth. Yet very few rigorous evaluations of SBM programs involving high school volunteers have been conducted.

P/PV's Impact Study of BBBS School-Based Mentoring

To explore the quality of matches involving high school mentors and their benefits to mentored youth, we drew on data from a large-scale, random-assignment impact study of Big Brothers Big Sisters school-based mentoring (BBBS SBM), which included both adult and high school volunteers. The study was conducted by Public/Private Ventures (P/PV) in collaboration with BBBSA and was designed not only to assess impacts but also to describe the structure of these programs and the support provided to matches. (See Herrera, Grossman, Kauh, Feldman, McMaken and Jucovy, 2007, for the findings from the study.) The study involved 10 BBBS agencies and 71 schools nationwide. Overall, 1,139 youth in grades four through nine were recruited into the SBM programs as they normally are—mostly through school referrals. A lottery was used to randomly select half of the youth (the "Littles") to be matched with volunteer mentors (their "Bigs"), while the other half (their "non-mentored peers") did not receive mentoring during the study but were placed on the agency's wait list to be matched when the study ended, 15 months later.

The youth, their teachers and their mentors were surveyed at three time points: as youth were beginning their program involvement in Fall 2004 (the baseline), at the end of the 2004-05 school year (the first follow-up) and again in late Fall 2005 of the next school year, shortly before the students' winter break (the second follow-up). To learn more about the programs, we surveyed and spoke with BBBS staff and also interviewed teachers, principals and school liaisons (i.e., school staff, typically a counselor or principal, responsible for coordinating the program with BBBS staff).

At the end of the first school year, relative to their non-mentored peers, Littles showed impacts in 9 of the 31 outcomes tested. All of the impacts were in school-related areas and included teachers' reports of improvements in the Littles' overall academic performance, as well as in the specific subjects of science and written and oral language; quality of class work; number of assignments turned in (homework and in-class assignments); skipping school; and serious school infractions (including principal's office visits, fighting and suspensions). Youth also reported improvements

in their perceptions of their academic abilities and confirmed teacher reports of decreases in unexcused absences.

However, the impacts appeared not to have been sustained in youth who ended their program involvement after one school year (the time commitment that is typically required of volunteers). Findings further suggested that training and supervision might need to be strengthened in these programs and that agencies should invest in bridging the summer break to ensure that SBM participants are getting the supports they need to create long-lasting relationships that provide youth with enduring benefits (Herrera et al. 2007).

These findings, however, reflect impacts and programmatic implications for the full group of youth participating in the evaluation. Close to half the Littles in the study were matched with volunteers who were in high school at the time of their involvement (a proportion that is fairly representative of BBBS programs at a national level). High school Bigs often participated with a larger group of high school students, as part of a class or community service requirement (two fifths received credit for their participation). Both seniors and younger high school students participated, and they were most often matched with youth in elementary school. The "high school Bigs" programs were similar to those involving adults. Matches met either during or after school, typically once a week for an hour or more. They engaged in a range of academic and social activities, and most met in the presence of other matches (in one large space, such as the school gym). Their interactions were typically supervised by BBBS staff and, less often, by school staff.

The Current Report: A Focus on High School Mentors

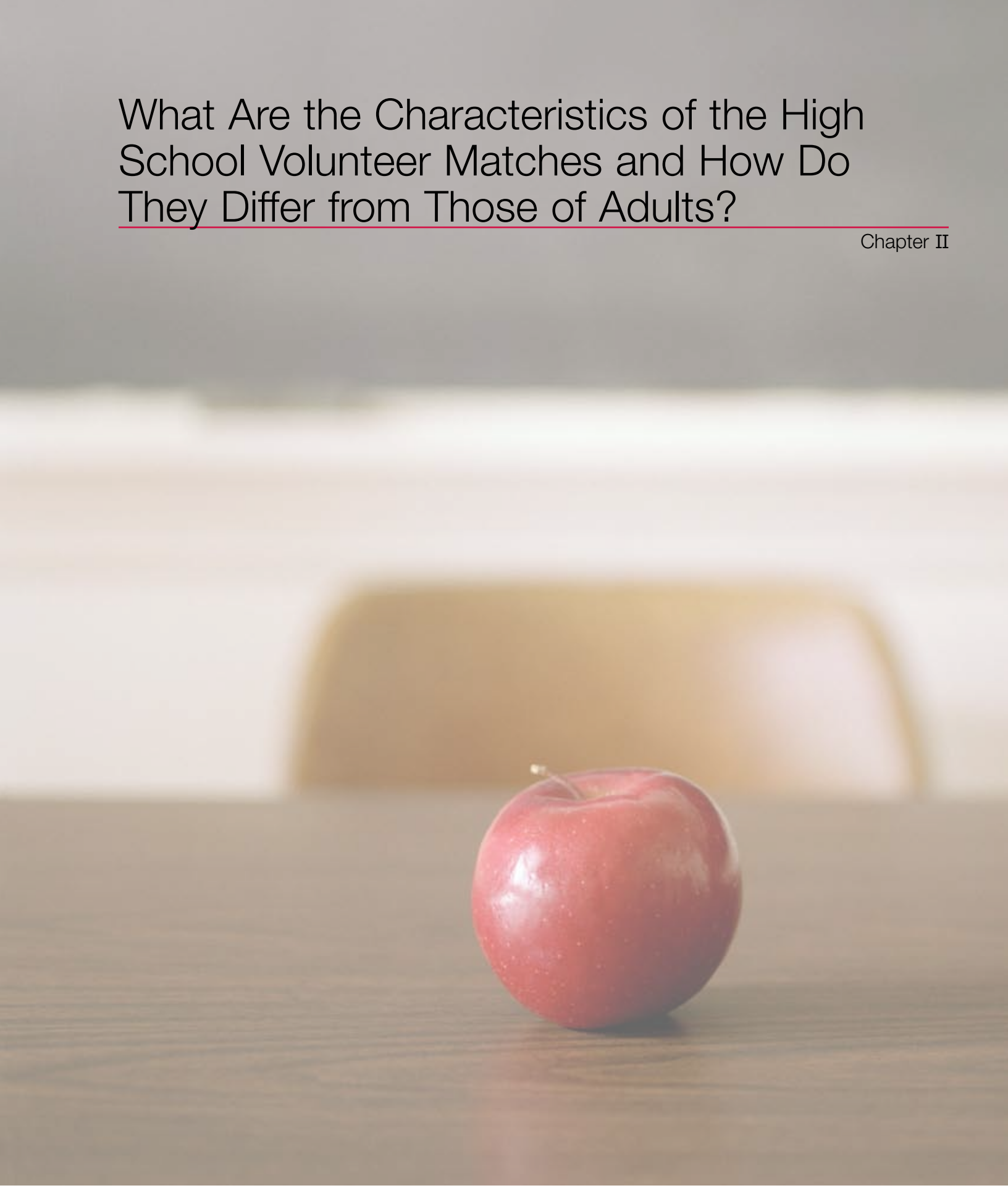
To learn more about these matches and the programs that support them, we use data from the BBBS SBM Impact Study[1] to address several questions about the high school mentors and their matches:

- How do matches with high school Bigs differ from those with adult volunteers?
- How do the Littles and their mentors benefit?
- What are the characteristics of the BBBS mentoring programs that use high school Bigs? Are practices within these programs associated with match success?

In the next chapter, we describe the high school Bigs and their Littles and compare them with the Bigs and Littles in matches using adult volunteers. We also discuss the length, consistency and quality of their relationships. Chapter III then describes the impact of these mentoring relationships on the Littles and compares these outcomes to those seen in adult-youth matches. In addition, it outlines the personal benefits the high school volunteers reported receiving. In Chapter IV, we describe the BBBS programs involving these volunteers (i.e., the SBM activities of the BBBS agency within a given school), the supports they provide the matches and those practices linked with match quality, longevity and youth outcomes. A final chapter presents our conclusions, along with implications for practice.

What Are the Characteristics of the High School Volunteer Matches and How Do They Differ from Those of Adults?

Chapter II



High school volunteers have several unique strengths that may set them apart from adult volunteers. For example, they provide their mentees with a friend who is close in age and may be easy to relate to. Their young age may make them better able to understand what interests the mentee, and their presence could provide the younger student with a boost in social status among his or her peers. On the other hand, high school students may not have the patience or insight that an adult brings to the relationship. Many adolescents may also lack an other-oriented focus that would help them to be consistent, caring role models even when the relationship is not offering them much in return—an important ingredient in successful mentoring relationships (Morrow and Styles 1995).

In this chapter we begin to explore these issues by describing the characteristics of the matches involving high school Bigs and how they differ from those with adult mentors. The following questions will be addressed:

- Who are the high school volunteers?
- With which youth are they matched?
- Do they share the same gender and race/ethnicity with their Little?
- Are they consistent in their attendance at match meetings?
- How long do their matches last?
- What is the quality of their relationships?

Who Are the High School Volunteers?

Almost half of the high school volunteers (49 percent) were juniors, and about one quarter (26 percent) were seniors when they were matched with their Littles. An additional quarter were either sophomores or freshmen in high school. Similar to their adult counterparts, high school mentors tended to be white and female. In fact, high school Bigs were more likely than adult Bigs to be female (79 versus 66 percent) and white (81 versus 74 percent).[2]

The high school students were quite active both in their schools and in their communities, in addition to their involvement with BBBS. Almost three quarters (74 percent) participated in two or more extracurricular activities, and 40 percent had paid jobs. Of those employed high school Bigs, 28 percent reported working 10 or fewer hours per week, while almost half (45 percent) worked 20 hours or more per week. At the time they became a mentor, close to two fifths (38 percent) were volunteering with other organizations. This high level of involvement in activities in addition to their BBBS commitment made the high school Bigs, as one principal indicated, "the cream of the crop" among high school students in their community. However, as we discuss later, these activities also had implications for their ability to commit consistently to the program.

Not surprisingly, the high school volunteers had extensive exposure to younger children. About half (49 percent) reported having had "a lot" of contact with youth ages 9 to 14 in the previous year, with an additional 41 percent saying that they had had "some" contact with this age group.[3] They were also experienced in mentoring children: Forty-seven percent reported having mentored informally in the past, and 18 percent had previous experience mentoring in a formal program like BBBS. Adults, by comparison, were less likely to report informal mentoring experience (26 percent) but more likely to report formal experience (31 percent).

Perhaps in part due to their high level of experience, relative to adults, in interacting with youth, high school Bigs reported significantly higher levels of overall efficacy, or confidence, in their ability to mentor a child.[4] For example, almost all high school Bigs (98 percent) felt "very" or "extremely" confident in their ability to be a role model, and 93 percent felt "very" or "extremely" confident in their ability to provide emotional support to a Little. Past research with adults suggests that high levels of efficacy have positive implications for several indicators of match success, such as contact, closeness and, ultimately, program benefits (Parra, DuBois, Neville, Pugh-Lilly and Povinelli 2002). However, high levels of confidence in young volunteers could also indicate a lack of understanding of how difficult it is to be an effective mentor and the serious commitment that mentoring entails. Some hints that this may be the case are revealed later in our discussion of meeting consistency.

