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Evaluation of the Mentoring Enhancement Demonstration Program: Technical Report

SEPTEMBER 2018

G. Roger Jarjoura | Manolya Tanyu | Janet Forbush | Carla Herrera | Thomas E. Keller

MAKING RESEARCH RELEVANT

Evaluation of the Mentoring Enhancement Demonstration Program

Technical Report

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Herrera | Thomas E. Keller



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Abstract

In 2012, OJJDP launched a demonstration field experiment, the Mentoring Enhancement Demonstration Program (MEDP) and Evaluation to examine: (1) the use of an “advocacy” role for mentors; and (2) the use of a teaching/information provision role for mentors. The American Institutes for Research (AIR) conducted a rigorous process and outcome evaluation of MEDP to assess the effectiveness of programs that agreed to develop and implement enhanced practices incorporating advocacy or teaching roles for mentors, including providing focused prematch and ongoing training to mentors, and providing ongoing support to help mentors carry out the targeted roles. The MEDP collaboratives varied widely in their geographical locations, their size and experience in mentoring, and the structure of their mentoring programs. In total, 2,165 youth were enrolled into the evaluation.

The evaluation was guided by a theory of change that posited that mentors exposed to enhanced training and support should be more likely to engage in the types of behaviors encouraged through the initiative, and through these behaviors promote more positive, longer-lasting relationships with their mentees, which should, in turn, promote stronger positive outcomes for youth. The implementation evaluation focused on how different the proposed enhancements were from the existing (i.e., the business-as-usual) program practices and whether these differences were big enough so that they might result in differences in match and youth outcomes. The impact evaluation was designed to understand whether the programmatic enhancements had an impact on the intermediate and distal youth outcomes.

The collaboratives (and the agencies within the collaboratives) varied in the extent of implementation of their proposed enhancements. Not all proposed enhancements were implemented with fidelity to the designed practices, and the report details how and why the implementation of the enhancements differed from the intended design. Attendance at postmatch trainings was one of the biggest challenges reported by participating programs. This suggests that programs must give as much attention to getting mentors to participate in enhanced trainings as they give to the design and staffing of the training.

We examined the effects of the MEDP intervention on 44 youth and match outcomes but found no statistically significant differences (positive or negative) between the EG and BG youth on any of the outcomes. Yet, mentors who received a higher dosage of the programmatic enhancements had stronger relationships with their mentees and yielded more positive outcomes in their mentees. The results showed that better outcomes across the various proximal, intermediate, and distal outcomes were more likely through the teaching functions than the advocacy functions. Among the enhancements, staff support around the teaching and advocacy functions appears to have the greatest influence on shaping the mentor behaviors.

Executive Summary

Introduction

In 2012, OJJDP launched a demonstration field experiment, the Mentoring Enhancement Demonstration Program (MEDP) and Evaluation to examine: (1) the use of an “advocacy” role for mentors; and (2) the use of a teaching/information provision role for mentors. The overall goal of MEDP was to develop program models that specified what advocacy and teaching look like in practice and to understand whether encouraging the general practice of advocacy and teaching could improve youth outcomes.

The American Institutes for Research (AIR) conducted a rigorous process and outcome evaluation of programs funded by OJJDP in 2012. The evaluation was designed to rigorously assess the effectiveness of programs that agreed to develop and implement enhanced practices incorporating advocacy or teaching roles for mentors, including providing focused prematch and ongoing training to mentors, and providing ongoing support to help mentors carry out the targeted roles.

The Mentoring Enhancement Demonstration Program

MEDP grantees comprised collaboratives that would offer coordinated implementation of the same set of program enhancements in three or four separate established and qualified mentoring programs located within the same regional area. The MEDP collaboratives varied widely in their geographical locations, their size and experience in mentoring, and the structure of their mentoring programs. The types and structures of mentoring programs also varied across, and sometimes within, collaboratives.

All the collaboratives proposed enhancements in the way they would train mentors for their roles, and in the way they would provide ongoing support to the mentors and in some cases, the matches. The evaluation of MEDP was designed to: (1) provide rigorous evidence about whether the enhancements improved youth outcomes and reduced risk for delinquency, and (2) describe the practice models and program characteristics associated with these improvements. This combined outcome and implementation analysis was guided by a theory of change.

The MEDP Evaluation

Based on recent research and theory in mentoring as well as the broader field of youth development, the theory of change posited that mentors exposed to enhanced training and support should be more likely to engage in the types of behaviors encouraged through the

initiative, and through these behaviors promote more positive, longer-lasting relationships with their mentees, which should, in turn, promote stronger positive outcomes for youth.

The implementation evaluation focused on understanding how different the proposed enhancements were from the existing (i.e., the business-as-usual) program practices and whether these differences were big enough to lead us to expect that they might result in differences in match and youth outcomes. We also examined the extent to which the enhanced program practices were delivered as intended. Finally, we wanted to understand what it took for the programs to implement their planned programmatic enhancements.

The impact evaluation was designed to understand whether the programmatic enhancements had an impact on the intermediate and distal youth outcomes. We were also interested in understanding—based on the theory of change—what processes led to these outcomes, and whether mentor experiences could be shaped by exposure to the enhanced program practices.

Sources of data for the evaluation included program documents, mentor training rosters, notes from site visits, notes from staff focus groups, surveys of staff, and baseline and follow-up surveys of youth, parents, and mentors. Throughout the initiative, the research team took a collaborative approach to working with the program staff who supported data collection activities, to increase their capacity to participate in the evaluation and to ensure data quality.

Characteristics of Participants

In total, there were 2,165 youth enrolled into the evaluation. Just over half of the youth in the initiative were female. The average age was 12.4. Just under half (43%) of the participating youth were African American, 30% were white, and 29% were Hispanic/Latino. At baseline, the youth's parents reported on a wide range of environmental and individual risks. In terms of environmental risks, 85% of the responding parents reported that the youth had been recently exposed to family stress, while more than three quarters noted that their child faced economic adversity. Finally, slightly more than half the parents reported that their child was facing difficulties with peers. In terms of individual risks, about half of parents reported that their child was having academic struggles, while just under half reported that their child had mental health concerns, and about one-fifth reported that their child had exhibited problem behaviors.

About 57% of the mentors in the study were female. The mentors ranged in age from 18 to 77, with an average age of 32. Although most were white (63%), a substantial minority were African American (20%) or Hispanic (15%). A little less than two thirds of the mentors (61%) were single. Most mentors (81%) were employed, and 31% were students. Although most mentors (67%) had not mentored previously, most had at least some experience interacting with youth in other settings. About 33% also reported worked in a helping profession.

MEDP Implementation

The collaboration between researchers, practitioners, and the funding agency was key for the success of both the implementation of the enhancements and for the evaluation of the demonstration project. With regard to the implementation of MEDP, the collaboratives (and the agencies within the collaboratives) varied in how well they implemented their proposed enhancements. We identified three collaborative components that were associated with implementation quality: (a) the importance of leadership across the collaborative; (b) the organizing impact of a shared vision for the planned enhancements; and (c) the capacity of the collaborative to implement the programmatic enhancements consistently and with fidelity.

To what extent were the enhancements distinct from the business-as-usual (BAU) approaches of the agencies?

- On average, collaboratives developed more than four new enhanced practices.
- Enhancements to training included new in-person trainings and new online trainings.
- Enhanced match support practices included: (a) focused mentor support promoting teaching/advocacy in the mentoring relationships, (b) new targeted practices for the mentoring relationships, and (c) increased number/frequency of staff contacts with match participants. There were also, in some collaboratives, new practices designed to provide peer support for mentors. Finally, some of the collaboratives offered enhanced practices in the form of structured match activities.
- Some of the MEDP enhancements were entirely new program elements. In some cases, the collaboratives and programs added new structures and supports to deliver these enhancements. Other enhancements were adaptations to existing practices that the agency was already implementing to some extent in their BAU model.

What Did It Take to Implement the Mentoring Enhancements?

To what extent were the programmatic enhancements implemented?

- The collaboratives (and the agencies within the collaboratives) varied in the extent of implementation of their proposed enhancements. Not all proposed enhancements were implemented with fidelity to the designed practices.
- There were many program processes and capacities that supported or challenged the extent to which the collaboratives could implement the enhancements with fidelity.
- Some collaboratives achieved full implementation of the proposed enhancements—this included fidelity to their MEDP model and evidence that enhancements were

implemented *consistently* at all partnering sites. In contrast, in some individual sites within collaboratives that only partially implemented their enhancements, staff diverted from the agreed-on program model or employed additional strategies in efforts to more successfully implement the enhanced practices. These local innovations, however, also meant that not all mentors within their collaborative received the same enhancements.

How and why did implementation of the enhancements differ from the intended design?

- Some sites and collaboratives faced challenges developing the online platform that would be used to train the mentors, engage them in blogs, and provide them with access to resources.
- Some sites and collaboratives added different formats of delivery or reduced the frequency of required activities.
- Many programs experienced low attendance by mentors and low mentor engagement at enhancement activities.

There were several factors that we identified as challenges to the implementation to MEDP:

- Online training for mentors was generally less successful than in-person training.
- When EG mentors reported having attended in-person mentor support groups, they were generally pleased with their experiences and indicated feeling they benefitted from the interactions. Yet, attendance at such events was often rather low.
- Similarly, attendance at postmatch trainings was one of the biggest challenges reported by participating programs. An implication of the MEDP evaluation is that programs must give as much attention to getting mentors to participate in enhanced trainings as they give to the design and staffing of the training.
- The strength of leadership and commitment to MEDP was not uniform across all agencies, and this ultimately had implications for program delivery and data collection activities.
- A challenge across all programs was staff turnover and the communication gaps that occurred during staff transitions.

The implementation analyses pointed to several key implications regarding the implementation of MEDP:

- The development of the MEDP enhancements required extensive time and effort before sites were ready to implement their enhanced practices.

- Those collaboratives found to fully implement the planned enhancements were those that built the capacity of their staff to carry out the enhanced practices through professional development and targeted training. It was also crucial to have buy-in from all levels of staff.
- Enhancements should ideally build on existing practices—not practices that require “starting from scratch.”
- Service learning was implemented in few of the MEDP sites, yet those mentors who took part reported that their relationship benefitted from this experience.
- Overall differences in per capita costs between the EG and BG groups were small, with enhanced mentoring tending to be slightly more expensive. On average, sites devoted more staff time to supervising matches, offering postmatch trainings, and organizing activities and events for EG matches.
- Some of the more novel enhancements were ultimately deemed impractical to continue over the long-term. Those sites that reduced staff caseloads to boost match support found this structure to be beneficial in supporting stronger matches and better youth outcomes but indicated that they would not be able to continue this enhancement beyond MEDP without additional resources.

Most staff reported that MEDP led to key improvements in several areas that they might not have experienced if they had not taken part in the initiative. These improvements were key points of emphasis for MEDP: building collaborative partnerships with other similar agencies; providing enhanced match support; enhancing the relationship between staff and mentors; and, creating more effective mentoring relationships.

Participant Experiences with the Enhancements

To what extent did the participants experience the program enhancements?

- About two thirds of both EG and BG mentors reported in our mentor survey that they participated in prematch training. However, more than twice as many EG mentors (71%) as BG mentors (29%) reported that they attended a training *after* they started meeting with their mentees.
- Programs experimented with various delivery strategies for the training content, but these innovations did not necessarily increase the participation rate for the mentors.
- In our follow-up surveys, EG mentors reported being contacted by program staff significantly more frequently than BG mentors “to talk about how things were going with their mentee.” EG mentors also reported significantly longer conversations with

program staff than did BG mentors, with EG mentors reporting an average 50% longer conversations with staff than BG mentors.

- Significantly more EG mentors, relative to BG mentors, said that they had interacted with other mentors.

To what extent did mentors incorporate teaching and/or advocacy into their role?