Who Are the Littles?

Most of the high school volunteers (76 percent) were matched with Littles in elementary school, as opposed to older Littles. This was partly due to conscious efforts on the programs' part to avoid matching high school Bigs with older Littles, reflecting concerns that matching young volunteers with students in middle school who are very close in age would yield less productive matches.

Relative to adults, high school volunteers tended to work in schools with lower proportions of students receiving free and reduced-price lunch and lower proportions of immigrant children. Yet, when examining the characteristics of individual Littles matched with high school Bigs, these youth were similar on several measures to those matched with adults.[5] This suggests that, although high-school-aged mentors tended to be placed in *schools* with less needy students, programs generally did not try to match their least needy *children* with the high school Bigs.

Do the Volunteers and Littles Share the Same Gender and Race/Ethnicity?

Many parents prefer that programs match their child with a mentor who shares their child's gender or ethnic background to provide the child with a role model of a specific gender or race/ethnicity. Thus, programs often strive to match youth with mentors who share these characteristics. However, this type of matching can be challenging because it is difficult to recruit males and ethnic minorities (recall that about four fifths of the high school Bigs were white and a similar proportion were female).

High school Bigs typically matched their Little in gender, but they did so less often than adult mentors (74 percent versus 87 percent). All of the mixed-gender high school Big matches were female Bigs matched with male Littles. With respect to ethnicity, the high school volunteers were more likely than adults to match their Little in racial/ethnic background (56 percent versus 28 percent), but most of these matches were white mentors paired with white Littles.[6]

Are High School Bigs Consistent Mentors?

Although the involvement of the high school Bigs in jobs and extracurricular activities may suggest that they are responsible, active young people, such activities could also contribute to difficulty juggling these responsibilities with their commitment to the mentoring program.

That seemed to be the case in this study. High school Bigs missed significantly more match meetings over the course of the school year (an average of 4.8 meetings) than adult mentors (an average of 3.5 meetings).[7] The most frequent reason the high school Bigs reported for missing these meetings was scheduling conflicts:[8] About two fifths (38 percent) of missed meetings were the result of something coming up on the mentor's part; 29 percent were missed due to a conflict on the Little's part, such as a school absence; and 22 percent were missed due to a conflict with the Little's school, such as a field trip.[9]

In our interviews, several BBBS staff members corroborated these findings by noting that a major challenge of working with high school Bigs was the competing demands in their lives that caused scheduling conflicts with the program. Also, in a survey completed by agency staff for each of the 71 schools in the study, over two thirds (69 percent) of staff running programs with high school Bigs noted that mentor attendance was a challenge, compared with only 30 percent of staff running programs with adult volunteers.

How Long Do Their Matches Last?[10]

SBM programs ask their volunteers to commit to the program for a school year. However, staff encourage their mentors to stay with the program as long as possible. In fact, an important indicator of program success is the number of matches that "carry over" into a subsequent school year.

At the first follow-up, high school Bigs had matches that lasted, on average, slightly longer than adult Bigs (141 versus 130 days). However, this difference disappeared by the second follow-up and is likely explained by the fact that high school Bigs, on average, started their matches earlier in the school year than adult mentors.[11] In most cases, the BBBS

agency has preestablished relationships with the high schools, and thus, their involvement is better organized, with groups of student volunteers being recruited by their school prior to the beginning of the program year. High school Bigs also ended their matches slightly earlier in the school year (their programs ended an average of about a week earlier than those for adults). However, the high school Bigs were not significantly more likely to be in matches that ended prematurely (i.e., before the end of the "program year"): Nineteen percent of high school Bigs and 17 percent of adult Bigs were in matches that ended prematurely.

Overall, adult volunteers were more likely than high school Bigs to carry over their match from the first school year into the next. Forty-nine percent of adults carried over their match, while 40 percent of high school students did. To explore whether certain groups of high school students were more likely to carry over their matches, we examined associations between carryover and three factors: the mentor's grade in high school, whether or not the mentor received school credit for program involvement and whether the mentor's program included adult Bigs. All three were related to match carryover and length.

Not surprisingly, seniors were much less likely than younger students to carry over their match. Only 10 percent of seniors, compared with 49 percent of younger students, carried over their match into the second school year. Seniors also had shorter matches than younger students at both the first (121 versus 148 days) and second (151 versus 217 days) follow-up.

Whether the high school Big received school credit also appeared to play a role in match length and carryover. Although offering school credit may encourage individuals to volunteer, it may also recruit students who do not intend to sustain their matches beyond their receipt of credit. Our findings support this latter hypothesis.

Forty percent of the high school students received school credit for their participation, either through school classes or service clubs. Students who received credit were less likely than those who did not to carry over their match: Twenty-nine percent of students who received credit carried over their match, while 47 percent of those without credit did.[12] Similarly, high school students who did not receive credit had matches lasting about 150 days at the first follow-up, whereas matches with mentors receiving credit only lasted an average of 128 days. However, when we looked at this latter finding more closely, separating Bigs who were seniors from all other high school Bigs, we found that the association between match length and credit was only true for the Bigs who were seniors.[13] Perhaps some of the seniors joined the program primarily to fulfill their community service requirements and ended their program involvement as soon as these requirements were fulfilled. We found some support for this: only six percent of senior matches not receiving credit closed by the end of January 2005 (after the first semester ended), whereas 19 percent of those seniors receiving credit closed their matches by that time.[14]

In addition, while most (90 percent) of the high school Bigs were in programs with only other high school students, a small percentage (10 percent) were in programs with both high school students and adults. Bigs in "high-school-only" programs were much less likely to carry over their matches than were high school Bigs in programs with both high school students and adults.[15] Only 32 percent of mentors in "high-school-only" programs carried over their match, compared with 58 percent of high school mentors in mixed programs. Findings when examining match length were similar. Perhaps motivations differ for these two groups of high school volunteers. Those volunteering with a larger group of students may have volunteered as part of a class with a school-year commitment or simply as an opportunity to spend time with a larger group of friends (many of whom may not have intended to continue their commitment). Volunteering with adults, who are fairly likely to sustain their match, may also motivate high school students to continue their matches.[16]

What Is the Quality of Their Relationships?[17]

In this study, we assessed relationship quality by asking both the Bigs and Littles a range of questions concerning how they felt about each other. Bigs were asked: (1) how close they felt to their Little; and (2)

a set of five questions about the overall quality of their relationship, including their similarity in interests with their Little and the extent to which they trusted each other. Littles were asked: (1) how close they felt to their mentor; (2) eight questions about their emotional engagement when with their Big (e.g., how excited, important or disappointed they felt when with their Big); (3) six questions about their level of dissatisfaction with their relationship (e.g., "Sometimes my mentor promises we will do something, then we don't do it"; "I wish my mentor asked me more about what I think"); and (4) five questions about the extent to which the match is youth-centered, engaging in activities that reflect the youth's interests (e.g., "My mentor almost always asks me what I want to do"; "My mentor thinks of fun and interesting things to do").

The Littles matched with high school Bigs reported having fairly high-quality relationships with them. At the end of the first school year, most of the Littles (65 percent) reported it was "very true" that their mentor was always interested in what they wanted to do, and 80 percent felt it was "very true" that they were happy when with their mentor. Fifty-one percent felt "very close" to their high school Big, and an additional 36 percent reported feeling "somewhat close" to their Big. Mentors also reported forming high-quality relationships with youth, but, similar to previous research (e.g., Herrera 2004), their ratings were not quite as high as the youth ratings. Thirty-nine percent of high school mentors "agreed" that they felt close to their Little, and 24 percent "strongly agreed."

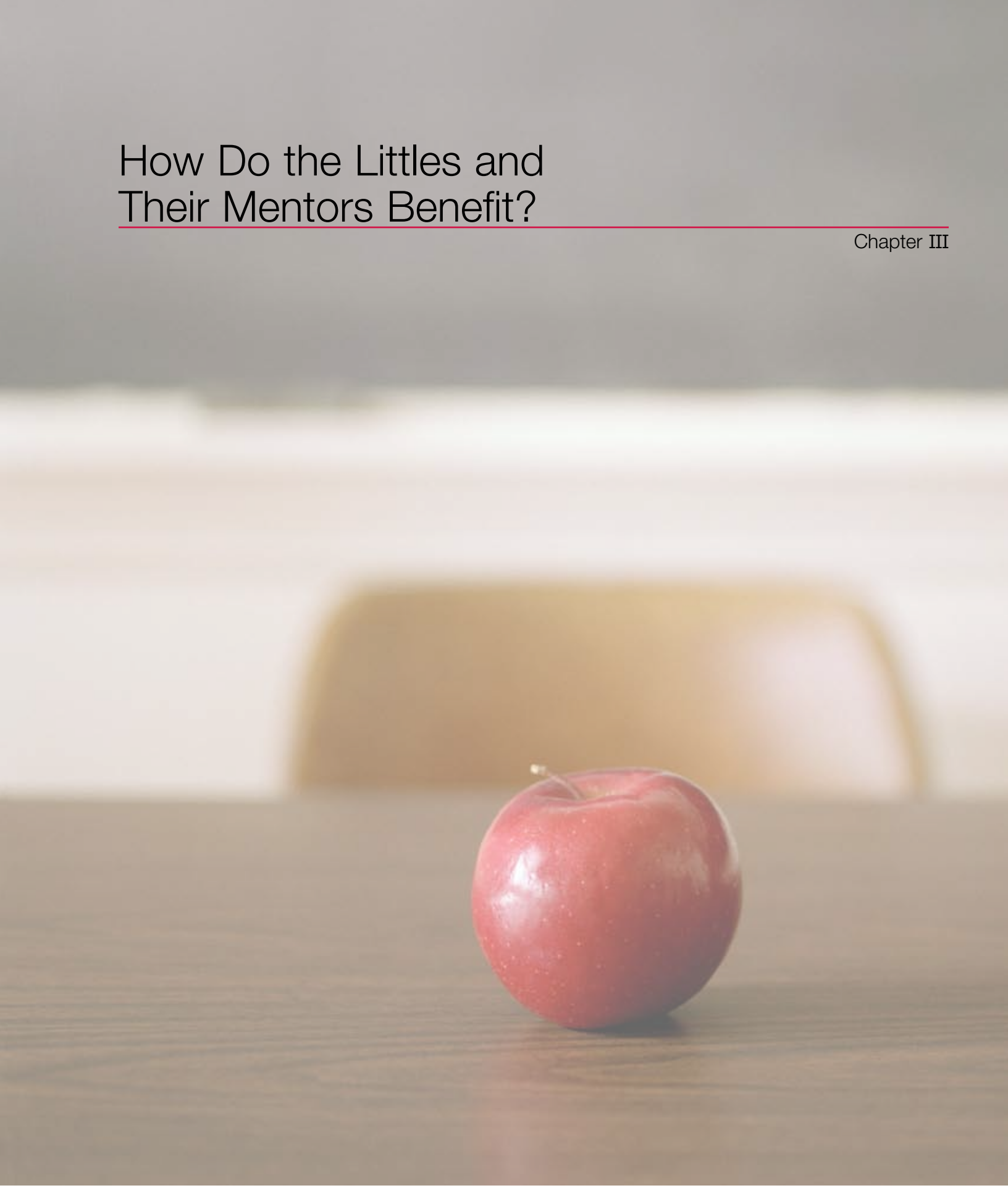
Overall, the relationships with high school Bigs were very similar in quality to those with adults. Littles' reports of relationship quality did not differ depending on whether the mentor was a high school student. High school Bigs, on average, did report higher levels of relationship quality than adults.[18] However, all measures of relationship quality (both mentor- and youth-reported) were higher when the match involved younger Littles—except youth-reported dissatisfaction, which was not associated with the Little's age. Thus, we also compared the quality of adult and high school Big relationships when statistically "controlling," or holding constant, the Little's age. Once the Little's age was accounted for, there were no differences between reports by high school Bigs and adult Bigs in relationship quality; and in one measure, youth-centeredness, Littles reported lower levels of relationship quality when matched with high school Bigs as opposed to adults.