- Mentors reported most frequently incorporating teaching functions than advocacy functions into their roles.
- EG mentors across the entire sample were significantly more likely than BG mentors to report that goals had been set for their mentee as part of their relationship (61% vs. 52%). Similarly, EG youth were more likely than BG youth to report that their mentor was trying to help them reach goals.
- In addition, EG mentors, on average, reported discussing progress toward these goals more often with program staff than did BG mentors. The content of EG mentors' discussions with their mentees also differed from those of BG mentors in some ways, suggesting a more planned approach to goal attainment among the EG matches.
- Mentors in both conditions reported that they knew what their mentee's sparks were and that they had helped them to develop their sparks. Yet, EG mentors were more likely than BG mentors to agree that their program assisted them in supporting the youth's spark development.

How did the mentors experience the enhancements?

- Most of the EG mentors that attended the enhanced training sessions found them helpful and used tips or pointers offered in these sessions.
- EG mentors reported significantly higher levels of agreement than did BG mentors to the statement: "Program staff have provided suggestions on what I can do with my mentee."
- Mentors who attended program-sponsored match activities with their mentees found these activities helpful in strengthening their relationships with their mentees. In this respect, there were no significant differences between EG and BG mentors.
- EG mentors rated interactions with other mentors as part of their enhancements (e.g., through in-person support groups, blogs, discussion groups/boards, blogs) as helpful.

Results from the Outcome Analyses

While not the first large-scale randomized controlled trial comparing a program enhancement with “mentoring as usual,” MEDP was unique in setting parameters and then giving programs the freedom to design and implement enhanced practices that were strategically focused on improving mentoring. We examined the effects of the MEDP intervention on 44 youth and match outcomes but found no statistically significant differences (positive or negative) between the EG and BG youth on any of the outcomes. The lack of significant differences may have been due to:

- For a variety of reasons, not every mentor randomized into the treatment group received the intended enhancements.
- Most participating programs likely already encouraged the adoption of teaching and advocacy behaviors by their mentors, and so it is likely that youth experienced teaching and advocacy functions in both groups.
- Given the nature of a mentoring intervention for youth aged 11-15, detecting measurable changes may require a longer follow-up window than 12 months.

Yet, mentors who received a higher dosage of the programmatic enhancements had stronger relationships with their mentees and yielded more positive outcomes in their mentees.

Analyses indicated that:

- The EG mentors were clearly more likely to have received the enhanced practices.
- We cannot rule out the possibility that the findings that the enhancements contributed to the adoption of the teaching and advocacy functions may be confounded with the motivation of those mentors that complied with the program requirements around the enhancements. Yet, these results may also suggest that for those mentors wanting to make a difference, the enhancements may offer a stronger likelihood for potential impact.
- The results showed that better outcomes across the various proximal, intermediate, and distal outcomes were more likely through the teaching functions than the advocacy functions.
- Among the enhancements, staff support around the teaching and advocacy functions appears to have the greatest influence on shaping the mentor behaviors.

We conducted exploratory moderator analyses and found:

- Among the mentors with a background as a helping professional, the youth working with an EG mentor had significantly better results for several outcomes, suggesting there may be a population of volunteers that are particularly well-suited to translate the

enhancements into the target mentor behaviors, increasing the likelihood for the desired outcomes for the mentees.

- When collaboratives include agencies from the same national affiliate organization (e.g., BBBS), we are less likely to find that BG mentors result in significantly worse outcomes from the EG mentors, but the structure of those more seasoned mentoring programs may help to ensure that the enhancements are implemented in such a way as to minimize negative outcomes for the participants.

Chapter 1. Introduction

Background

Formal youth mentoring programs can be effective in promoting positive development and preventing problem behaviors (Jekielek, Moore, & Hair, 2002). Mentoring has evidence of positive effects on young people across a wide variety of developmental domains, but meta-analyses synthesizing the results of many program evaluations have found that, on average, these effects are relatively modest (DuBois, Holloway, Valentine & Cooper, 2002; DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011). Program evaluations have similarly demonstrated that mentoring has positive, albeit modest, effects on outcomes associated with youth delinquency (Tolan, Henry, Schoeny, Lovegrove & Nichols, 2014).

The Office of Juvenile Justice and Delinquency Prevention (OJJDP) has a history of funding and supporting mentoring programs dating back to at least the early 90s, and since 2009, has deliberately focused on supporting mentoring research to advance the effectiveness of mentoring programs—for example, studies seeking to identify which practices would enhance the impact of mentoring. Reflecting this focus, researchers have tried to address this question. DuBois and colleagues’ 2011 meta-analysis investigated program factors associated with different levels of effectiveness. In their analysis, mentoring programs that matched mentors and mentees based on shared interests were found to have stronger effects than those that did not use this matching criterion (DuBois et al., 2011).

Another notable finding concerned the differential effects associated with particular mentoring role functions. Namely, stronger positive effects were observed for programs in which mentors were expected to serve in an advocacy role (e.g., connecting with teachers to discuss youth’s academic progress) or to serve as a teacher and source of information (e.g., helping the mentee to develop specific skills), relative to programs that did not support these roles. Consequently, the authors concluded that “judicious efforts to incorporate more systematic teaching or advocacy activities into the work that mentors do with youth could significantly enhance prospects for programs to achieve desired outcomes” (DuBois et al., 2011, p. 78). Although intriguing, the associations between program practices (i.e., matching on interests and teaching and advocacy role functions) and program effects were based on correlational analyses rather than rigorous tests of the effects of each practice.

OJJDP staff also recognized that there are limitations in understanding associations between program practices and positive effects, and gaps in knowing how best to help practitioners

implement these practices at a programmatic level. Consequently, in 2012, in consultation with the meta-analysis' lead author, David DuBois, OJJDP launched a rigorous randomized demonstration field experiment, the Mentoring Enhancement Demonstration Program (MEDP) and Evaluation to study two mentoring moderators in more detail: (1) the use of an "advocacy" role for mentors; and (2) the use of a teaching/information provision role for mentors.

The overall goal of the Mentoring Enhancement Demonstration Program was not only to develop program models that specified what advocacy and teaching look like in practice (to be able to help guide future OJJDP grantees and practitioners) but to understand more broadly whether encouraging the general practice of advocacy and teaching could improve outcomes. In other words, this initiative was not intended to be a traditional comparative effectiveness trial to understand whether a specific program model or curriculum was effective, but instead was designed as a demonstration approach to understand if and how a general strategy (i.e., encourage and support teaching and/or advocacy in programmatic mentoring relationships) could change local practice and influence youth outcomes. The MEDP evaluation was, thus, intended to rigorously and systematically assess both the overall effects of these practices (i.e., whether, on average, the enhanced models were more effective than "business-as-usual" programming) and the effects of specific approaches (i.e., whether some approaches and programs were more effective than others).

The American Institutes for Research (AIR) conducted a rigorous process and outcome evaluation of programs funded through OJJDP's 2012 MEDP solicitation. The evaluation was designed to rigorously assess the effectiveness of programs that agreed to develop and implement enhanced practices incorporating advocacy or teaching roles for mentors, including providing focused prematch and ongoing training to mentors, and providing ongoing support to help mentors carry out the targeted roles. Combining these elements was expected to strengthen outcomes for young people.

The MEDP funding opportunity solicitation defined *teaching and advocacy functions* as "those in which the mentor offers active guidance to the youth and seeks to facilitate the youth's relationships with peers and/or other supportive adults and to support engagement with appropriate activities and resources."¹ For the MEDP initiative, OJJDP awarded funding to 10 grantee partnerships, each consisting of three to four collaborating agencies that had preexisting youth mentoring programs. Each grantee partnership, referred to as a "collaborative," was

¹ See page 4 in solicitation:

<https://www.ojjdp.gov/grants/solicitations/FY2012/MentoringEnhancementDemonstrationProgram.pdf>

expected to develop its own program enhancements designed to encourage mentors to incorporate teaching and advocacy functions into their work with youth mentees.

The agencies were expected to propose and implement enhanced practices in three key ways: (1) matching youth and mentors based on needs, skills, experiences, and interests; (2) providing targeted initial and ongoing training for mentors; and (3) providing targeted ongoing mentor support. Focusing on these three areas of practice helped promote consistency across the approaches in program sites, for potential replication, and was a decision guided by previous research as described below.

1. *Mentor–mentee matching.* Instead of matching primarily on demographic characteristics (e.g., matching youth with mentors based on gender or ethnicity), which is a strategy commonly used by mentoring programs, the funding announcement called for the creation of mentoring relationships based on matching a youth’s needs and interests with a mentor’s experiences, skills, and interests. As we noted above, DuBois et al. (2011) found that matching based on interests was associated with stronger positive program effects. In other research, perceptions of similar interests have been linked with youth and mentor reports of relationship quality, the amount of contact between mentors and youth, and the mentor’s desire to continue the match (Ensher & Murphy, 1997; Madia & Lutz, 2004; Herrera, Sipe, McClanahan, Arbetron, & Pepper, 2000).
2. *Mentor training.* *Mentor training* was defined in the funding announcement as a structured opportunity for a mentor to enhance skills, knowledge, and abilities in serving as a mentor to, and in building relationships with, youth mentees. For the enhancement, the training was to focus primarily on building mentors’ skills and effectiveness in incorporating advocacy and/or teaching functions into their role. Research suggests that receipt of prematch training is positively associated with mentor reports of relationship quality (Herrera et al., 2000; Herrera, DuBois, & Grossman, 2013a), relationship closeness (Herrera et al., 2007; Herrera et al., 2013a), and relationship length (Herrera, et al., 2007; Garringer, McQuillin, & McDaniel, 2017; Herrera et al., 2013a; Kupersmidt, Stump, Stelter, & Rhodes, 2017). Postmatch training is also positively associated with mentor reports of relationship quality (Herrera et al., 2013a), relationship closeness (Herrera et al., 2007; Herrera et al., 2013a), and relationship length (Herrera, et al., 2007; Herrera et al., 2013a). Furthermore, programs that offer mentors ongoing postmatch training generally demonstrate stronger effects (DuBois et al., 2002).

3. *Ongoing mentor support.* The funding announcement identified ongoing mentor support as another practice for encouraging teaching and advocacy roles. Ongoing mentor support typically refers to the communication and guidance provided to mentors by program staff regarding, for example, match activities, plans, and successes and challenges. Research examining the benefits of mentor support has yielded mixed findings. Some studies report that more frequent communication between mentors and staff is linked with longer matches (Herrera et al., 2013a), more positive mentoring interactions (McClanahan, 1998), and stronger youth benefits (Herrera, Kauh, Cooney, Grossman, & McMaken, 2008). One recent study, however, found that a higher average frequency of mentor–supervisor contacts was associated with negative youth outcomes, perhaps suggesting that mentors in struggling relationships or dealing with more challenging youth issues sought out more advice from program staff (Bernstein, Dun Rappaport, Olsho, Hunt, & Levin, 2009).

MEDP, as a demonstration program, relied on the capacity of grantees to develop and implement new program enhancements, and called for a rigorous implementation, or process, study in addition to the impact evaluation. Guided by several key research questions, the evaluation team sought to provide a comprehensive assessment of the implementation of the programmatic enhancements. For example, how would the teaching and advocacy enhancements differ from standard practices? To what extent could grantees successfully implement changes to their existing services? In what ways would these changes affect mentor and youth experiences? Which enhancement strategies would be associated with more positive youth outcomes? What resources would be necessary for implementation of the enhancements with fidelity? And would these changes in practice be sustainable?

The impact evaluation would then focus on examining whether these programmatic changes would result in measurable differences in match and youth outcomes in a variety of areas, relative to what youth would have experienced had they received business-as-usual services. For example, do matches receiving enhanced programming last longer than those that do not receive such enhancements? Do they have a different focus or quality? And do youth ultimately make bigger gains than they would have otherwise in areas that past research suggests are key outcome areas for mentoring and/or have a strong theoretical link to a teaching or advocacy focus, for example, their knowledge about and access to community resources, development of interests and talents, academic performance, social competence, and emotional well-being?

Organization of the Report

In the next chapter we describe the MEDP initiative, and in chapter 3, we describe the evaluation of MEDP. In chapter 4 we lay out the methodology of the implementation and outcome evaluations. We also provide an overview of analyses that were conducted for the implementation, outcome, and cost analyses. We describe the participants in the study in chapter 5. This includes a focus on the youth, the mentors, and the matches for which data were collected for this evaluation. In chapter 6, we examine the first research question focusing on the extent to which the enhancements were implemented. In chapter 7, we discuss the findings from the analyses that addressed the second research question, which examined what it took for the participating programs to implement MEDP. In chapter 8, we take up the experiences of the mentors with the enhanced programmatic strategies. We then present the results from the outcome analyses in chapter 9. We conclude the report with chapter 10, with a discussion and conclusions based on the findings. We offer some potential next steps for upcoming analyses to close the report.

Chapter 2. The Mentoring Enhancement Demonstration Program

How is Mentoring Characterized for This Initiative?

Mentoring is an intervention that is defined and applied programmatically in a variety of ways for people of all ages. For the purposes of MEDP, the OJJDP solicitation set a specific scope of the type of mentoring and the population to be served under this initiative. Grants were awarded to agencies already providing youth mentoring program services. That is, while this demonstration program was focused on the development of enhanced practices, the agencies that delivered the mentoring already had a track record of providing youth mentoring services, and thus there was a well-defined business-as-usual model to serve as the comparison condition in the evaluation.

The OJJDP solicitation² defined an *established youth mentoring program site* as one in which the following characteristics had been in place for at least 3 years at the time of application and would continue during the MEDP initiative: The agency provided mentoring services to a defined population, operated in a particular geographic region, and used a specific mentoring model (i.e., one-on-one or group). In qualifying programs, all mentors had to be volunteers (i.e., not paid a regular stipend, wage, or salary for their time spent mentoring). The MEDP solicitation also recommended that the mentoring matches be structured to last for a minimum of 12 months. The target age group for youth served under MEDP was 12 to 14 years, although programs could include youth as young as 11 and as old as 15 at enrollment into the program. While many of the agencies participating in MEDP served youth as young as 6 or as old as 17, youth were only eligible for the initiative if they met the age criteria.³

Collaborative and Agency Characteristics

The MEDP initiative was intentionally broad in the types of collaboratives and programs funded. By involving a wide range of collaborative types in different geographic regions, serving different types of youth in a range of mentoring settings, the initiative provided an opportunity to understand what combination of these factors could provide the best conditions to support

² The solicitation is found at:

<https://www.ojjdp.gov/grants/solicitations/FY2012/MentoringEnhancementDemonstrationProgram.pdf>.

³ The practical implications of this requirement were that grant resources could not be used to serve youth outside the specified age range, and youth could only be enrolled in the evaluation if they met the age criteria.

programmatic enhancements. This section describes the initiative’s collaboratives and programs.

Prospective MEDP grantees had to submit a collaborative application demonstrating that there would be coordinated implementation of the same set of program enhancements in 3 to 5 separate established and qualified mentoring programs located within the same regional area. Ultimately, 10 grantees designated as collaboratives and representing a total of 30 program sites across 13 states,⁴ were funded to implement the MEDP initiative. More detailed information about the business-as-usual practices in the collaboratives is included below. A description of each collaborative and its partnering agencies is included in Appendix A.

The MEDP collaboratives varied widely in their geographical locations, their size and experience in mentoring, and the structure of their mentoring programs. Most of the collaboratives included three partnering programs operating within distinct organizations, but two collaboratives included four partnering programs and, in two other collaboratives, there were only two distinct organizations, with one organization operating two different mentoring programs.

Within three of the collaboratives, programs operated in rural geographical areas; nine programs operated in suburban areas; and all 10 operated at least partially in urban areas. In four collaboratives, the programs were in locations fairly close to one another, so getting staff together for meetings or sharing materials and trainings across partners was relatively easy. Other collaboratives were more spread out geographically—in two cases, involving programs based in more than one state—so in-person meetings and resource sharing were not as easy to arrange. Exhibit 1, below, provides a visual representation of the geographic distribution of the collaborative sites.

As shown in Exhibit 2, the types and structures of mentoring programs also varied across, and sometimes within, collaboratives. All 10 collaboratives included programs that provided one-on-one mentoring to youth participants, while three collaboratives also included programs that provided mentoring in a group setting (in all these programs, groups met in a school-based setting). All collaboratives included at least one community-based mentoring program, in which mentoring was provided by the mentor at a location of the match’s choosing, rather than at a given site or location. Three collaboratives included both community-based and school-based programs.

⁴ At the start of the initiative, there were 32 program sites, but two of the sites from the same collaborative experienced challenges in the implementation of the enhancements and/or the data collection activities, so it was determined in Year 3 of the project that they would not continue participation in the evaluation.

Exhibit 1. Geographic Distribution of the MEDP Collaborative Sites

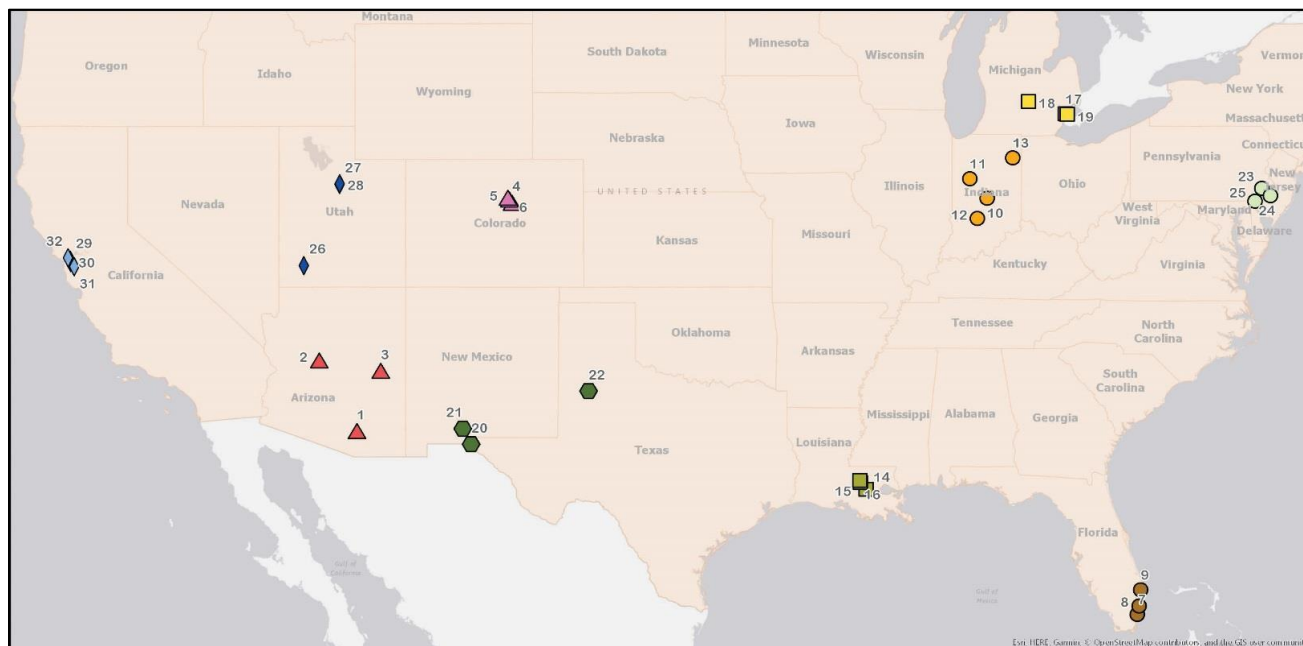


Exhibit 2. Characteristics of MEDP Collaboratives

Collaborative	Setting		Program format		Size of mentoring program (number of matches served annually)				Structure
	School based	Community based	One on one	Group	100 or fewer	101-400	401-1,000	More than 1,000	Mentoring is primary activity of all agencies
A	✓	✓	✓	✓		✓			
E	✓	✓	✓	✓	✓	✓			
F	✓	✓	✓		✓				
H	✓	✓	✓		✓	✓			✓
I		✓	✓			✓	✓	✓	✓
K		✓	✓				✓	✓	✓
L		✓	✓				✓	✓	✓

	Setting		Program format		Size of mentoring program (number of matches served annually)				Structure
R		✓	✓			✓	✓		✓
S		✓	✓	✓	✓				
Y		✓	✓			✓	✓		✓

Note: Each row identifies the characteristics of the collaborative, with check marks (✓) if one or more partner agencies within the collaborative met the criteria.

The 10 collaboratives were distinct in their composition and characteristics:

- National affiliation.** Six of the 10 collaboratives comprised agencies affiliated with Big Brothers Big Sisters of America. The other four collaboratives engaged a more diverse blend of agencies including collaboratives that were associated with the 4-H national organization, Goodwill Industries International, National Association of Police Athletic/Activities Leagues, and other local youth-serving agencies.
- Role of lead agency.** As part of the grant requirement, each collaborative had a lead agency, which for eight of the collaboratives, was also one of the implementing partners. Two collaboratives (E and R) had external partners that coordinated and supported grant activities but did not originally serve MEDP matches or implement enhancements as part of the initiative. However, one of these agencies (E5) ultimately stepped into the role of an implementing partner when a collaborating partner left the partnership and MEDP.
- Prior experience as partners.** When the MEDP solicitation was announced in 2012, only a few agencies (in Collaboratives I, K, R, and Y) had worked with their collaborating partners in the past; most had little or no experience working together.
- Geographical proximity among partners.** Five collaboratives enjoyed geographical proximity among the partnering agencies that facilitated in-person contact and/or sharing of resources (A, E, K, L, and S). Agencies within the other five collaboratives were more geographically dispersed and needed to be creative in how the partnering agencies came together. In two collaboratives (L and Y), the partnering agencies were in neighboring states.
- Mentoring location.** Six of the agencies operated programs that were school-based, in which mentoring occurred in school, during or after school hours; the other 24 agencies operated community-based programs, in which mentors met with youth at locations of

their choosing. Some of the collaboratives included only community-based programs, whereas others had a mix of school- and community-based partners.

- **Mentoring structure.** Three of the programs offered mentoring in a group context, in which one mentor met with a small group of youth, while 27 offered one-on-one mentoring, in which each mentor met with only one youth. There was not more than one group-mentoring program in any one collaborative; in those collaboratives, one group-mentoring program was partnered with two or three one-on-one mentoring programs.

These differences across collaboratives could have important implications for implementation and program quality. For example, fidelity of implementation may be stronger when all agencies in the collaborative are close in proximity, have worked together before, and use the same base program model. These factors may affect how often and seamlessly the partners communicate and the extent to which they can share strategies, which could affect the quality of supports offered at each partnering program and ultimately the quality of relationships that developed.

Program Enhancements Proposed by the Collaboratives

As part of MEDP, all the collaboratives proposed enhancements in the way they would train mentors for their roles, and in the way they would provide ongoing support to the mentors and in some cases, the matches. In addition, some collaboratives planned to provide opportunities for mentors to meet and interact with one another, and some proposed structured activities for the mentors and mentees to participate in together. We describe here what the collaboratives proposed to implement as part of MEDP. A discussion of the extent to which these enhancements were implemented will be presented in the findings in chapter 6.

Mentor Trainings

The proposed enhanced trainings varied in their content, format, frequency, and length (see Appendix B for a list of training topics offered):

- **Timing.** Four collaboratives (H, L, R, and Y) expected mentors to complete at least some of the enhancement trainings either right before their match started or in the early weeks of their match. In other collaboratives (I, K, and L), mentors were asked to complete enhancement trainings at a specific later point in the match, such as at 3 and 6 months after the start of the match. Three collaboratives (A, E, and S) offered the trainings at various points, asking mentors to attend as convenient. Where there were multiple topics featured in distinct trainings, some collaboratives expected the mentors in the treatment group to

participate in all the trainings—including when delivered in an online format—while other collaboratives asked mentors to participate in some portion of the multiple trainings (e.g., at least two of the five as the trainings were available).