In addition, for both high school and adult matches, mentors and youth in cross-race matches generally reported similar levels of relationship quality to those in matches that shared the same race. However, this was not true for gender: Youth matched with high school Bigs reported higher levels of closeness when the mentor was the same gender, whereas youth matched with adult mentors reported higher levels of closeness when the mentor was of a different gender (i.e., boys matched with female adults).[19]

Thus, at the end of the first school year, the Littles matched with high school Bigs appeared to be in relationships of similar duration and quality to those experienced by Littles matched with adults. Yet the high school Bigs were not as consistent in their attendance as the adult mentors; and by the second school year, fewer high school Big matches were still meeting. In the next chapter, we explore the implications of some of these differences for youth benefits and examine the extent to which the mentors themselves felt they benefited from the program.

How Do the Littles and Their Mentors Benefit?

Chapter III



Although several studies have examined how youth benefit from being mentored, few rigorous studies have explored how youth benefit from mentoring by young volunteers, and none have quantitatively compared these impacts with those of adults. Karcher (2007a), in his recent summary of cross-age peer mentoring programs, reports that the studies that have been conducted suggest fairly positive outcomes for youth mentored by young volunteers in school-based programs. Specifically, researchers find improvements in attitudes toward and connectedness to school and peers (Karcher 2005; Bowman and Myrick 1987), academic achievement (Karcher, Davis and Powell 2002), social skills (Karcher 2005) and behavior problems (Bowman and Myrick 1987).

In the last chapter, we reported that, on average, high school Big matches are fairly similar to adult matches in both their length and quality—two key precursors to strong outcomes (Grossman and Johnson 1999; Grossman and Rhodes 2002; Diversi and Mecham 2005; Karcher 2005). Yet we also found that the high school volunteers were less consistent in their match meetings and were more likely to end their matches after the first school year. There were also several groups of high school Bigs—seniors, those who received credit and those in programs with only other high school Bigs—who had particularly short matches. These differences suggest that we might expect distinct outcomes for the Littles matched with the high school Bigs.

In this chapter, we explore this hypothesis by discussing two key questions:

- What are the impacts for youth matched with high school mentors, and what are the impacts for youth with adult mentors?
- Do adult Bigs benefit their Littles significantly more than high school Bigs?

We also examine the high school mentors' reports of how they themselves benefited from their involvement in the program. Studies have only recently begun to explore how mentoring might benefit the mentor—an issue that is particularly salient when using high school students as volunteers. Community service and service-learning projects can increase adolescents' interest in political and social issues (Niemi, Hepburn and Chapman 2000; Metz, McLellan and Youniss 2003) and their educational achievement (Davila and Mora 2007). For example, Karcher (2008) found that high school mentors reported greater gains from fall to spring in academic self-esteem and connectedness to school than their same-age peers who did not volunteer to serve as mentors. Because the mentoring relationship is primarily social in nature, one might also expect high school mentors to benefit from an improved ability to interact with other people. Previous research on adult mentors suggests that social skills can, in fact, be positively affected by the mentoring experience (McLearn, Colasanto, Schoen and Shapiro 1999).

What Are the Impacts for Youth with High School Mentors? What Are the Impacts for Youth with Adult Mentors?[20]

At the end of the first school year, Littles matched with high school Bigs improved more than their non-mentored peers on only one measure—teacher-reported social acceptance (see the second column of data in Table 1).

In contrast, Littles matched with adult Bigs performed better than their non-mentored peers in almost half (8 of 17) of the teacher-reported outcomes we measured (reported in the first column of data in Table 1):

- Classroom effort;
- Prosocial behavior;
- Skipping school;
- Quality of classwork;
- Number of assignments completed;
- Written and oral language;
- Classroom misbehavior; and
- Serious school misconduct (including fighting, principal's office visits and suspensions).

Littles matched with adult Bigs also performed better than their non-mentored peers in the following four youth-reported outcomes:

- Grades;
- Scholastic efficacy (i.e., perceptions of their academic abilities);
- Skipping school; and
- Expectations about going to and finishing college.

Youth with adult Bigs were also more likely than their non-mentored peers to report having a "special adult" in their lives.

Do Adult Bigs Benefit Their Littles Significantly More than High School Bigs?

Our analyses thus far estimated impacts for youth mentored by adults and (separately) those mentored by high school Bigs. However, these analyses do not directly compare the size of these two sets of impacts. This comparison is important because it allows researchers to statistically determine if one group of mentors is more effective (i.e., yields significantly bigger impacts) than the other. It is possible, for example, that high school volunteers produced fairly large impacts in all of the areas that were "significantly" affected by adults—their impacts simply were not large enough to reach statistical significance, perhaps in part due to the smaller sample of high school Bigs. In that case, a direct comparison between the size of each impact for adults and for high school Bigs would show that they are similar in size despite only the adults' impacts reaching statistical significance, and we could not conclude that adults were significantly more effective than high school Bigs in these areas.

To examine this issue and assess whether Littles received significantly bigger impacts when matched with adults, we directly compared the size of the impacts for high-school- and adult-mentored youth for each outcome tested (these results are summarized in the last column in Table 1).

The youth matched with adult mentors benefited significantly more than those matched with high school mentors in six outcomes: youth-reported grades, college expectations and parent-youth relationship quality, and teacher-reported classroom effort, positive social (i.e., "prosocial") behavior and classroom misbehavior. Youth with high school Bigs benefited more than those with adult Bigs in two outcomes: social acceptance and assertiveness.

Thus, youth matched with the high school volunteers in this study improved more than their non-mentored peers in only one outcome measured: their social acceptance (as rated by teachers). And their impact was bigger than that for adult-mentored youth in two outcomes: their social acceptance and their assertiveness. Both of these two outcomes are associated with youth's ability to relate socially with his or her peers—for example, "assertiveness" encompasses the child's leadership abilities, including the extent to which he or she is not withdrawn and defends his or her views under group pressure. Perhaps these improvements were a result of increases in social status as a consequence of having an older teen's attention. Youth in these matches may have also had more opportunities than those matched with adults to interact with their peers during their meetings. As we will see in the next chapter, high school matches were more likely than adult matches to meet in the presence of other matches and, thus, perhaps interacted more with those surrounding youth than adult-youth pairs.

Yet, what is most noteworthy about these findings is that those Littles matched with high school volunteers benefited more than their non-mentored peers in only one of the 31 outcomes tested—fewer than would be expected by chance alone. Thus, the larger implication of these analyses is that, on average, those youth matched with high school volunteers in the first year of their program involvement benefited very little from their mentoring experience, at least in those outcomes we tested (most of which focused on school-related areas). By contrast, youth matched with adults showed positive impacts in a range of school-related and social outcomes; and in several cases, these impacts were significantly larger than those yielded by high school volunteers.

Table 1

Impacts for Youth Matched with Adult and High School Bigs and a Comparison of the Size of These Impacts

School-Related Outcomes (as reported by teacher, unless stated)	Impacts for Littles Matched with Adult Bigs	Impacts for Littles Matched with High School Bigs	Is One Impact Significantly Bigger than the Other?
Overall Academic Performance	0.12	0.09	NO
specifically in:			
Written and Oral Language	**0.14***	0.05	NO
Reading	0.08	0.12	NO
Science	0.09	0.15	NO
Social Studies	0.14	0.02	NO
Math	0.06	0.10	NO
GPA (youth report, 1-4)	**0.18****	-0.10	**YES****
Quality of Class Work	**0.19*****	0.07	NO
Number of Assignments Completed	**0.24*****	0.07	NO
School Preparedness	0.08	-0.03	NO
Classroom Effort (1-4)	**0.16*****	-0.04	**YES****
Task Orientation	0.08	0.05	NO
Absence without an Excuse (0, 1)	**-0.13****	-0.02	NO
Start to Skip School (youth report; 0, 1)	**-0.12****	-0.03	NO
Engaging in Serious School Misconduct (0, 1)	**-0.10***	-0.03	NO
Is Difficult in Class	**-0.11****	0.03	**YES***
Teacher-Student Relationship Quality	0.07	0.07	NO
Teacher-Student Relationship Quality (youth report, 1-4)	0.03	-0.06	NO
Positive Classroom Affect (1-4)	0.00	0.05	NO
Scholastic Efficacy (youth report, 1-4)	**0.09***	0.01	NO
Academic Self-Esteem (youth report, 1-4)	0.02	0.02	NO
Connectedness to School (youth report, 1-4)[a]	-0.02	0.00	NO
College Expectations (youth report, 1-4)	**0.15****	-0.05	**YES***

Table 1 *(continued)*

Impacts for Youth Matched with Adult and High School Bigs and a Comparison of the Size of These Impacts

Non-School-Related Outcomes (as reported by teacher, unless stated)	Impacts for Littles Matched with Adult Bigs	Impacts for Littles Matched with High School Bigs	Is One Impact Significantly Bigger than the Other?
Substance Use (youth report; 0,1)	0.00	0.05	NO
Misconduct Outside of School (youth report; 0,1)	-0.11	0.26	NO
Prosocial Behavior (1-4)	**0.10****	-0.04	**YES****
Social Acceptance (1-4)	-0.01	**0.13***	**YES***
Sense of Emotional Support from Peers (youth report, 1-4)	0.03	0.00	NO
Self-Worth (youth report, 1-4)	0.05	-0.03	NO
Assertiveness	-0.06	0.07	**YES***
Relationship with Parent (youth report, 1-4)	0.07	0.00	**YES***

Notes: Columns 1 and 2 list the estimated impacts for youth matched with adults and high school Bigs, respectively. Those that are bolded are large enough that the difference between Littles and their non-mentored peers can be considered "statistically significant" (see below for definition). The third column indicates whether the difference between the size of the two impacts in Columns 1 and 2 is statistically significant. Those outcomes indicating "YES" in the last column are outcomes for which either adults or high school Bigs are significantly more effective in fostering benefits in their Littles.