- **Advocacy focus.** Seven collaboratives (F, H, I, K, L, S, and Y) focused their first training on the incorporation of advocacy functions into the mentor’s role. The other three (A, E, and R) focused on youth development in the first training and introduced advocacy in a later training. The enhanced trainings did not focus as deliberately on the incorporation of teaching functions into the mentoring role.
- **Format.** Seven of the 10 collaboratives (A, E, and L were the exceptions) proposed to conduct the first training in person, and most of the trainings were intended to be delivered to mentors in groups. In addition, five collaboratives (A, E, H, L, and R) developed online trainings or modules on a variety of topics that the mentors could complete on their own. Some of the online trainings featured quizzes to assess the mentors’ learning. The online format was intended to provide more flexibility for the volunteers to participate in the trainings when it was convenient for them. One collaborative (F) was already using an online training to orient its mentors to its national curriculum and continued using it with MEDP, while also enhancing the content.
- **Length.** Most in-person trainings were proposed to take up to 2 hours, although one collaborative (A) proposed a single 4-hour training. One collaborative conducted a 1.5-day mentor conference that was hosted off-site with various sessions for mentors to choose from. This format was intended to increase participation of the mentors who were college students. All online training modules were self-paced, and each was designed to be completed in less than an hour

Ongoing Match Support

Collaboratives proposed a variety of practices to provide ongoing support to their mentors. These practices varied depending, in part, on whether the agency was affiliated with BBBS.

Non-BBBS programs. Two of the four non-BBBS collaboratives (A and S) initiated one-on-one monthly calls with the mentors to monitor the match relationship and provide mentors guidance in teaching and advocacy. These were completely new practices at these sites.

BBBS programs. All BBBS agencies already had bimonthly phone contacts with mentors in their BG models, so as part of MEDP, they proposed to lead more focused conversations with the mentors to promote teaching and advocacy. One collaborative (L) proposed to contact both the youth and the parent monthly (in addition to contacting mentors) and added a 6-month mentee home visit with the mentor and staff. Another BBBS collaborative (R) proposed to

increase the frequency of their check-ins with mentors from every other month to monthly and, in addition, stipulated that the first 6 months of these meetings would be in person.

Match planning and goal setting

Although not an explicit component of the initiative, match planning (i.e., developing a “plan” to shape the direction, focus and/or activities of the mentoring relationship) and goal setting (i.e., developing focused goals for the mentee that the match would work on together) were featured heavily in collaboratives’ proposed enhancements as part of their efforts to support the development of strong, effective mentoring relationships.

Although goal setting was already encouraged in the BG model in many BBBS programs, the enhancements included a greater focus on working toward the creation of a match plan. Some collaboratives hosted workshops where matches (i.e., both the mentor and mentee together) learned about setting goals, while other collaboratives incorporated the development of goals into the match introduction meeting and provided ongoing focused support to mentors to support the attainment of these goals.

Five BBBS collaboratives (H, I, K, L, and Y) identified goal setting as an enhanced program practice. Teaching and advocacy functions were encouraged, and coaching took place during ongoing communications between program staff and mentors.

Two of these five collaboratives (H and Y) also developed a match plan and proposed that the plan and goal setting would be discussed in the first match meeting. As part of the match plan, the enhanced matches were asked to focus on two or three specific goals. While both collaboratives used the match support calls to monitor whether the mentor focused on the goals during interactions with the mentee and used the goals to discuss teaching and advocacy, one of these collaboratives (Y) also planned to review these goals quarterly with all parties involved in the match (i.e., mentor, youth, and parent). Two other BBBS collaboratives in this group (I and L) implemented a training with mentors and mentees timed around the third month of match meetings and used this training to help the match set a goal that would guide their interactions.

Two non-BBBS collaboratives (A and E) provided training to the mentors around goal setting, and one BBBS collaborative (R) provided training to the youth in the program, of which one component focused on teaching the youth to set goals and track their individual progress in achieving the goals.

In a related area, five collaboratives added components to their program around “sparks” development. Sparks are keen interests that youth enjoy and in which they invest time and

energy. Mentors in these programs were supported around helping youth to find their sparks and engaging in activities that fostered their growth.

Mentor support groups

In addition to providing enhanced one-on-one support to mentors, some collaboratives proposed opportunities for mentors to interact with one another using two different formats:

- **Online support groups.** Creation of web portals/mentor blogs was proposed by four of the 10 collaboratives (A, E, H, and R). The use of technology was intended to allow easy access to program resources and facilitate learning and support, among mentors as a peer support system. The use of technology to support mentor interaction and access to resources was a new practice for the programs in these collaboratives. Among these web portals, Collaborative R used a well-established portal (Ning). The other three collaboratives proposed to develop their own portals (A and E) or work with a contractor who would create the platform (H).
- **In-person support groups.** In-person mentor support groups were another commonly proposed format to support mentors to network with one another and learn from other mentors' experiences. Three of the 10 collaboratives (I, L, and Y) proposed adding this type of support for their mentors. One collaborative (F) initiated monthly Mentor Council meetings to facilitate teaching and advocacy in mentoring relationships, while also facilitating mentor input into program activities and interaction among mentors.

Focused Match Activities

Another strategy used by several collaboratives was engaging the matches in program-sponsored activities. The Collaborative F sites were already offering regular family events as part of their BG programming but, as part of MEDP, added mentors to these events.

Distinct from these unstructured social events and celebrations offered to matches and the families in some of the mentoring programs, five collaboratives (F, I, K, L, and Y) proposed structured group activities that would allow mentors and mentees to interact as part of an enhanced activity. These enhanced activities were structured to learn a skill (e.g., ice skating) or increase knowledge (e.g., tour a baseball stadium or airport control center). In all but one of these collaboratives—Collaborative K had a match activity that was a high-profile activity each youth attended once—the sites offered several activities over the course of the project. Collaborative F sites already offered many group activities to BG matches, but only matches in the intervention group were expected to work together on a structured project in which they were to demonstrate or teach others participating in the program.

In two of the collaboratives (I and R), matches were expected to complete two service learning activities. In Collaborative R, matches engaged in these activities on their own; in Collaborative I, service learning was part of a larger group activity. Finally, in four collaboratives (F, I, L, and Y), structured group activities were also open to families.

Chapter 3. The MEDP Evaluation

The evaluation of MEDP was designed to: (1) provide rigorous evidence about whether the enhancements improved youth outcomes and reduced risk for delinquency, and (2) describe the practice models and program characteristics associated with these improvements.⁵ This combined outcome and implementation analysis was guided by a theory of change, as shown in Exhibit 3.

The MEDP Theory of Change

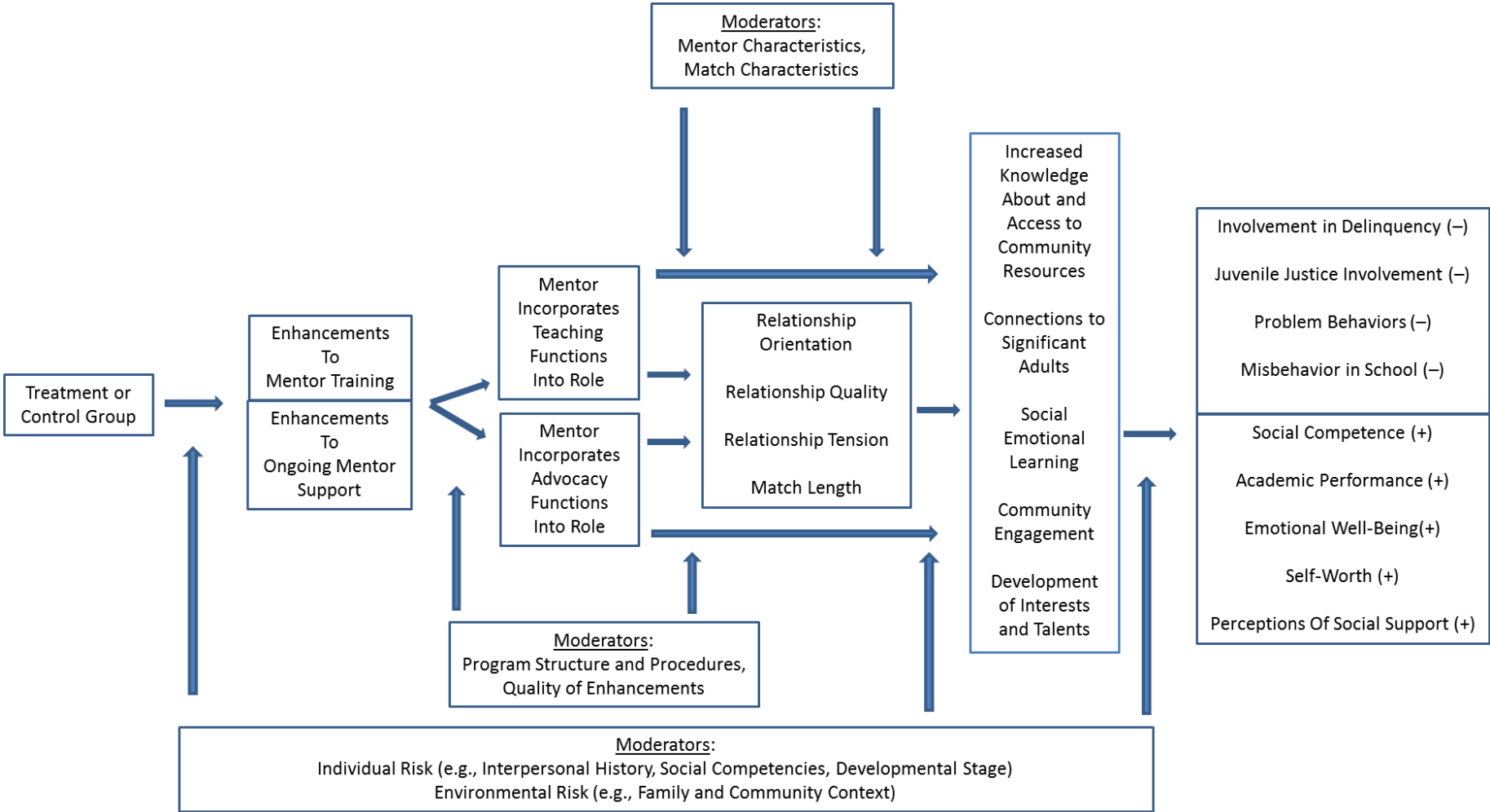
The theory of change supporting the MEDP evaluation is based on recent research and theory in mentoring as well as the broader field of youth development. The basic premise underlying the model is that mentors who are exposed to enhanced training and support should be more likely to engage with their mentees in the types of behaviors encouraged through the initiative, and through these behaviors promote more positive, longer-lasting relationships with their mentees, which should, in turn, promote stronger positive outcomes for youth.

Our theory of change begins with the assumption that mentors in the enhanced group should receive *more* training and support than their peers in the BAU group, and the *content* of that training and support should be more focused on teaching and advocacy. All participating collaboratives proposed to improve mentor training and match support, both in quantity and quality. Thus, if these program enhancements are implemented with fidelity, then the EG mentors should have more opportunities for exposure to training and support, and the guidance they receive should be higher quality, including a stronger focus on assuming a teaching or advocacy role with their mentees.

We posit that EG mentors who receive the targeted training and support will be more likely to engage in the behaviors encouraged through these enhancements. As noted, recent research supports the idea that the *amount* of both pre- and postmatch training is positively associated with relationship quality (Herrera et al., 2000, 2007, 2013a, 2013b) and duration (Garringer et al., 2017; Herrera et al., 2007, 2013a; Kupersmidt et al., 2017). *Quality* of training has also been linked with mentor plans to continue mentoring (McQuillin, Strait, & Saeki, 2015). More frequent communication between mentors and staff (i.e., support) has also been linked with longer matches (Herrera et al., 2013a), more positive mentoring interactions (McClanahan, 1998), and stronger youth benefits (Herrera et al., 2008). Although less is known

⁵ The analyses (as described in other parts of this document) will consider whether there are meaningful variations at the level of the individual program, or in groups of programs (i.e. collaboratives), or in groups of programs with similar practices.

Exhibit 3. MEDP Theory of Change



about whether specific *content* in training and support translates into mentor’s actual behavior with their mentees, we hypothesize that mentors who receive more ideas, resources and encouragement for teaching and advocacy will be more likely to engage in the promoted behaviors.

Teaching and advocacy behaviors are then posited to promote stronger and longer-lasting relationships. We hypothesize that these behaviors may help youth by directly supporting the development of our outcomes of interest. Teaching and advocacy behaviors also may foster these outcomes by affecting the quality and focus of the mentoring relationship—from both the youth and the mentor perspectives. For example, by exploring interest areas in which the mentor can support the youth’s development (teaching), the mentor may strengthen youth’s feelings of “youth-centeredness” or voice in the relationship (a key ingredient in successful mentoring relationships; see Morrow & Styles, 1995), the extent to which the relationship is focused on growth or goal achievement (another important contributor to successful relationships; see Karcher and Nakkula, 2010), and the youth’s overall feelings of satisfaction with the relationship. Stronger youth engagement and satisfaction could then be linked with higher levels of mentor satisfaction with, and perceived quality of, the relationship and stronger commitment to sustain the relationship—which, combined with higher engagement and enjoyment by youth could further contribute to longer lasting relationships (Rhodes, Schwartz, Willis, & Wu, 2017).

We also investigate how teaching or advocacy might have a negative effect on aspects of relationship quality. On the one hand, relationships with a very strong focus on goal achievement *without* youth voice could engender conflict. Youth also might perceive higher levels of criticism from the mentor or feel pressured to achieve goals. On the other hand, if the enhancements facilitate more youth voice in the relationship (as we hypothesize), these potential sources of tension could be diminished relative to what would be experienced in a BG match.

Based on the model, we next hypothesize that through stronger relationships youth in the enhanced condition will achieve greater program benefits. The relationships that develop between youth and their mentors are theorized to be the central route through which mentoring influences youth (Rhodes, 2005). The *quality* of the relationship is therefore thought to determine the extent to which mentoring affects youth’s lives. In fact, studies suggest that relationship quality is an important mediator through which youth benefit from mentoring (DuBois & Neville, 1997; Parra, DuBois, Neville, Pugh-Lilly, & Povinelli, 2002; Thomson & Zand, 2010; Zand et al., 2009; also see Bayer, Grossman, & DuBois, 2015). The duration of the

mentoring relationship is also important, with longer mentoring relationships predicting more favorable youth outcomes (Grossman & Rhodes, 2002; Grossman, Chan, Schwartz, & Rhodes, 2012).

We posit two “layers” of youth outcomes flowing from the youth’s involvement in a more positive, engaging, and growth-focused relationship, with intermediate outcomes leading to our final more distal outcomes. These intermediate outcomes and how they may be shaped by the mentor behaviors and the mentor-mentee relationship are described here, along with the anticipated associations with our final distal outcomes.

- 1) **Increased knowledge about and access to community resources:** A mentor trained and supported to serve as an advocate may be more inclined to recognize the areas in which a mentee is struggling and to connect the mentee and family with potentially helpful community services and resources. In this way, mentors may directly contribute to improvements in areas which we measured as outcomes in our study. For—for example, mentors could link youth to academic help, assistance with mental health concerns, or help to improve negative behaviors. Similarly, mentors may help youth and families obtain access to a variety of economic supports (e.g., food assistance), specialized services (e.g., legal aid), or enriching community resources (e.g., library).
- 2) **Perceptions that the volunteer is a “special adult” in the youth’s life:** Increased advocacy—for example, connecting with others of import to the child, advocating on the child’s behalf, or providing connections for the child to positive activities—and teaching behaviors that show an interest in and encouragement for activities of import to the child, could engender feelings that the mentor cares about and is generally supportive of the youth and increase the likelihood that the child sees the volunteer as an important and influential non-parental adult—i.e., a “mentor.” Youth with this type of a positive, significant relationship with a non-parental adult, in turn, experience positive outcomes in a wide range of areas including peer relationships and academics (Franco & Levitt, 1998; DuBois & Silverthorn, 2005).
- 3) **Improved social emotional learning (including problem solving, help-seeking skills and future orientation):** By fostering more positive, goal-focused relationships, mentors are posited to help youth to develop stronger problem-solving skills, to encourage youth to develop the ability to seek help when needed, to foster a more goal- or future-oriented focus in youth. These attributes are associated with more positive outcomes and less risky behavior in youth. Research finds, for example, negative associations between

future orientation and substance use (Robbins & Bryan, 2004); positive predictive associations between academic help-seeking behavior and academic achievement (Ryan & Shin, 2011); and links between problem-solving—particularly self-perceptions of social problem-solving skills—and mental health and well-being (D’Zurilla, Chang, Nottingham, & Faccini, 1998).

- 4) **Community engagement:** By engaging in more positive after-school and community activities, youth would gain a variety of social and academic skills and be more likely to avoid risky behaviors—links supported by a variety of studies (see Durlak, Weissberg, & Pachan, 2010).
- 5) **Helping youth develop interests and talents, or “sparks”:** Aspects of both teaching and advocating involve helping the youth to develop, foster and strengthen interests. Involvement in these kinds of “sparks” activities is associated with positive outcomes in a range of domains including academic, social, and well-being (Ben-Eliyahu, Rhodes, & Scales, 2014)—all of import in the MEDP evaluation.

The distal outcomes posited in the theory of change are based on previous research on youth mentoring programs. Based on prior research, we expected that mentoring might be associated with a lower likelihood for involvement in delinquent behaviors (DuBois et al., 2011; Tolan et al., 2014), involvement with the juvenile justice system (Tolan et al., 2014), reports of problem behaviors (Brezina, Kuperminc, & Tekin, 2016), and experiences with school misconduct (Reagan-Porras, 2013). Research evidence has also shown that mentoring can be associated with improvements in social competence, academic performance (Brezina et al., 2016; Rhodes, Reddy, Roffman, & Grossman, 2005), emotional well-being (Herrera et al., 2013a), self-worth (Rhodes et al., 2005), and social support (Herrera et al., 2013a).

In addition to testing these routes from program enhancements to youth outcomes, we also explored several moderators of program outcomes (i.e., factors that affect how these paths function and whether and how youth ultimately benefit from program involvement). We hypothesized that several sets of variables could affect the extent to which youth benefit:

- 1) **Youth characteristics:** Several youth characteristics and experiences could influence the extent to which they benefit from enhanced mentoring. For example, older youth may be more attracted to goal-focused interactions or settings that, some of which may fit better with their developmental needs (e.g., gaining work experience or specific academic skills; see Larose, Cyrenne, Garceau, Brodeur, & Tarabulsy, 2010). For this

reason, we hypothesize that older youth would benefit more from the more focused teaching and advocacy behaviors proposed as part of MEDP. We also hypothesize that youth with different “risk” experiences and backgrounds might differ in the extent to which they benefit from a teaching and advocacy focus. Namely, teaching and advocacy might be particularly effective when mentors are matched with youth who enter the program with specific challenges that could be addressed by the mentor through a more targeted focus (e.g., academic needs, mental health challenges, substance use).

- 2) **Mentor characteristics:** Very little work to date has explored how mentor characteristics affect youth outcomes, though studies hint that some characteristics may matter. For example, Herrera et al. (2008) found stronger benefits from participation in a school-based mentoring program for youth matched with adult mentors as opposed to high-school-aged mentors. DuBois et al. (2002) in their meta-analysis of 55 mentoring program evaluations found that programs utilizing mentors from a helping profession (e.g., teaching) yielded stronger impacts than programs not targeting this type of mentor. Mentor attitudes about youth also may shape outcomes (Karcher, Davidson, Rhodes, & Herrera, 2010). Because this is a relatively new area of inquiry, we did not have clear hypotheses about exactly which characteristics would play a role in shaping youth outcomes. However, we did hypothesize that mentors from a helping background might be able to implement the teaching and advocacy role to a greater degree than those without that background, leading to stronger youth outcomes in the enhanced group for youth matched with these mentors. We also hypothesize that mentors with a stronger “growth mindset” (i.e., the belief that people can change with effort; Dweck, 2006) might make more effort in implementing teaching and advocacy behaviors than mentors without this mindset, and thus be more effective at fostering targeted youth outcomes.
- 3) **Match characteristics:** The literature on how well mentors “match” the youth they are mentoring (e.g., share the same gender or ethnicity) is mixed in its findings (see Pryce, Kelly & Guidone, 2014). However, there is some indication that matching youth and mentors on interests may yield stronger program benefits (DuBois et al., 2011). In MEDP, interest-based matching and, similarly, matching the mentor’s skills to the youth’s area(s) of needs could be particularly important for mentors taking on a teaching or advocacy role, in that mentors who already have a given skill, talent or interest may be better able to support their mentee’s development in these areas.

- 4) **Program characteristics:** Several program-level features might interact with the enhancements to influence the effects for youth. In general, the programs participating in the MEDP initiative vary greatly on a wide range of characteristics including their size, their experience in mentoring, and practices in their BAU programs. This variability provides a unique opportunity to test which types of programs might be most conducive to yielding benefits through the types of enhancements supported by MEDP. Programs also differed in the specific enhancements they proposed and their approach to, and success with, implementing those enhancements. Because the MEDP evaluation is a comparative effectiveness trial (i.e., comparing youth impacts in the enhanced versus BAU groups), we hypothesize that we would see a bigger difference in impacts between the BAU and enhanced groups from those collaboratives that: (1) developed enhancements that were more distinct from their BAU programming; and (2) implemented those enhancements more successfully.

Research Questions

The MEDP evaluation involved both an implementation evaluation and an impact evaluation. The implementation evaluation focused on understanding how different the proposed enhancements were from the existing (i.e., the business-as-usual) program practices and whether these differences were big enough to lead us to expect that they might result in differences in match and youth outcomes. We also examined the extent to which the enhanced program practices were delivered as intended. Finally, we structured the evaluation to provide an understanding about what it took for the programs to implement their planned programmatic enhancements. Questions 1-3 below were the key research questions for the implementation evaluation.

The impact evaluation was designed to understand whether the programmatic enhancements had an impact on the intermediate and distal youth outcomes. We were also interested in understanding—based on the theory of change—what processes led to these outcomes, and whether mentor experiences could be shaped by exposure to the enhanced program practices. The specific research questions for the impact evaluation are identified in question 4 below.

Q1. To what extent were the enhancements implemented?

- 1a. To what extent were the enhancements distinct from the business-as-usual (BAU) approaches of the agencies?
- 1b. To what extent were the programmatic enhancements implemented?
- 1c. How and why did implementation of the enhancements differ from the intended design?

Q2. What did it take to implement the enhancements in mentoring programs?

- 2a. What factors affected the implementation of the enhancements within programs?
- 2b. What were the costs associated with implementing the enhancements?

Q3. Were the enhancements associated with participant experiences and behavior?

- 3a. To what extent did the participants experience the program enhancements?
- 3b. To what extent did mentors incorporate teaching and/or advocacy into their role?
- 3c. How did the mentors experience the enhancements (accessibility/usability)?

Q4. Did the enhancements have an impact on match and youth outcomes?

- 4a. Did youth who received enhanced mentoring show more positive outcomes, in contrast to those who did not?
- 4b. Did MEDP lead to reduced involvement in problem behaviors and lower likelihood for involvement in the juvenile justice system for those youth who received enhanced mentoring, in contrast to those who did not?
- 4c. What were the paths through which the enhancements had an impact on youth outcomes?
- 4d. Were the impacts moderated by mentor or program characteristics?

Design of Implementation Evaluation

Understanding and measuring implementation fidelity was important to know how and why MEDP enhancements worked, and the extent to which program and youth outcomes were influenced. Our investigation of the implementation of the initiative was guided by a conceptual framework from the field of implementation science.⁶ We measured adherence to intervention, quality of delivery, participant exposure, and participant responsiveness as the key components of implementation fidelity (Century, Rudnick, & Freeman, 2010; Dane & Schneider, 1998). We measured the processes that influenced implementation using an ecological framework (Goodman, 2000; Durlak & DuPre, 2008).