These estimated impacts are regression "adjusted," controlling for indicators of random assignment (i.e., to which group the child was assigned), the baseline value of the outcome measure, youth's age, minority status, gender, number of youth-reported stressful life events in the six months prior to baseline, whether the child qualifies for free or reduced-price lunch, the child's extracurricular activity involvement and school. For those variables with a 0-1 response format, Column 1 is the difference between the proportion of Littles in adult programs with this outcome and the estimated proportion of their non-mentored peers in adult programs with this outcome (calculated by dividing the Littles' average by the estimated percent change impact or the "log odd treatment effect"); Column 2 is the difference between the proportion of Littles in high school programs with this outcome and the estimated proportion of their non-mentored peers in high school programs with this outcome (calculated by dividing the Littles' average by the estimated percent change impact or the log odd treatment effect).

*** The true impact is not equal to zero at a 0.01 level of significance.

** The true impact is not equal to zero at a 0.05 level of significance.

* The true impact is not equal to zero at a 0.10 level of significance.

The significance level, which is noted by asterisks, represents the probability that the averages for the Littles and their non-mentored peers are the same. Thus, p=.05 means that there is a 5-percent chance that the estimated impact is actually zero. We call an impact "statistically significant" if the likelihood that the impact is really zero is less than ten percent (p<.10). This 10-percent level is selected (as opposed to the 5-percent level used in many fields) to increase our power to detect a legitimately effective program. Most evaluation research uses this two-tailed 10-percent criterion (which is equivalent to a 0.05 one-tailed test).

[a] Connectedness to School is a combination of a three-item School Liking scale and a six-item Connectedness to School scale, which contains items about trying hard as well as about school enjoyment.

Table 2
Mentor-Reported Benefits

Reported Benefits	Percentage Agreeing That They Had Improved in Each Area[a]	
	High School Bigs	Adult Bigs
Interpersonal skills (i.e., communicating, being patient, wanting to be a better role model)****	47%	40%
Personal skills (i.e., being responsible, reliable, organized)*	34%	27%
Knowledge of child development****	41%	29%
Leadership abilities***	35%	28%
Interest in working with children as a career****	23%	14%
Interest in social issues (i.e., awareness of issues, wanting to solve social problems, wanting to volunteer for other programs)	30%	33%
Respect for others' cultures	25%	31%
Respect for others' religions	17%	18%
Performing better in job or school	22%	21%

a On a scale from 1 = strongly disagree to 4 = strongly agree, these percentages reflect the number reporting an average score (across all items in a given scale) greater than or equal to 2.45.

* $p < .10$

*** $p < .01$

**** $p < .001$

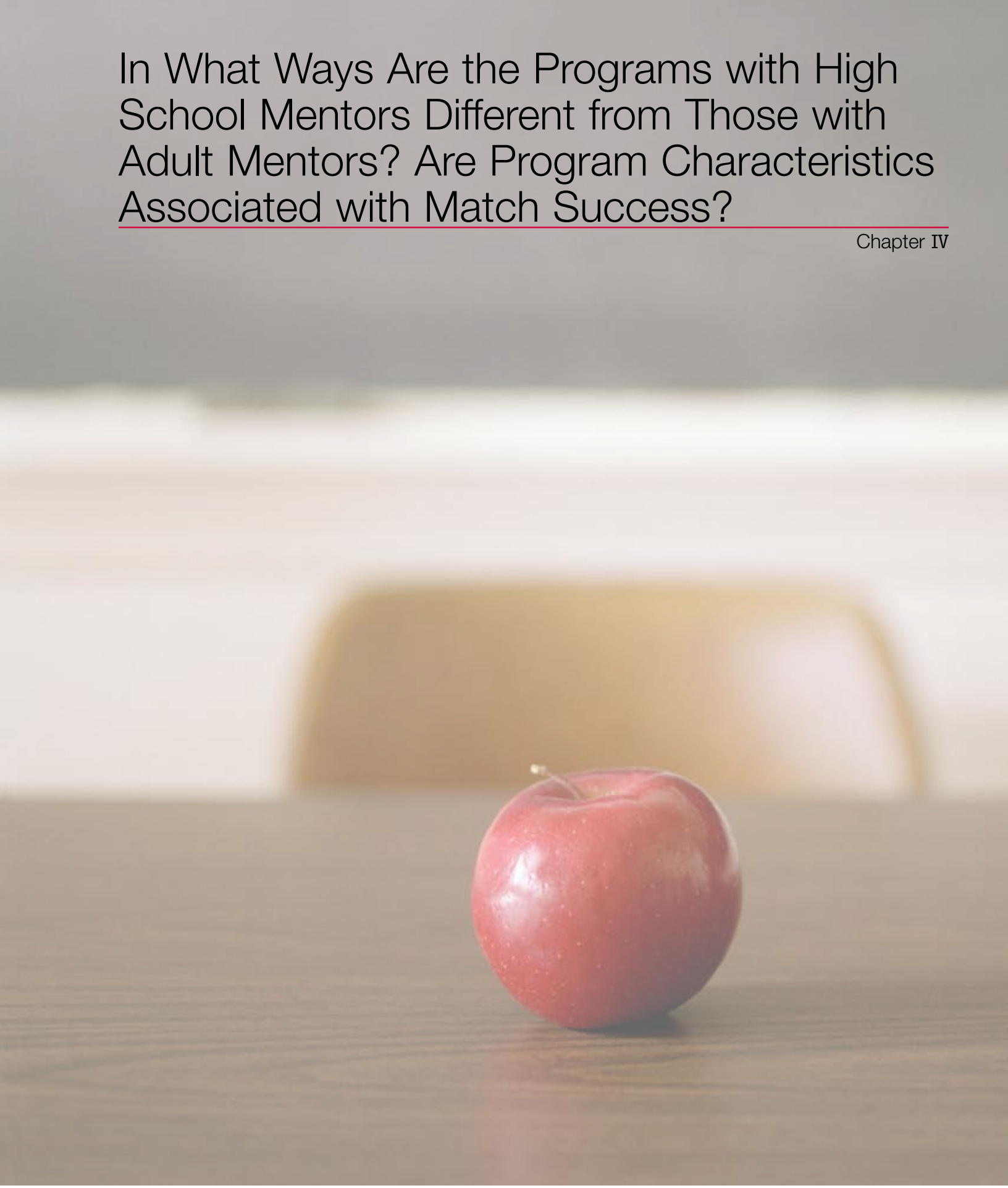
What Benefits Do the High School Mentors Report They Receive?

At the second follow-up, we asked all mentors to tell us in what ways they felt they had benefited from the program. High school Bigs were more likely than adult volunteers to report receiving several benefits (see Table 2): improvements in interpersonal skills and abilities, including communicating better, being more patient and wanting to be a better role model; personal abilities, such as being responsible, reliable and organized; knowledge of child development; leadership abilities; and interest in working with children as a career.

These analyses examined the benefits to youth and their high school Bigs across a wide variety of mentoring programs. In the next chapter, we describe these programs and those involving adults; we also discuss how some program practices may be particularly important in helping high school Bigs create higher-quality, longer-lasting relationships and, ultimately, yield stronger benefits.

In What Ways Are the Programs with High School Mentors Different from Those with Adult Mentors? Are Program Characteristics Associated with Match Success?

Chapter IV



Although high school students are an appealing source of volunteers for SBM programs, analyses presented in Chapter III suggest that, in the average program, Littles matched with high school volunteers achieved very limited impacts through their involvement. However, the programs included in this study are quite diverse in their structure and activities and in the amount and types of support they provide the matches. Are there program practices that are associated with benefits for these Littles and, thus, strategies other programs could implement that would increase the effectiveness of high school volunteers?

To explore this issue, this chapter examines several related questions:

- Were the high school Bigs involved in programs with different characteristics from those involving adults? To what extent were these program characteristics linked with match length and quality?
- To what extent were program practices linked with benefits for the Littles?

We examine the extent to which specific program practices are associated with longer and higher-quality matches because research has consistently found that these two measures of match "success" are precursors to strong benefits (Curtis and Hansen-Schwoebel 1999; Lee and Crammond 1999; Herrera 2004; The Opinion Research Centre 1995; Grossman and Rhodes 2002; Karcher et al. 2006; Herrera et al. 2007; Grossman and Johnson 1999).

We further examine whether program practices are linked with youth benefits, hypothesizing that those high school Bigs receiving strong training and support from their programs would yield larger benefits for their Littles than those without such supports. A recent meta-analysis by DuBois and his colleagues examining the effects of mentoring across 55 studies supports such links: Programs that engaged in a majority of best practices outlined by the authors (including training and ongoing structure and support) yielded larger effects than those programs that did not (DuBois et al. 2002).

Were the High School Bigs Involved in Programs with Different Characteristics from Those Involving Adults? To What Extent Were These Program Characteristics Linked with Match Length and Quality?

BBBSA has a set of guidelines for all of its SBM programs. To date, these guidelines do not differ for high school versus adult mentor programs. Our analyses comparing practices in adult and high school Bigs programs are generally consistent with this. When examining program characteristics and practices used to support the matches, we found some differences between adult and high school Bigs programs—for example, in the frequency with which matches were asked to meet and the amount of choice they had in their activity selection. However, there did not seem to be a "typical" high school Bigs program that differed from adult programs, despite the fact that we expected these programs to be quite different given the distinct strengths and challenges of these two groups of Bigs. Below, we compare key characteristics of these two sets of programs and the extent to which particular characteristics are linked to match length and quality.

Duration and Timing of Match Meetings

High school and adult Bigs reported being involved in meetings of similar length with their Littles: Thirty-nine percent of high school Bigs and 42 percent of adults reported meeting with their Little for 45 to 60 minutes during each match meeting, and 39 percent of high school Bigs and 37 percent of adults reported meeting with their Little for more than an hour during each match meeting. Adult and high school Big matches also met at similar times of the day. About half (49 percent) of high school Bigs were in programs that met only during the school day, and 51 percent were in after-school programs, while adults were fairly equally distributed across three types of programs: those with matches meeting after school (38 percent); those that met only during school (37 percent) and those that met both during and after school (25 percent).

Frequency of Match Meetings

Despite programs having the same overarching guidelines, BBBS staff reported that, relative to adults, high school Bigs were asked to meet more

frequently with their mentees. Eighty-three percent of high school Bigs were asked to meet with their Littles at least four times a month, whereas only about half (52 percent) of other volunteers were asked for such frequent meetings. Mentors' retrospective reports of how frequently they actually met were consistent with this trend.[21]

It could be argued that this difference could help compensate for the fact that high school Bigs missed more meetings than their adult counterparts in terms of sheer time spent with their Littles—that is, despite more missed meetings, high school Bigs likely saw their Littles more often than adult Bigs over the same period of time simply because they were scheduled to meet with them more frequently. Although this may be true, the experience for Littles of an absent mentor, and the associated disappointment, could have negative implications beyond the missed "face time" with their mentor, suggesting that their more frequent meetings may not fully compensate for their absences. Work by Karcher (2005) supports this hypothesis. In his impact study of high-school-aged mentors, youth with inconsistent mentors actually declined in self-esteem and behavioral competence. Mentor attendance was also more closely related to outcomes than mentee attendance, suggesting that number of meetings is not the only determinant of youth benefits; the experience of having a mentor who comes as scheduled is particularly important.