- **Adherence** refers to the degree to which an intervention is delivered as it was designed. This may include the **program adaptations**, or planned adjustments made to the intervention during program implementation. It may also include **program differentiation**, or unplanned changes made to the design (e.g., one staff adding a new component to the intervention that is not part of the design). The changes to the intended intervention design may make it difficult to identify if the outcomes were due to the intervention design or another component that was not part of the design. It may

⁶ Implementation science is the study of factors that influence the full and effective use of innovations in practice (NIRN, 2015).

also mean that not all participants receive the same intervention and it may weaken program outcomes.

- **Quality of delivery** defines the manner the intervention is delivered by individual staff or agencies. In the context of MEDP, we defined implementation quality as those aspects of program delivery that were not directly related to the implementation teaching/advocacy within a mentoring relationship but nevertheless influenced implementation capacity of agencies and staff (e.g., program structures and supports, staff training and support to deliver the intervention). We used an ecological framework to examine the complexity and facilitation of MEDP enhancements at the initiative, collaborative, and local level and how they influenced intervention delivery.
- **Participant exposure** is the extent to which participants receive the intervention. In the context of MEDP, participants exposure (dosage of intervention) is assessed in the amount of enhancements they participated in.
- **Participant responsiveness** refers to participants response to the intervention. To assess participant responsiveness, we examined mentor perceptions of the program practices (i.e. training, match support, match activities) they participated in. We also examined how the mentors applied enhancement-related learnings to their match relationships.

To examine implementation of the enhancements and investigate the processes that influenced the level of implementation, we employed a mixed-methods approach, collecting both qualitative and quantitative data at different periods in the project. Qualitative data was collected through the site visits we conducted to each agency and the open-ended responses shared in mentor surveys. We used survey data collected from the mentors and youth at follow-up and staff surveys collected Year 3 of MEDP implementation to analyze quantitative data. Our analysis of program adherence is presented in Chapter 6 and quality of delivery in Chapter 7. Our analysis of participant exposure and participant responsiveness is presented in Chapter 8.

Design of the Outcome Evaluation

The outcome evaluation was designed to compare the outcomes of youth in mentor–mentee relationships exposed to the program enhancements (the enhancement group, EG) with the outcomes for youth who received services as usual (the business-as-usual group, BG). A randomized controlled trial (RCT) with a pretest-posttest control group design was conducted to examine whether the changes collaboratives made to their practices, (i.e., the program

enhancements) yielded measurable benefits for youth participants, relative to what they would have received had they been offered business-as-usual services. The outcome evaluation was also designed to examine *how* and *under what conditions* the intervention influenced the outcomes.

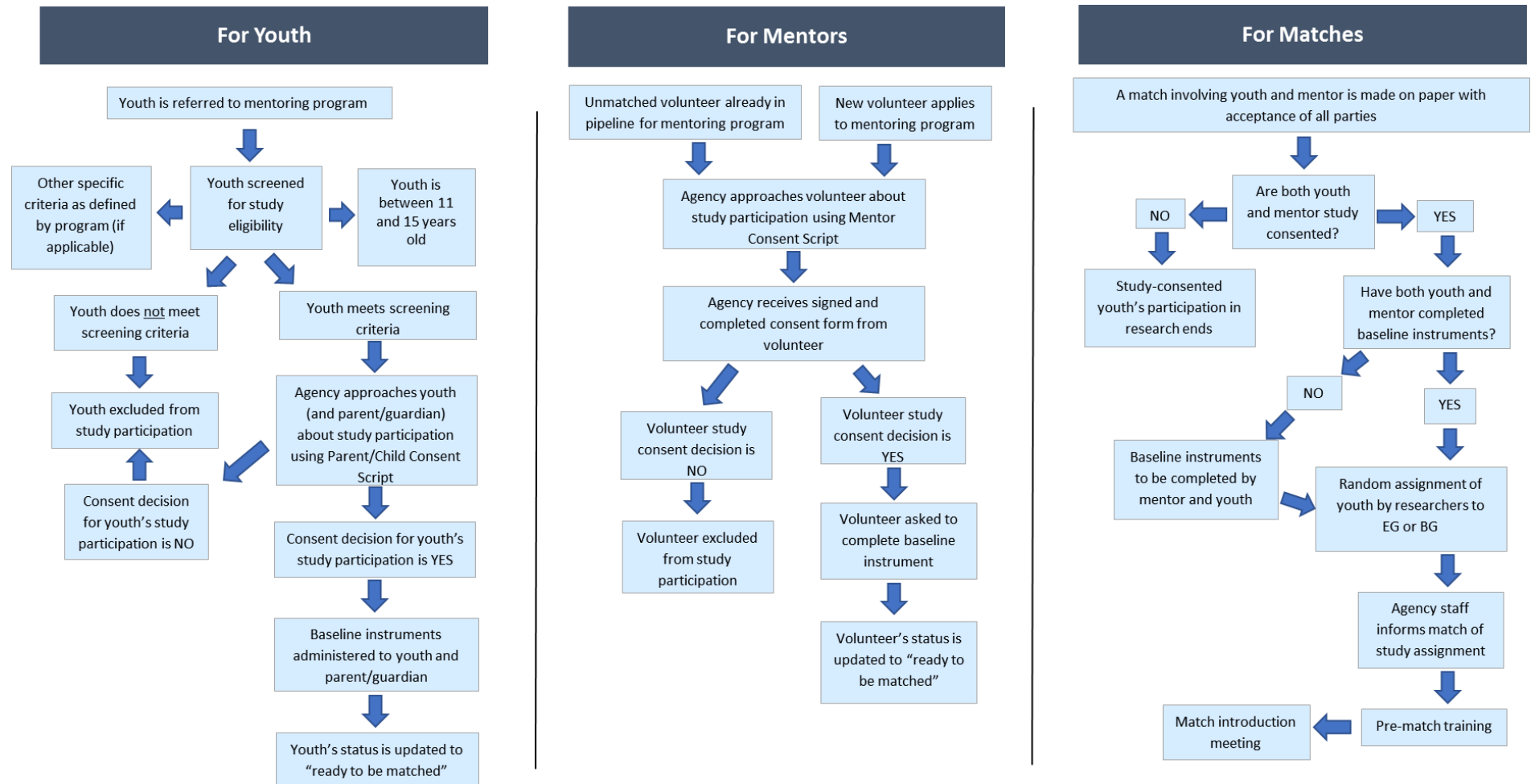
The design of MEDP and its evaluation set a target sample size of 75 mentored youth per program. Across the 30 programs, the goal was to enroll 2,250 youth. To rigorously determine the impact of offering program enhancements, we randomly assigned mentor–youth matches to the EG or BG condition. Random assignment took place at the point when a mentor and mentee had been matched, as we describe below. Programs understood that the enhancements were to be offered to the EG matches but not to the BG matches.

The research team established procedures for the participating programs to follow to screen, recruit, and enroll participants into the study.⁷ The process for enrolling youth in the study, depicted in the left panel in the diagram, involved screening a new program participant for study eligibility, approaching the parent/guardian of an eligible youth to obtain consent for study participation, and obtaining assent from the youth participant. Following receipt of written consent, the baseline survey assessment was administered to the youth and his or her parent or guardian, after which the youth was ready for matching with a mentor.

A similar procedure, depicted in the middle panel of this diagram, was followed for enrolling mentors into the study. All volunteers approved for program participation as mentors were considered eligible for study participation and were invited to provide written consent. Following consent, baseline surveys were administered to study mentors, at which point they were eligible to be matched. The procedure for randomizing matches between mentors and youth study participants is depicted in the right panel in the diagram. When a program proposed a new match (which was often referred to as a match “on paper”) involving either a youth or mentor already enrolled in the study, the consent status of both parties was determined. If only one member of the pair had consented, then the consenting person’s participation in the study ended at the time of matching. If both participants in the match had given consent for the study, and baseline assessments had been completed, then the youth was randomly assigned by the research team to either the EG or the BG condition.

⁷ Note that programs followed their preexisting procedures for screening and enrolling youth applicants.

Exhibit 4. Flow Chart for Cases Prior to Randomization



The researchers informed agency staff of the assignment, and staff, in turn, notified the match participants.⁸ Randomizing the youth after they were matched with a mentor had many advantages and addressed challenges we identified in conducting evaluability assessments at the start of the initiative (prior to the start of the evaluation). One advantage was that the programs could operate more closely to the model they would follow were they not being evaluated. That is, once a volunteer consented to participate in the study, there were no restrictions on which youth he or she could be matched with.⁹ The research team allowed programs to follow their existing process as often as possible to minimize threats to the external validity of the study.

As specified in the original funding solicitation, each program was asked to enroll 75 to 100 youth into the evaluation. If each program enrolled 75 youth, we estimated that we would have the statistical power to detect a minimum effect size of $ES=.18$ ($power=.8$; $\alpha=.05$) under reasonable assumptions of effect size variability.¹⁰ Achieving the enrollment targets was the responsibility of the lead organization of each of the 10 collaboratives, so that across three programs, there should be 225 youth enrolled. If there were four programs in the collaborative, there should be a total of 300 youth enrolled. Over the course of the evaluation, some of the collaboratives enrolled higher numbers of youth in one or more of the programs to compensate for another program in the collaborative that could not enroll 75 youth. Overall, the collaboratives were successful in meeting their target enrollment goals. The sample used for the outcome analyses included an average of 72 youth per program.

⁸ There were two exceptions to this randomization strategy. In Collaborative F, there were 13 schools across three counties that served youth study participants (each county is served by one of the three programs in this collaborative). Mentoring was a key component of afterschool programming. Because the youth participated in one afterschool club per school and the enhancements were tied closely to club activities, there was no way within any one club to effectively keep the EG matches separate from the BG matches. Consequently, the 13 schools were randomly assigned to implement either enhanced or business-as-usual mentoring. Volunteers were assigned to the schools based on criteria established by the program (but not randomly assigned) and then matched to youth within these schools. In Collaborative A, the group mentoring program served eight school classrooms. Programming took place in the classroom during the school day. To avoid contamination among the youth within each class, each classroom would either be assigned to the enhanced mentoring condition or the business-as-usual condition. The program did not have any influence over the assignment of students to classrooms and we could not randomize youth into BG or EG classrooms. Thus, classrooms were assigned as either EG or BG. Volunteers were assigned to the classrooms according to criteria established by the program (but not randomly assigned) and then matched to youth within that classroom.

⁹ Another advantage to this timing (i.e., after the match was made) was that the observation period began at the time of the match, so we expected to see less attrition between baseline and the start of the match than would have potentially happened under a model in which youth and mentors were each randomly assigned and then matched later, when an optimal match was identified. In addition, because the 12-month observation period began at the time of the match, youth had a greater likelihood of meeting with a mentor for 12 months prior to follow-up than they would have if they had needed to wait to be matched during the observation period.

¹⁰ The DuBois et al. (2011) meta-analysis found average effect sizes of $ES=.18$, with some as high as $ES=.40$.

Response Rates

In total, there were 2,165 youth enrolled into the evaluation. As there were sites that featured group mentoring, there were a somewhat smaller number of mentors enrolled into the evaluation, as shown in Exhibit 6. In addition, in three of the school-based sites it was determined that it would not be feasible to have parents participate in the baseline and follow-up surveys. Finally, a small number of parents elected to give consent for their children to participate in the study but chose not to participate themselves. The final sample size for parents is presented in Exhibit 5.

Because study participants typically completed the baseline surveys prior to being eligible for randomization, response rates for completion of the baseline instruments were high. The differences in baseline response rates from 100% reflect potential loss of surveys in the transfer of data from the agencies to AIR and differences in the random assignment process for some school-based programs (i.e., in sites where entire classrooms or schools were randomly assigned to condition, the research team could not screen each participant's study materials for completeness prior to random assignment).

Initially, AIR trained agency staff to administer the follow-up surveys to mentors, youth, and parents. Program staff struggled to get the surveys completed, particularly in cases where the mentor or family had left the program prior to follow-up. Midway through the study, AIR engaged a team of survey administrators who worked to locate and engage participants to complete the surveys. This strategy succeeded in increasing response rates for all participating collaboratives. The final response rates for each group for the 12- and 18-month surveys are presented in Exhibit 5.

Exhibit 5. Survey Response Rates

	Sample (pre/post)	Baseline	12 month follow up	18 month follow up
Youth	2165/2165	95.6%	73.8%	
Mentor	2023/2106	96.6%	75.6%	
Parent	1989/1989/1070	94.1%	71.1%	68.4%

Data Sources

To address each of the research questions, this evaluation involved an intensive data collection effort. In Exhibit 6, we map the various sources of data across each of the four key research questions.

Exhibit 6. Data Sources Mapped Against the MEDP Research Questions

MEDP evaluation questions	Data Source									
	Mentor training rosters	Program documents	Site visits	Staff focus groups	Staff survey	Program cost survey	Parent baseline and follow up survey	Youth baseline and follow up survey	Mentor baseline and follow up survey	Juvenile justice records
Q1. To what extent were the enhancements implemented?	✓	✓	✓						✓	
Q2. What did it take to implement the enhancements in mentoring programs?			✓	✓	✓	✓			✓	
Q3. Were the enhancements associated with mentor experiences?			✓	✓			✓	✓	✓	
Q4. Did the enhancements have an impact on match and youth outcomes?							✓	✓	✓	✓

Between December 2012 and January 2017, the MEDP evaluation team collected data from several sources for the process and outcome evaluation. In this section, we provide a brief description of each data source.

Surveys Administered to Participants

- **Mentor Baseline Survey.** This survey was completed by mentors at the time of enrollment into the study and captured data on the background of mentors, their experiences leading up to becoming mentors in the program, their level of confidence in taking on the mentoring role, and their experiences with the program's preparation for the match.
- **Mentor Follow-Up Survey 1 ("Post-training Survey").** This survey was completed by mentors following the training about the incorporation of advocacy and teaching functions into the mentoring role. Survey items gauged the mentor's experiences with the program's preparation for the match and assessments of the helpfulness of the mentor training.¹¹
- **Mentor Follow-Up Survey 2.** This survey was completed by mentors 12 months after the match began (for ongoing matches) or when the match ended (if prior to 12 months) and captured information on the mentoring relationship with the youth, the mentors' approach to mentoring, and the training and support provided by the mentoring program.
- **Youth Baseline Survey.** This survey was completed by youth prior to being matched and asked about how the youth felt about him or herself, the adults in the youth's life, the relationship with the youth's parent(s), and the youth's peers, as well as how things were going in school, involvement in prosocial activities, and involvement in problem behaviors.
- **Youth Follow-Up Survey.** This survey was completed by the youth 12 months after the start of their mentoring relationship¹² and assessed all the constructs included in the youth baseline survey in addition to the experiences of the youth in the mentoring program and in their most recent mentoring relationship.

¹¹ Data from this post-training survey are part of the archived data from this evaluation but were not used for the analyses presented in this report.

¹² If the mentoring relationship ended earlier, the youth may have been matched to a new mentor. The timing of the follow-up survey would still be 12 months after the start of the initial mentoring relationship.

- **Parent/Caregiver Baseline Survey.** This survey was completed by the parent or caregiver at study enrollment (prior to the beginning of the mentoring relationship) and included questions on the background of the youth and family, individual and environmental risk factors, perceptions of the need for assistance for the youth and awareness of appropriate resources, and the youth’s behavior in the 6 months prior to enrollment in the study in a variety of areas.
- **Parent/Caregiver Follow-Up Survey 1.** This survey was completed by the parent or caregiver at 12 months after the match initiation date for the first mentoring relationship and included questions on individual and environmental risk factors of the youth, characteristics of the youth’s behavior and experiences over the previous 6 months, and the experiences of the youth and parent in the mentoring program and in the most recent mentoring relationship.
- **Parent/Caregiver Follow-Up Survey 2.**¹³ This survey was completed by the parent or caregiver 6 months after completion of the first follow-up survey and captures information on youth outcomes and the experiences of the youth and parent in the mentoring program and in the most recent mentoring relationship. This survey was administered to parents in 20 of the 30 sites.¹⁴

Data Collected from Staff

- **Staff focus group.** Using a webinar platform, we conducted 10 focus groups with staff from each agency within the collaboratives, focusing on the experiences of the mentoring programs in conceptualizing and encouraging advocacy and teaching functions among mentors.
- **Staff surveys.** Staff in the programs (i.e., the site coordinator, staff who implemented the program “on the ground”, and in some cases, the grantee coordinator) were asked to complete a survey that examined their perceptions of the impact of the enhancements, their experiences in implementing the enhancements, and their intentions and aspirations related to the incorporation of the enhancements into the program’s business-as-usual model.¹⁵

¹³ As of the publication date for this technical report, the data from the 18-month follow-up parent survey had not yet been analyzed. Analysis of these data is planned.

¹⁴ We administered the 18-month survey in most of the sites. We did not seek to administer this later follow-up for 10 sites that did not appear to implement the enhanced practices with fidelity to their planned enhancements or were school-based sites that did not engage parents in follow-up surveys. We also did not seek to administer follow-up surveys for sites where it was difficult to secure the 12-month parent surveys.

¹⁵ A total of 109 staff members responded. With one exception, we received at least one response per agency, with a range of three to 20 responses per collaborative.

Program Records

- **Training rosters.** Programs provided rosters for all trainings they delivered to mentors.
- **Cost survey.** Toward the end of the data collection phase, we administered a survey to each participating agency focusing on the costs of implementing EG and BG mentoring.
- **REDCap database.** An online data storage and monitoring system was adapted to collect match information on all research participants, including tracking of all milestones for each match (i.e., match initiation date, match closure date, rematch date).
- **Juvenile justice records.** We worked with each program to secure records from their local juvenile justice agencies on official contact that each youth may have had prior to and during the 12-month mentoring match.
- **School records.** We examined academic performance across all sites by including questions about grades in the youth survey. As several of the agencies were operating in partnership with a local school, a small number of sites also elected to collect records on academic performance and attendance directly from the schools.¹⁶

Program Documents

We collected documents from the programs throughout the course of the evaluation. This included copies of forms and checklists developed by the collaboratives to support MEDP practices (e.g., match support checklist). In addition, grantees were required to submit to OJJDP continuation applications and progress reports outlining their enhancements at the end of each program year. These materials were also made available to the research team. At closeout of their OJJDP grants, each collaborative provided copies of all materials developed specifically developed for MEDP, including protocols and manuals. In addition, the research team, in collaboration with OJJDP staff, provided an assessment of how likely each program model was to achieve positive youth outcomes. Written materials from each collaborative were reviewed to answer a series of questions about the likelihood the planned enhancements would make a difference for the youth being served.

Site Visits

We made one formal site visit to each collaborative from November 2014 to April 2015 to learn about how the initiative was progressing and any challenges staff might be encountering. These site visits were coordinated so that the partnering sites within each collaborative were scheduled for visits within a 2- to 3-day time frame. During these visits, we conducted

¹⁶ At the time of the publication of this report, we have not yet cleaned and analyzed the data received from schools.

interviews with key MEDP staff, the MEDP coordinator, agency leadership, and the grantee coordinator. Semi-structured protocols were used for each interview that aligned with our process evaluation questions. We also conducted a focus group with mentors who were invited by agency staff and available to come to the site at the time of our site visit. The number of mentors in each focus groups varied from 1 to 13. Each interview and focus group lasted between 45 and 60 minutes. When possible, we observed trainings or program activities. Prior to each visit, the research team asked the grantee coordinator to identify documents that outlined MEDP activities, staffing structures, and meeting notes. These documents were reviewed prior to each site visit and used to prepare for the visits. A debriefing call with the collaborative sites and grantee coordinator followed 2 to 4 weeks after each site visit.

Researcher–Practitioner Collaboration Approach

The research team began the study using the grantee proposals to outline the proposed enhancements. The team also performed an evaluability assessment of each agency to assess its readiness for an experimental study, data collection capacity, and staffing structures. In addition, the research team administered a questionnaire to each site coordinator to assess each program’s existing supports to foster enhancement implementation. Findings from these assessments were used to identify training and technical assistance needs, and to tailor support based on distinct site needs.

Throughout the initiative, the research team took a collaborative approach to working with the program staff who supported data collection activities. The aim at each implementation site was to increase their capacity to participate in the evaluation and to ensure data quality. Our approach was characterized by several activities/features.

First, the research team instituted procedures to build relationships with participating programs and understand program operations and the contexts in which they were operating. The research team assigned a data manager and a senior researcher to each collaborative to oversee data collection within that collaborative. These researchers met with the programs weekly or biweekly to discuss any challenges they might have been having and make corrections when procedures weren’t going as planned.

Second, the research team provided focused training and technical assistance to participating programs. The results of our evaluability assessment suggested a variety of supports that would be needed by different programs to ensure they could be effective in implementing a high-quality study.

For example, the research team developed training materials and resources for staff to refer to as the study progressed and to use when training new staff. These materials included a data collection guide, videos, webinar recordings on how to obtain consent and administer surveys, a letter from OJJDP staff showing their involvement in the project, and sample data forms. In addition, the research team hosted nine webinars on a variety of topics to boost data collection capacity.

The research team developed 36 biweekly newsletters for the programs, sharing innovative practices implemented by participating programs, noting relevant resources and research findings, and charting the progress each collaborative was making toward the goal of enrolling 225 to 300 matches in the evaluation.

OJJDP staff also hosted an additional seven webinars to discuss both implementation challenges/successes and data collection tips. These webinars brought together the grantees, the research team, and OJJDP staff, and included “breakout rooms” to facilitate peer-to-peer learning among the staff across collaboratives. OJJDP staff also reached out to individual sites throughout the evaluation, which further encouraged programs to stay focused on reaching their enrollment targets.

Third, support for the evaluation sites around data collection activities was designed to be flexible, to adapt to site needs. The types of support that were needed fluctuated across and even within collaborating sites. The process used to administer surveys differed for school- and community-based programs, requiring different types of support (e.g., school administration is typically carried out in a group context at school, whereas community-based administration is almost always in a one-on-one context in the program office or the child’s home).

Although program staff were originally slated to collect all follow-up surveys from parents, youth, and mentors, this proved very difficult and time consuming, particularly when following up with matches that were no longer (or never) served by the program. The research team monitored response rates and agency strategies on a weekly basis to understand what types of help staff might need when surveying different families. Ultimately, especially in cases where response rates were very low, the research team took a more significant role in guiding staff efforts and eventually, for almost all agencies, took over data collection for follow-up surveys.

Chapter 4. Methodology

This section provides an overview of analyses that were conducted for the implementation, outcome, and cost analyses. A more detailed description of the analyses will be discussed in each specific section where the findings are discussed.

Qualitative Analyses for the Implementation Study

For our qualitative data collected from interviews, focus groups, and program documents, we used content analysis, an inductive approach to manage data through reduction, organization, and connection to uncover major themes and patterns within and across sources (Denzin & Lincoln, 2003; Dey, 1993; LeCompte, 2000). Several methods were used to increase the accuracy and trustworthiness of the qualitative analyses we performed, including developing an analysis plan guided by our evaluation questions, creating a written coding structure to analyze program enhancements, delivery processes, and factors that influenced delivery processes. We also used multiple data analysts to increase interrater reliability and conducted quality review of coding.