Program Structure and Activities

Although all of the programs participating in our study had some degree of structure, matches often chose how they spent their time together. This was particularly true for high school Bigs. BBBS staff reported that, relative to programs using only adult volunteers, programs with high school Bigs focused a smaller amount of time on "structured" activities predetermined by the school or BBBS agency, and a larger amount of time on unstructured activities that matches could choose for themselves.[22]

This relative lack of structure in the high school Bigs programs is surprising given that these volunteers would seem to benefit from more, rather than less, structure. Yet this difference in structure seemed to contribute to differences in decision-making that favored the high school Bigs. Namely, high school Bigs were more likely than other volunteers to involve their Littles in deciding what activities to engage in during match meetings—an important indicator of success in adult-youth matches (Morrow and Styles 1995). High school Bigs reported that they most often chose activities in collaboration with their Littles (52 percent) or allowed the Littles to choose the activities (24 percent). Adults involved their Littles in decision-making slightly less often: Forty-six percent most often chose activities in collaboration with their Littles, and 16 percent allowed the Littles to choose. When Littles were not involved in decision-making, most often it was BBBS staff who chose the activities: Twenty-four percent of adults and 14 percent of high school Bigs reported that this was the case. Very few of the adult and high school Bigs reported that they chose the activities by themselves (5 and 3 percent, respectively), that a teacher decided (2 and 5 percent, respectively) or that some "other" person decided (7 and 2 percent, respectively).

A major concern about SBM programs is that the school context may mean that matches spend extensive time on academic activities at the expense of engaging in activities and discussions that could promote stronger, longer-lasting relationships. Karcher's recent SBM research (Karcher 2004; Karcher 2007b) suggests why this concern is so important. He reports that relationship-focused social activities and discussions, or "developmental" activities, are linked with stronger benefits and higher levels of mentor satisfaction, whereas goal-oriented, problem-focused activities (including those that are academically focused) are linked with weaker benefits and lower levels of mentor satisfaction. Earlier research similarly discusses the importance of activities focused on getting to know the youth and having fun together, as opposed to those focused on improving the child's behavior or performance in some way (Morrow and Styles 1995).

Relative to adult volunteers, and consistent with a constructive approach to relationship development, high school Bigs reported spending more time engaging in two types of activities with their Littles: (1) casual conversations, including talking about social issues (e.g., current events/news, poverty, race issues) and discussing their Littles' social life; and (2) various recreational activities, including playing games and sports, engaging in creative

activities (e.g., arts and crafts, writing for fun) and attending school and BBBS events.[23] In contrast, although high school and adult mentors reported spending similar amounts of time talking about academic issues, such as the importance of staying in school,[24] adult Bigs spent more time with their Littles providing homework help or tutoring.[25]

This fairly strong focus on nonacademic activities corresponds with Bigs' reported goals for youth. Prior to the start of their mentoring experience, volunteers were asked to identify their most important goal in mentoring from a list of five options.[26] At that time, high school Bigs did not differ significantly from adult mentors in terms of their focus on academics—very few of both groups (6 percent and 11 percent, respectively) reported that helping the Littles make academic improvements was their central goal.[27] However, at the second follow-up, when we asked the mentors what they actually focused on most in their match meetings, high school Bigs were much less likely than adults (5 percent versus 25 percent) to say that they tried to help their Littles make academic improvements, and they were more likely to say that they sought to improve the Littles' relationships with others (12 percent versus 3 percent).

Meeting Context

During their match meetings, some mentors had opportunities to interact with other mentors and even other matches. In many of these programs, matches all met at one time, in one space—for example, the school gym or cafeteria. Seventy-eight percent of high school Bigs (compared with 55 percent of adults) reported meeting in one large group.[28] We know very little about how this context might affect the development of the mentoring relationship. Exposure to the Little's schoolmates could provide mentors with valuable information about their Little's social skills and potential difficulties in interacting with peers (Herrera, Vang and Gale 2002). The presence of other volunteers could also provide mentors with support and camaraderie that could help them feel connected and committed to the program. Yet having other youth or matches present could also distract both youth and mentors from the development of their own relationship.

To test these competing hypotheses, we assessed whether the meeting context for the match (i.e., whether it met in the presence of other matches) was associated with match length and quality.[29] Our findings support both hypotheses, depending on the age of the mentor.

Both high school Bigs and adults saw advantages to meeting in the presence of other matches and reported very few drawbacks, but high school Bigs reported more of these benefits. For example, they were more likely than adults to agree that meeting in the context of other matches helped them get to know their Little in ways they would not have if they had met on their own (49 versus 29 percent). High schools Bigs were also less likely to agree that this context distracted their Little (18 versus 40 percent) or themselves (10 versus 16 percent) from their interactions or prevented them from talking about personal things (10 versus 27 percent).

Whether the match met in the context of other matches was not associated with mentor reports of closeness or overall relationship quality for either the high school or adult Bigs. However, it did seem to be important for retaining high school Bigs: At the second follow-up, matches with high school Bigs lasted longer when the match met in the context of other matches (275 versus 207 days). The same was not true for adult mentors; their matches were similar in length regardless of meeting context (240 versus 256 days) (see Figure 1 on the next page).

Although high school volunteers tended to prefer meeting with other matches present, the Littles did not always appear to benefit from this context. Whether youth benefited was in large part a function of the type of volunteer with whom they were matched. Youth who were matched with adults reported slightly higher levels of youth-centeredness in their relationship when meeting in the context of other matches (see Figure 2 on the next page). However, this difference was not large enough to be statistically significant. Youth matched with high school Bigs reported significantly higher levels of youth-centeredness when meeting *independently*, suggesting that the extent to which interactions were focused on the youth was negatively affected by meeting in a group context.

Figure 1
Associations between Meeting Context and Match Length

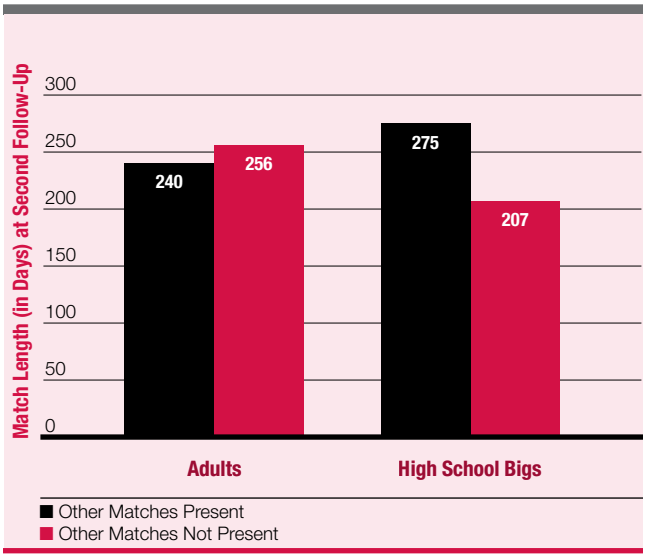
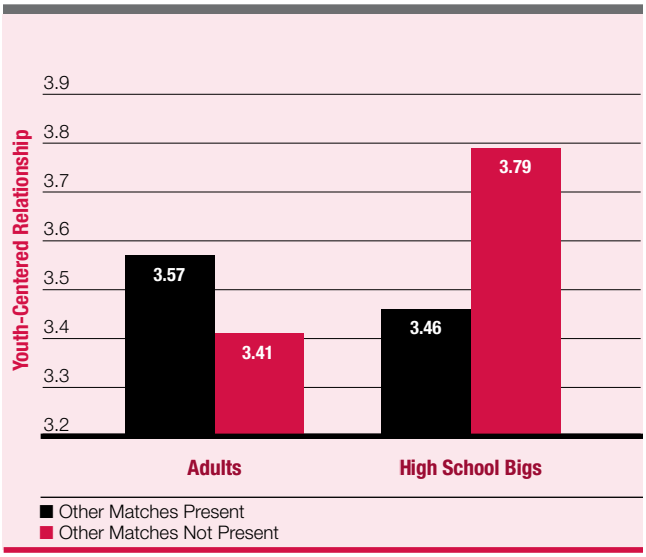


Figure 2
Associations between Meeting Context and Youth-Reported Youth-Centered Relationship



An observation of a high school Bigs program suggested one possible reason for these differences in youth centeredness. In this program, the high school Bigs seemed to have difficulty focusing on their Littles' needs while in the presence of their high-school-aged peers. Several appeared to be spending more time talking among themselves than providing their Littles with attention. Mentor responses to our survey supported this observation. When mentors were asked how important several aspects of the program were to them, high school Bigs differed from adult mentors in the importance of only one aspect of support: Support from other mentors was more important to them.[30] The high school Bigs were also more likely than adults to agree that meeting in the context of other matches helped them interact with other mentors (98 and 93 percent, respectively). Adults are probably more likely to understand that interacting with their own peers is not why they are involved in the mentoring program. Adults also do not depend on peer social interaction in the same way younger volunteers do.

Training

To assess the amount of training received by the mentors, we relied on two measures: (1) how many hours of total training (combining pre- and post-match training) he or she reported receiving by the first follow-up; and (2) the overall quality of the training.[31] To test whether these measures were associated with match success, we used three sets of indicators of success: match length by the first and second follow-up; whether the match carried over into a subsequent school year;[32] and relationship quality reported by both mentor and youth.

1. *Amount of pre- and post-match training.* Adult and high school Bigs did not differ in the total amount of training they reported receiving. By the first follow-up, a quarter of adults reported receiving no training; about a third (32 percent) had up to two hours of training; 39 percent had two to less than four hours; and five percent had four or more hours of training. By comparison, 31 percent of the high school Bigs reported receiving no training; 27 percent had up to two hours; 31 percent had two to less than four hours; and 11 percent reported receiving four or more hours of training.

   For high school Bigs, the amount of training received was more consistently associated with match success than it was for adults. Compared to their peers who received less than two hours of training, high school Bigs who received two hours or more had longer lasting matches by the second follow-up and reported having higher-quality and closer relationships with their Littles (at both

follow-ups). Similarly, Littles matched with more highly trained high school Bigs reported higher levels of youth-centeredness, emotional engagement and closeness in their relationships at the second follow-up, although these associations did not emerge at the first follow-up. In contrast, for adults, having at least two hours of training was associated only with higher levels of mentor-reported closeness and higher levels of youth-reported emotional engagement.[33]

Although these findings suggest that mentors stay in their matches longer and develop stronger matches *because* they received more training, post-match training often depends on mentor initiative; it is often those mentors who are most invested in the program who seek more training, and it is those very same mentors who are most likely to foster strong matches and sustain them. Thus, these findings should be interpreted cautiously.

2. *Quality of training.* High school and adult Bigs reported very similar levels of training quality: adults reported an average of 3.7 on a five-point scale, whereas high school Bigs reported an average score of 3.8 on the same scale. Unlike amount of training, quality of training had similar associations with measures of match success for both high school and adult Bigs.

   Relative to their peers who reported lower-quality training at the first follow-up, those high school Bigs who reported higher-quality training did not experience longer matches at that time; but they did have longer matches by the second follow-up and were more likely to carry over their match into a second school year. High school Bigs' reports of higher training quality were also associated with their own reports of higher-quality relationships at the first follow-up; but this was not the case for any of the youth-reported relationship quality measures. Similarly, adult volunteers who reported higher-quality training were more likely to carry over their matches to the next school year and reported higher-quality and closer relationships with their Littles. Again, however, this was not the case for any of the youth-reported measures of relationship quality.

Supervision and Staff Support

Supervision and support from BBBS staff took several forms. Staff reported providing regular individual check-ins with the mentors, outside of match meetings, to see how the matches were progressing. In addition, in many cases, they were present for match meetings, setting up activities and ensuring that meetings progressed smoothly.

To assess the amount and quality of supervision and support provided to the mentors, we used two mentor-reported measures: (1) how often they talked with BBBS staff for support or advice; and (2) the quality of BBBS support they reported receiving. We also examined the same three indicators of match success outlined in the previous section: match length, relationship quality and match carryover.[34] Match carryover, however, was not associated with either measure of support and, thus, is not discussed in this section.

1. *Frequency of supervision/support.* Relative to adult Bigs, high school volunteers reported talking slightly more often with BBBS staff for support or advice.[35] This reflects the fact that BBBS staff reported being present at match meetings for high school mentors more often than for adults: Sixty-two percent of high school Bigs (compared with 58 percent of adults) had BBBS staff present either "often" (14 percent) or "always" (48 percent). School liaisons (school staff responsible for coordinating the program with BBBS staff) as well as teachers, assistant principals and counselors, were also present significantly more often for high school than for adult match meetings. BBBS staff reported that 36 percent of high school Bigs, compared with only 14 percent of adults, had school liaisons who were present "often" or "always." Perhaps this was part of a conscious effort to provide extra support to the high school mentors. Yet this type of supervision was still much less frequent than that from BBBS staff. And both BBBS and school staff supervision were not as frequent as one might expect given the age and experience level of these younger volunteers.

   How often mentors talked with BBBS staff for support or advice was linked with match success for both high school and adult Bigs. Adult mentors with more frequent communication

reported having higher-quality (at both follow-ups) and closer relationships (only at the second follow-up), while high school Bigs who reported more frequent communication had longer lasting matches by the second follow-up.

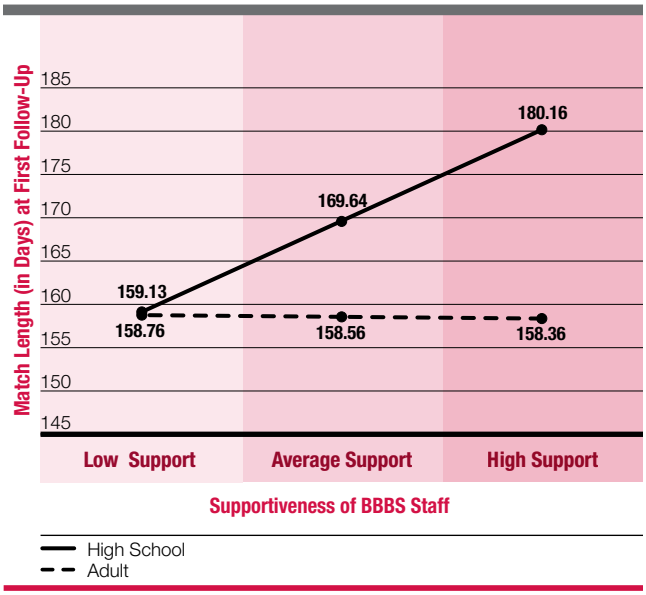
However, although high school Bigs' frequency of communication with BBBS staff was not associated with mentor reports of match quality, it was negatively associated with Little reports. For high school Bigs, seeking support or advice from BBBS staff was associated with less close relationships, less emotionally engaged youth, less youth-centered relationships and greater dissatisfaction at the first follow-up. This association persisted into the second follow-up for two indicators of match quality: emotional engagement and youth-centeredness. These associations likely reflect the fact that relationships with problems are often those for which the Bigs and agency staff are in most contact (i.e., mentors are most likely to seek help from BBBS staff when their relationships are having difficulties).

2. *Quality of support.* In addition to how often volunteers communicated with BBBS staff, we also assessed the extent to which volunteers felt well supported by staff, namely, mentors' reports on the extent to which staff: (1) have shared important information with them about their Little; (2) have given them suggestions for activities; (3) seem willing to help them; and (4) seem concerned about how well their match is going. High school and adult Bigs perceived similar levels of fairly high-quality support from BBBS staff (both groups of mentors rated staff support as a 4.0 on a scale from 1 to 5).

   For both groups of mentors, Littles' reports of relationship quality were unrelated to the quality of staff support their Bigs received. However, those mentors who reported receiving higher-quality support from program staff reported stronger and closer relationships.[36]

   Additionally, as shown in Figure 3, higher-quality staff support was associated with longer match length for the high school mentors but had virtually no association with match length for adult volunteers.[37]

Figure 3
Associations between Quality of BBBS Staff Support and Match Length for High School and Adult Bigs



These analyses thus revealed several program practices that are linked with longer and stronger matches for high school Bigs. Reports of high-quality training and supervision, and receiving at least two hours of training, were all associated with longer and higher-quality matches; more frequent supervision was also linked with longer matches (but possibly flagged more troubled matches as well). Only one of these program variables (training quality) was associated with match carryover. In addition to program training and supervision, one other practice—meeting in the presence of other matches—was associated with longer matches, but it was also linked with youth reports of less youth-centered interactions with the mentor. Finding ways to increase match supervision and structure in ways that can sustain the interest of high school Bigs, yet also ensure that they are focused on the needs of their Littles, will thus be a key challenge for programs using high school mentors.

To What Extent Were Program Practices Linked with Benefits?

In addition to assessing whether and how program practices were linked with match duration and quality—factors that have been associated, in past research, with benefits for youth—we also examined how practices were linked more directly with youth benefits. We focused on two types of measures that our analyses suggested might be linked with benefits—training and support, and meeting context. To test whether Littles in high school Big matches benefited more from programs providing strong mentor training and support than from programs providing weaker training and support, we examined benefits for matches in programs varying in the following characteristics: quality of BBBS staff support, training quality, amount of training, the extent to which mentors reported communicating with school staff and the extent to which mentors reported communicating with BBBS staff. We also tested the effect of meeting context, in terms of whether the match interacted with other youth.[38]

Only one measure—frequency of communication with BBBS staff—proved to have fairly consistent, positive associations with outcomes for Littles matched with high school Bigs. The benefits received by Littles in "high-communication" programs (i.e., those in which mentors reported relatively frequent communication with BBBS staff)[39] were larger than those of Littles in low-communication programs in five areas:

- Teacher-reported social acceptance;
- Assertiveness;
- Positive classroom affect;
- Classroom effort; and
- School preparedness.

In only one case, college expectations, did this group of Littles show statistically smaller benefits than their counterparts in low-communication programs.[40]

Additionally, for the first three of these outcomes (i.e., teacher-reported social acceptance, assertiveness and positive classroom affect) and six additional outcomes (overall academic performance, performance in reading, performance in science, task orientation, teacher-reported teacher-youth relationship quality, and unexcused absences), Littles with high school Bigs in high-communication programs performed significantly better than their non-mentored peers.[41] In two cases, college expectations and substance use, Littles with high school Bigs in high-communication programs performed worse than their non-mentored peers. Perhaps these findings reflect the fact that high levels of communication can signify added support to help matches flourish; but in some cases, they can also pinpoint matches that may be having difficulties and thus *need* more support. The overall pattern of findings, however, suggests that in the vast majority of cases, added support went hand in hand with more positive benefits for youth.

Frequent communication with BBBS staff was, then, the program feature that mattered the most in predicting whether a Little matched with a high school Big would benefit. Those Littles in programs where their high school Bigs talked frequently with BBBS staff for support or advice received several benefits from their program involvement. And, importantly, in many cases these benefits were bigger than those received by youth in low-communication programs, suggesting that frequency of communication makes a significant difference in high school Bigs programs.

Thus, although high school Bigs, on average, yielded very few benefits to their Littles, those high school Bigs in programs with high levels of support (i.e., frequent communication with BBBS staff) were effective in providing their Littles with several benefits relative to their non-mentored peers. These benefits were not apparent in the full sample, in part, because they were diminished by combining them with the relatively small effects yielded in programs with low levels of support.

None of the other program factors we examined showed consistent patterns of associations with program benefits. Given our fairly small sample size and the conservative way we conducted these analyses, our lack of findings in these other areas should not imply that these program practices do not make a difference, but rather that communication with BBBS staff is the only program practice we tested that makes a big enough difference that we could detect it statistically.

Conclusions

Chapter V

This study suggests that high-school-aged volunteers have many strengths. They appear to be an active group of volunteers, involved in both their schools and jobs. They also bring to the match extensive exposure to and experience with children—ingredients that could help them relate to a mentee. In addition, they showed hints of approaching their matches in ways that could potentially be linked to match success—they involved their Littles in decision-making more often than adults and engaged in academic activities with their Littles less often than adults. Their matches also lasted at least as long as those of adults, and their relationships appeared to be fairly strong. Furthermore, the high school Bigs themselves reported several benefits from their mentoring experience, even more than reported by adult Bigs—suggesting that programs could potentially benefit both the Little and the high school student mentor.

However, high school volunteers were less consistent mentors for their Littles—they missed more meetings than adults and, not surprisingly, high school seniors were much less likely than adults to carry their match over into a subsequent school year. Most importantly, the impacts for the involved Littles were much weaker than those of Littles matched with adults. Littles mentored by high school Bigs benefited in only one of the 31 outcomes tested—social acceptance—whereas Littles mentored by adults benefited in 12 of the 31 outcomes. In six outcomes, adults yielded significantly bigger impacts than high school Bigs. In fact, the adults yielded more significant impacts than the full sample discussed in the broader impact study, suggesting that the presence of matches with high school Bigs in the broader study (Herrera et al. 2007) may have diminished the findings for the larger group of Littles.

Yet, there were also many indications that carefully outlining the parameters of high school mentoring programs could improve their ability to benefit youth. This suggestion is in line with past work that has found more consistent impacts yielded by high school mentors. For example, Karcher (2005) found that high school mentors benefited their mentees in both school and parent connectedness. However, the focus of his evaluation was a very structured program that involved extensive orientation and training, relied on structured activities and a curriculum focused on connectedness, involved parents in the program and provided extensive support to the high school volunteers (Karcher, in press). Essentially, the program implemented many of the practices that the current study reports are associated with more successful matches. For example, the program in the Karcher study included weekly interaction between mentors and program staff, whereas in the current study, program staff reported being present at weekly match meetings either "often" or "always" for less than two thirds of the high school Bigs. The mentors in the Karcher study also received two hours of training per month, compared with the 42 percent of high school Bigs in this study who reported receiving two or more hours of training across the entire school year. That program was, in fact, created to address the unique needs of high school mentors for high levels of training, guidance and supervision.

The differences between more structured high school mentor programs, like the one described above, and the high school Bigs programs in this study, may hold the key to tapping the potential of high-school-aged mentors. Currently, most BBBS SBM programs involving high school Bigs are not drastically different from those involving adult Bigs. BBBS SBM was, in fact, created for adult mentors. Using high school volunteers in these programs is a relatively recent addition to the SBM model. Yet high school students are, quite simply, not adults. They come to the program with their own set of developmental needs, including facing a major developmental transition (for seniors) and a desire for peer interaction that, in some cases, appeared to have been addressed at the expense of focusing on their Littles. Although some of the programs involved in this study were structured to accommodate some of the differences between adult and high school volunteers, the programs do not have a standardized set of practices that reflect their distinct needs. Yet our analyses suggest that young volunteers may need very different types of support, training and structure to be successful in their matches. Without these supports in place, matches with high school volunteers are likely to yield very few benefits.

Our recommendations for strengthening program practices when using high school volunteers are as follows:

1. Consider how to use high school Bigs' natural strengths.

Although the Littles matched with high school Bigs improved relative to their non-mentored peers in only one area (social acceptance), their impacts in one additional peer-related area (assertiveness) were significantly bigger than those received by Littles matched with adults. These benefits also correspond with mentor reports of what they focused on in their match meetings: Adults reported focusing on academics much more than the high school Bigs, whereas the high school volunteers focused more on improving the Littles' relationships with others. High school Bigs' understanding of how to help their mentees improve in peer-related areas—or helping them improve in these areas simply by virtue of their age and status—may be an important strength that programs should try to capitalize on in their work with these mentors.

2. Ensure that young volunteers understand the importance of consistency.

High school Bigs were more likely than their adult counterparts to miss meetings, and a majority of BBBS staff working with high school Bigs reported that consistent attendance was a challenge for them. Their relative tendency to miss match meetings reflected the fact that high school Bigs were very active in their schools and communities, and these are positive characteristics for Littles to emulate; but inconsistent mentoring in many cases could be worse for a child's self-esteem than no mentoring at all (Karcher 2005). Training for high school volunteers should make this a central focus and, if the students receive school credit for volunteering, this credit should be made contingent on consistent attendance.

3. Provide matches with opportunities to interact with other youth; however, use a group setting for match meetings only with significant supports in place.

Mentors reported many benefits to meeting in the presence of other matches, and those high school volunteers meeting with their Littles in a larger group sustained their matches longer than those who met outside of this context. However, those Littles who met with their high school Bigs in the group context reported lower levels of youth-centeredness than those meeting outside of this context. And our observations suggested that this type of meeting structure may require significant supervision to ensure that the high school volunteers focus attention on their Littles as opposed to their own peers.

4. Provide significant communication with, and support for, high school Bigs.

Matches with both adult and high school volunteers benefited from strong program support. However, support seemed to be particularly beneficial to matches with high school Bigs. For example, stronger support by program staff was associated with match length only in the high school sample. In addition, Littles matched with high school Bigs in programs with relatively frequent communication with BBBS staff benefited more than their non-mentored peers in several outcomes, and many of these benefits were significantly bigger than those received by Littles in programs with less staff communication.

5. Provide a *minimum* of two hours of training (pre-match and ongoing) to high school Bigs.

At the first follow-up, 31 percent of high school mentors reported not receiving any pre-match or ongoing training. Those 42 percent who had received at least two hours of training by the first follow-up had longer lasting matches by the second follow-up and had higher-quality and closer relationships with their Littles (from both the mentors' and the Littles' perspectives). These findings should not imply that two hours is the ideal amount of training. Receiving more training may yield much stronger matches. Instead, these analyses suggest that high school mentors

should receive *at least* two hours of training. Additionally, although we did not examine training content in this report, content should be carefully considered to ensure that high school volunteers not only feel prepared to mentor a child (which most did), but also have the skills, attitudes and knowledge base necessary to be a strong, consistent mentor.

6. Try to involve high school mentors before their senior year.

Seniors were much less likely than younger high school mentors to carry over their match into a subsequent school year. Programs that want to keep their volunteers past one school year should make this goal explicit to seniors to ensure that this is possible for them.

7. If providing high school Bigs with class credit, consider providing credit only after two semesters of service or after they carry their match over into a subsequent school year.

In this study, those high school Bigs who received class credit were less likely to carry over their matches than those who did not. It is likely that students typically volunteered until the end of the commitment required for receiving credit, but no longer. Thus, making credit contingent on a full year (or more) of service may be important in keeping young volunteers on board for the long term.

8. Consider mixing adult and high school programs.

High school Bigs in programs that also used adult Bigs stayed with the program longer than those with only other high school volunteers. Perhaps this difference reflects differences in mentors' original motivation for volunteering (e.g., high school volunteers joining with a larger group of students may have volunteered in large part for the group experience). However, these teens could have also been positively influenced by the presence of adults, who tended to be more consistent mentors. In mixed programs, adults could also be trained to serve as role models to the high school Bigs in how to effectively mentor and balance their own needs with those of the children.

These types of changes in the BBBS high school Bigs model will require significant effort and may increase the cost of the high school Bigs program. However, there are several reasons to invest these efforts in the program. First, and most importantly, these volunteers have the potential to make a substantial difference in their Littles' lives, as evidenced both in evaluations of more structured programs and in those programs in the current study with very strong staff support. Second, high school volunteers represent an efficient way to reach many children through school-based programs—including youth whose parents may be wary of an adult mentor for their child. And although they do require more and different kinds of support than adults, high school students also have many unique strengths that can contribute to strong mentoring relationships. Finally, high school volunteers appear to reap several benefits from the experience themselves and are more likely to volunteer in the future than teens without early volunteering experience (Toppe et al. 2002).

Several characteristics and limitations of this study are important to note. First, high school Bigs had matches that were similar to those of adults in both match length and quality, yet, on average, their Littles did not experience substantial impacts. This counterintuitive set of findings suggests that match length and quality may play a different role in match success for high school SBM matches than they do for adult SBM matches. Perhaps meeting consistency, activity focus and structure, and expectations for the long-term nature of the relationship are equally or more important.

These findings could also suggest that although relationship quality is important, we simply did not measure those aspects of relationship quality that matter most to these types of matches. Our instruments were designed for adult matches. High school volunteers and the Littles they are matched with may judge their relationships using very different criteria than adult volunteers and their Littles; the constructs that past research highlights as key in adult matches (e.g., youth-centeredness, decision-making) may not be what drives these

peer matches. Littles likely come to these matches with very different expectations for the match's longevity, its purpose and its boundaries. And they likely approach the match, and judge its value, in very different ways. As researchers continue to explore these matches and their benefits, they will need to create new, more sensitive measures with this in mind.

Finally, a criticism of the Herrera et al. (2007) study, using the full sample, centered around the fact that most impacts were found in teacher-reported measures. If teachers knew which youth were being mentored, they may have expected to see changes in these youth and consequently raised their scores. We argued in the broader report that many teachers did not know which youth were being mentored and that analyses examining differences between youth who were more or less likely to have a teacher who knew about their mentoring status (i.e., elementary versus middle school Littles) did not appear to favor a theory of teacher bias. Moreover, some of our teacher-reported impacts were supported by impacts in similar youth-reported outcomes (e.g., skipping school and unexcused absences, teacher-reported measures of academic performance and youth's perceptions of their own academic abilities), and many of those outcomes for which we found significant impacts were "counts" of behaviors (e.g., the number of unexcused absences in the past four weeks) rather than less "objective" teacher attitudes or opinions. Yet the possibility for teacher bias does exist. And if teachers simply expect to see more change in youth mentored by adults as opposed to those mentored by high school students, this could also explain differences between high-school- and adult-mentored youth, at least in teacher reports. This argument does not, however, account for the fact that adult-mentored youth also benefited in four youth-reported outcomes, whereas high-school-mentored youth benefited in none of the youth-reported outcomes we measured.

Although findings from this study suggest several strategies for improving SBM programs, the findings should be considered preliminary until further studies—including an evaluation being undertaken by BBBSA—can confirm that their implementation significantly improves outcomes for youth mentored by high-school-aged volunteers. SBM programs that do not yet recruit high school mentors should wait to start such programs until clear guidelines are put in place. Similarly, those that are currently using high school volunteers should wait to expand until the field can provide guidance on how to design these programs and shape their expansion.

BBBSA is already initiating some of the changes suggested in this study in its high school Bigs program. The organization has convened a group of six of its strongest BBBS agencies to review these and other findings and share their own experiences and strategies to improve their current model. Our findings suggest that these changes will be well worth the effort.

Endnotes

1 This report uses data from the first school year when examining questions about impacts because this time frame provides the best picture of the mentoring relationship during the life of the typical one-school-year program. In the second school year of the study, about half of the youth in the treatment group were no longer receiving mentoring through the BBBS program. Thus, the second-year impacts do not yield a clear assessment of how youth benefit in their second year of program experience, but rather whether their impacts carry over from the previous school year—and analyses in the larger study suggest that, on average, they do not. Additionally, as discussed in the Herrera et al. (2007) study, the early timing of the second-year assessments may not have allowed continuing relationships enough time to reestablish themselves after the very recent four-month summer break—again, making the second-year impacts more difficult to interpret. We use data from both the first and second school year when examining predictors of "match success" in Chapter IV (i.e., when describing practices associated with match length, carryover and relationship quality) to enable us to see whether program practices are linked with both mentors' concurrent reports and their future behavior. A few variables are also discussed that were only measured in the second school year (these instances are noted in the text).

2 At the time of our study, 31 percent of the adult mentors were college students.

3 Relative to adult mentors (40 percent of whom reported having "some" contact and 30 percent of whom reported having "a lot" of contact with youth 9 to 14 years of age in the last year), high school Bigs reported having had significantly more recent contact with children in that age group.

4 Mentors with greater exposure to youth and involvement in youth activities reported more confidence in their ability to effectively mentor a Little—which could in part explain the fact that high school volunteers had higher levels of efficacy. However, the association between high school status and mentor efficacy was true even when holding constant the mentor's amount of experience and involvement with youth.

5 At baseline, Littles mentored by adults were slightly more at risk in their self-reported stress, academic risk and school misbehavior, whereas Littles matched with high school Bigs tended to have more difficulties with peers and lower perceptions of their own academic abilities. None of these differences, however, were large enough to reach statistical significance. The quality of their relationship with their parents was also virtually identical for the two groups. In only one of the seven measures we examined were adult-mentored Littles significantly more at risk than those mentored by high school Bigs: Adults were more likely to mentor youth who had used substances, a difference likely explained by the fact that adults tended to mentor older Littles.

6 For high school volunteers, 90 percent of same-race matches were between white Bigs and Littles; this proportion was much smaller (63 percent) for adults. Forty-four percent of high school Bigs were in cross-race matches. Seventeen percent of those were minority Bigs matched with a Little from a different minority group; 15 percent were minority Bigs matched with white youth. For adult Bigs, 72 percent were in cross-race matches. Seventeen percent of those were minority Bigs matched with youth from a different minority group; 3 percent were minority Bigs matched with white youth.

7 This was true regardless of how long the match lasted (i.e., even when holding length of match constant).

8 We tested whether volunteering with other organizations, having a paid job or the number of activities involved in (e.g., school, job, volunteering, clubs) was associated with missed meetings for high school or adult volunteers. These activities were not associated with missed meetings for either group. The number of hours worked at baseline was also not associated with missed meetings for the high school Bigs but was for adults: Adults who worked more hours per week missed more match meetings.

9 The remaining 11 percent were missed for "some other reason." Despite missing fewer meetings overall, those adults who did miss meetings reported reasons that were proportionally similar to those reported by the high school volunteers: 34 percent of their missed meetings were the result of something coming up on the mentor's part; 30 percent resulted from something coming up on the Little's part; 25 percent were a result of a conflict with the school; and 11 percent were missed for "other" reasons.

10 Analyses examining indicators of match length (i.e., length of match, match carryover to the following school year) reflect mentor-reported data from only 81 percent of participating matches. These matches involved mentors who had only one match over the course of the study and that match began during the first school year of the study (n=492 of 611 total matches). Further, the actual analysis sample was typically smaller than 492 cases due to missing data.

11 Among the high school Bigs who were matched only once during the first school year, 33 percent started their matches by the end of October, while 28 percent of adults had started their matches by that time.

12 Seniors were not more likely to receive credit than their younger high school peers (34 percent versus 37 percent, respectively).

13 At the first follow-up, seniors who did not receive credit had matches lasting about 142 days, compared with 97 days for seniors receiving credit. Nonsenior high school students with credit did not differ significantly from adults in match length (142 versus 130 days respectively). However, younger students without credit had significantly longer matches (153 days) than adults. Seniors with credit had significantly shorter matches (97 days) than adults. Seniors without credit (142 days) did not differ significantly from adults in match length.

14 For nonsenior high school students, six percent of those not receiving credit had closed their matches by the end of January, compared with 14 percent of those who were getting credit.

15 This association was also true when excluding seniors from the analysis (42 percent of nonsenior high school mentors in high-school-only programs carried over their match, compared with 71 percent in mixed programs).

16 In addition to conducting analyses using each of these three factors (i.e., senior status, credit and adult presence) independently, we also tested statistical models that included all three factors at once to examine which factors were most important (i.e., continued to be significantly associated with match length and carryover when holding constant the other two factors). When predicting carryover and match length at the second follow-up, all three factors remained statistically significant. However, when predicting match length at the first follow-up, only senior status and credit were linked with shorter matches; adult presence was no longer associated with match length once senior status and credit were accounted for.

17 Analyses examining relationship quality (reported by either mentor or Little) are based on the last match that youth had at the time they completed their follow-up assessment.

18 High school Bigs reported higher-quality relationships in overall relationship quality, but not on the single-item report of closeness.

19 We found similar results for two of the three other youth-reported measures of relationship quality. Youth matched with high school Bigs reported similar levels of youth-centeredness and emotional engagement whether or not the mentor was of the same gender; however, youth paired with adult mentors reported less youth-centered relationships and slightly lower levels of emotional engagement when the mentor was of the same gender (although the latter association was not statistically significant). Mentors, however (both high school and adult), reported similar levels of closeness and overall relationship quality whether or not their Little was of the same gender.

20 Schools participating in our study used one of three sets of mentors: only high school Bigs, only adult Bigs or a combination of high school and adult Bigs. To assess the impact of having a high school or adult Big, we limited our analyses to youth attending schools that used only two of the three sets: those using only high school Bigs and those using only adult Bigs. Using only these "pure schools" allows us to compare the outcomes of Littles to their unmatched peers in their school. Our final analysis sample included 514 youth attending "adult-mentored schools" and 418 youth attending "high-school-mentored schools." Because the number of youth attending high-school-mentored schools is somewhat smaller than the number of youth attending adult-mentored schools, a slightly larger impact among Littles attending high-school-mentored schools would have been necessary to emerge as statistically significant. As such, it is possible that the smaller number of significant impacts found for high-school-mentored Littles relative to adult-mentored Littles is, in part, due to lower statistical power.

21 At the first follow-up, compared with other volunteers, high school mentors did not report meeting more frequently with their Little in the past four weeks but did meet more frequently in the four weeks prior to that.

22 Unstructured match time was defined as times when "matches engaged in activities of their choosing." Structured activities were those that were "totally predetermined by the school or agency." Our survey also included a question about semistructured activities (i.e., matches are given a few activities from which to choose), although responses to this option are not discussed here.

23 These results were not a function of the age of the Little. When holding youth age constant, high school status was still associated with engaging more frequently in both types of activities.

24 The extent to which mentors reported talking about academic topics at the first follow-up was not associated with teacher reports of the Little's overall academic performance at baseline. Thus, those mentors who focused on academically related activities were not simply responding to more pressing academic needs of their Littles.

25 This result was not a function of the Little's age (i.e., the fact that adults were matched with older youth than were high school Bigs). The association was true even when holding youth age constant.

26 The five options were to help the Little: make academic improvements; improve relationships with others; improve school behavior; feel good about him/herself; or for the mentor to be a friend to him/her.

27 At baseline, high school volunteers and adults differed in one goal: Twenty-eight percent of high school Bigs said that their most important goal was to help the child feel good about him- or herself, while 40 percent of adult mentors stated this was their most important goal.

28 This difference between reports for adult and high school Bigs is statistically significant. This measure was only collected at the second follow-up.

29 All of these analyses focused on the second follow-up because the measure of meeting context was only assessed at the second follow-up.

30 High school and adult Bigs did not differ in their reports of the importance of support from the Little's school, BBBS staff or the mentor's school or job.

31 This variable, "program quality," (Karcher, Nakkula and Harris 2005) includes questions about the amount and adequacy of training and guidance received, as well as the clarity of the program's goals and focus.

32 High school seniors were less likely than younger high school mentors to carry over a match into the following school year (perhaps because they were graduating and moving away at the end of the school year). Thus, we limited our analyses in this section examining match carryover to only those high school students who were not seniors.

33 These associations did not generally appear to be a function of youth characteristics: Being trained by the first follow-up was not associated with youth's single-parent status, their level of stress at baseline or their relatively low scores in three areas (school behavior and attitude, personal relationships, and substance use and misbehavior outside of school). Training was, however, positively associated with youth's academic difficulties at baseline; those high schoolers (and those adults) with training by the first follow-up were more likely to be matched with youth whose teachers reported that they were relatively needy academically at baseline.

34 Again, high school seniors were excluded from analyses examining carryover to minimize potential bias.

35 On a scale from 0 to 4, high school Bigs reported communicating with BBBS staff at a level of 1.6, compared with 1.4 among adult volunteers. In this scale: 0 = never; 1 = about every 2 to 3 months; 2 = about once a month; 3 = 2 to 3 times a month; 4 = every week. Note, however, that BBBS program staff reported communicating slightly less frequently with high school Bigs outside of their match meetings than they did with adult Bigs. BBBS staff reported communicating monthly with 68 percent of adults and weekly with 16 percent of adults, compared with their reports of communicating monthly with 83 percent of high school Bigs and weekly with just 2 percent of high school Bigs.

36 Staff support was associated with relationship quality and closeness for both high school and adult mentors at the first follow-up. At the second follow-up, both indicators of match quality were associated with staff support for adult mentors, but only relationship quality remained significantly associated with staff support for high school mentors.

37 In Figure 3, "low" and "high" support indicate ± 1 standard deviation from the average level of support.

38 These analyses were conducted using hierarchical linear modeling (HLM) to account for the "nested" nature of the data (i.e., youth are nested within programs), and the significance tests for these analyses are based on the number of programs in our sample (high school mentors volunteered in 30 schools; adult mentors in 24 distinct schools). Youth who attend the same program may share program-level characteristics and, therefore, may be more similar to each other than youth who attend different programs with different program-level characteristics. Similarities among youth from the same program create "dependence" at the program level. HLM accounts for this dependence and yields less biased results. It is possible that some nonsignificant findings may result from our small sample size. Thus, a lack of results from some of these analyses may not imply that a given variable is not important, but simply that we did not have enough "power" (i.e., a big enough sample) to detect differences.

39 To create this measure, we used mentor responses to three questions: (1) How often did you talk one-on-one with BBBS staff for support or advice? (2) How often did you talk with BBBS staff for support or advice, with other mentors present? And (3) how often did you talk with BBBS staff for support or advice, with your Little present? The final measure reflects the most frequent level of communication reported in response to these questions. For example, if the mentor reported speaking one-on-one with BBBS staff on a weekly basis, but monthly in the other two contexts, he or she was given a score of "weekly" in the final measure. Responses were "split" at the median or "middle" value such that high-communication programs were those in which mentors reported average frequencies that were higher than the median (i.e., in the top half of all responses); and low-communication programs were those in which mentors reported average frequencies that were lower than the median. The median value for adults was 1.26 and the median for high school Bigs was 1.64, where "1" = about every 2 to 3 months and "2" = about once a month.

40 The estimated impacts for Littles mentored by high school Bigs in high-communication programs and those for Littles mentored by high school Bigs in low-communication programs for each of the six outcomes that showed differences between high- and low-communication programs are as follows: teacher-reported social acceptance (high: 0.22; low: 0.02); assertiveness (high: 0.14; low: -0.02); positive classroom affect (high: 0.13; low: -0.05); classroom effort (high: 0.07; low: -0.12); school preparedness (high: 0.11; low: -0.13); and college expectations (high: -0.14; low: 0.11).

41 Littles matched with adults in high-communication programs also performed better than their non-mentored peers in several areas: academic efficacy, global self-worth, academic performance in science, classroom misbehavior, prosocial behavior, positive classroom affect, number of completed assignments, starting to skip school, engaging in serious school misconduct and quality of school work. Mentored youth in low-communication programs performed better than their non-mentored peers in the areas of college expectations, overall academic performance, academic performance in oral and written language, number of assignments completed, classroom effort and prosocial behavior. We also directly compared the size of the impacts experienced among adult-mentored youth in high-communication programs with those of adult-mentored youth in low-communication programs. Youth in high-communication adult programs had significantly bigger impacts than those in low-communication programs in four areas: global self-worth, classroom misbehavior, serious school misconduct and positive classroom affect; youth in high-communication adult programs had significantly smaller impacts than those in low-communication programs in one area: classroom effort.

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