All interviews and focus groups from site visits were recorded with the permission of participants and used to clean up interviewer notes. These notes were triangulated with relevant program documents (e.g., manuals for enhanced trainings, program descriptions of MEDP enhancements) and used to develop a comprehensive narrative description of program characteristics and practices related to the implementation of MEDP enhancements. These narrative descriptions were written at the collaborative level, our unit of analysis used in this study. These narratives were systematically and purposefully structured to answer our process evaluation questions. These summaries were then coded in NVivo 9, a qualitative software program to synthesize MEDP enhancements, implementation fidelity and processes, supports and challenges to intervention delivery. Where needed, individual interview and focus group notes were incorporated into our analyses to fill in the gaps and enhance analyses. The key components of implementation fidelity and the framework to analyze implementation processes were informed by implementation science (Durlak & DuPre, 2008; Fixsen, Naoom, Blasé, Friedman, Wallace, 2005; Goodman, 2000).

Data were then analyzed to make comparisons across collaboratives, identify factors that differed across collaboratives, and unique characteristics. Key findings were summarized for reporting and quotes were pulled to provide clarifying/supporting examples.

The staff focus groups were similarly coded, using a priori codes in NVivo 9. The coding structure was discussed with the coder before initial coding, to ensure a common understanding of the codes being used. During the coding process, inductive codes were also added in consultation with the senior design team to capture the wide variety of responses, all of which were open-ended. During the analysis phase, the team looked for emerging patterns, themes, and categories from the interviews and document review for each evaluation construct.

Quantitative Analyses for the Implementation Study

To capture mentors' and staff experiences, survey data from mentors and staff were also used. All data were cleaned and managed by a data coordinator, and quality assurance mechanisms were applied to check for completeness and quality.

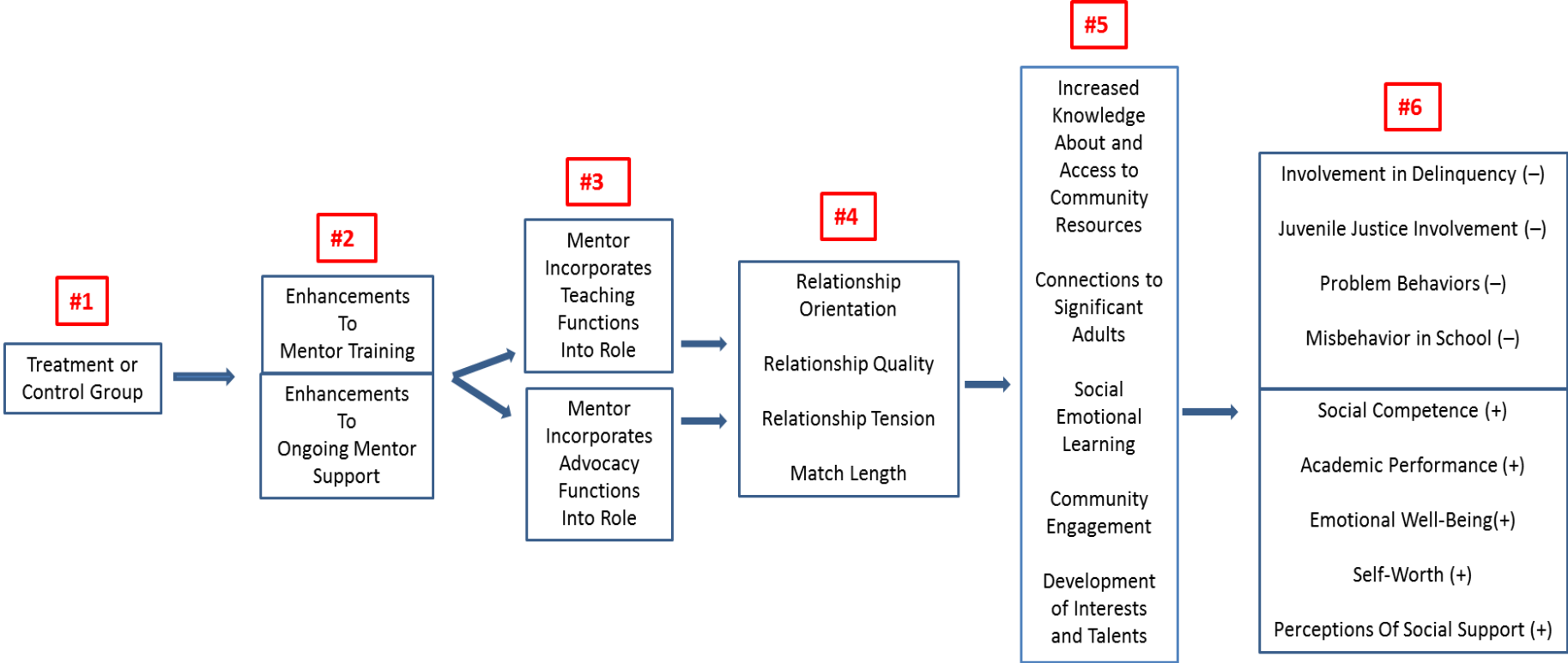
Analyses for the Outcome Study

Our outcome study focused on whether and to what extent the MEDP intervention had an impact on the youth who participated in mentoring relationships assigned to receive the enhancements, relative to those assigned to receive business-as-usual services. In this section, we introduce the variables that we examined in addressing this issue. To organize the discussion of the measures, we offer an annotated version of a segment of our theory of change model. As shown in Exhibit 7, the outcome analyses focused on outcomes that appear in the diagram in Box 4 (the proximal outcomes), Box 5 (the intermediate outcomes) and Box 6 (the distal outcomes).

In addition, we also examined whether exposure to the enhancements (Box 2) had an impact on the practices of mentors (Box 3) and whether these mentor practices affected the outcomes in boxes 4-6. The diagram shown in Exhibit 7 is annotated with numbers for ease of description of the six different segments of the model. Before we describe our analyses, we provide a list and description of each of the key variables from Boxes 2-6.

For Boxes 2 through 4—we also describe additional scales referred to in the implementation study. These sets of items were not included in our path analyses because they were either relevant to only a subset of agencies (e.g., activities around sparks development) or were exploratory and not central to our core questions (e.g., the extent to which youth developed relationships with program staff). Single items used in the implementation study are not described here and instead are described in the text within each relevant section of the findings presented in chapters 7 and 8.

Exhibit 7. Excerpt from Theory of Change Being Tested in Path Analyses



Box 2. Enhanced Programmatic Practices

There are four measures of the programmatic enhancements that we included in our quantitative analyses.

Number of hours of enhancement training: The programs provided rosters to document which of the EG mentors attended each of the enhancement trainings. With information on how long each training lasted, we calculated a total number of hours in training for each mentor. For a small number of sites, we had only partial information on training rosters. For those sites, we supplemented these data with information from the mentor follow-up surveys that addressed whether the mentors attended each of the trainings and how many hours of training they participated in.

Match support on advocacy and teaching role: Mentors were asked in their follow-up survey to indicate how often they talked with staff (e.g., during training or support calls) about taking on a “teaching or guidance role” and/or taking on an “advocacy role” in their relationship with their mentee. If the mentors reported spending any time talking about these topics with staff, they were coded 1 on this variable. Otherwise they were coded 0.

Match support around teaching/advocacy functions: On their follow-up survey, mentors were asked seven questions about whether program staff were clear about wanting the mentor to strengthen the mentee’s connections with others or help the mentee to strengthen his/her skills, behaviors, interests or talents. Mentors were asked if staff provided pointers and ideas about how to strengthen mentee’s connections with others, how to help the mentee learn new skills, activities to do with the mentee to strengthen his/her relationships with others, activities to do with the mentee to strengthen his/her skills, behaviors, interests or talents, and how to support the development of mentee’s special interests or talents. Responses to these questions were combined in a scale reflecting the quality of targeted mentor support by program staff around the teaching and advocacy functions.

Number of mentor support activities: The programs provided rosters documenting the participation of the EG mentors in activities that were designed to increase the support mentors had from their peers (i.e., other EG mentors) and staff around the teaching and advocacy functions. This measure provides a count of the number of such activities in which each mentor participated. For a small number of sites, we had only partial information on training rosters. For those sites, we supplemented these data with information from the mentor follow-up survey that addressed whether the mentors attended each of the support activities.

Quality of youth’s relationship with program staff (*implementation only*): We asked youth to rate the extent to which they agreed with five items assessing their relationship with “the

people who work at the program to support your relationship with your mentor.” Youth were asked the extent to which the following statements were true: “There is someone at my mentoring program, other than my mentor who....(1) “I feel close to”; (2) “I feel comfortable talking with”; (3) “I talk to regularly about how things are going with my mentor”; (4) “I could talk to if I had a problem at school or at home”, (5) “I could talk to if I had a problem with my mentor.”

Box 3. Mentor Practices

Moving to Box 3, we used four measures in our path analyses to capture the extent to which the mentors incorporated teaching and advocacy functions into their role.

Teaching Functions: A scale was constructed combining responses by mentors on the follow-up survey to a series of 15 items asking how often they had engaged in several teaching-related tasks with, or on behalf of, their mentee. The specific tasks consisted of: explaining how to do a task; modeling how to do a task; breaking down a task into smaller steps; structuring a task so that the mentee could accomplish it; joining in to do a new or challenging task alongside the mentee; providing the mentee with instructional materials on how to do a task; letting the mentee figure out how to do a task by trial and error; encouraging the mentee to do a task independently; introducing the mentee to new situations and settings; doing research or studying something together; working on a project together; quizzing the mentee about facts/knowledge (e.g., for school or fun); creating/playing games with the mentee to make learning fun; practicing something (e.g., hobby, sport) alongside the mentee; and sharing stories about lessons learned through experience. This scale provided an indication of the extent to which the mentors incorporated teaching functions into their role.

Advocacy Functions: A scale was constructed combining responses by mentors on their follow-up surveys to a series of 18 items asking how often they had engaged in several advocacy-related tasks with, or on behalf of their mentee. The specific tasks consisted of: meeting with teachers or other professionals on behalf of the mentee; speaking up for the mentee when he/she gets in trouble; talking with other adults to make sure the mentee is treated fairly at school or in the community; attending school functions or other events to support the mentee (e.g., games, recitals, concerts); talking to the mentee’s peers on the mentee’s behalf; connecting the mentee with someone who could teach him/her a skill or provide guidance; introducing the mentee to interesting or influential adults in the community; including the mentee’s friends in activities; serving as a reference for the mentee (e.g., for job/college applications, internships); helping the mentee gain work experience, learn about job opportunities, or get a job; finding and sharing information that could help the mentee (e.g., tips on health, how to apply for jobs); identifying opportunities or resources in the community for the mentee's family; letting program staff know about the needs of the mentee or his/her

family; helping to enroll the mentee in afterschool activities, lessons, or sports; introducing the mentee to school or community services and resources; getting free or discounted items or opportunities for the mentee; and helping the mentee to access public programs or services. This scale provided an indication of the extent to which the mentors incorporated advocacy functions into their role.

Expanding Connections: The mentor follow-up survey asked mentors to what extent they focused on the following in their meetings or discussions with the mentee: exploring or developing the mentee's skills or talents; strengthening the mentee's relationships with peers; strengthening the mentee's relationships with adults; expanding the mentee's social network; improving the mentee's social skills; helping the mentee learn how to seek help from others; and developing the mentee's character. These items were combined into an index reflecting how often mentors focused their interactions with the mentee on expanding the mentee's connections with others and sharpening their skills and talents.

Time Doing Things for Mentee or Mentee's Family: as one additional indication of the incorporation of advocacy functions into their role, we are using a single item that captures the amount of time that mentors reported doing things on behalf of the mentee or the mentee's family when the mentor was not with the mentee.

Sparks Development (*implementation only*): Three two-item scales (in addition to two single items) were used to measure the mentor's support of the child's development of sparks (interests or passions). The three scales assessed:

- 1) **The mentor's awareness of and help in fostering the youth's sparks (mentor report; alpha baseline =N/A; alpha follow up =.69):** This scale included the following questions: I know what my mentee's interests, passions or "sparks" are; I have tried to help my mentee develop his/her sparks; My program has helped me develop/support my mentee's sparks.
- 2) **Involvement of the parent in the mentor's efforts (mentor report; alpha baseline =N/A; alpha follow up =.73):** This scale included the following questions: I have discussed these sparks with my mentee's parent or guardian; My mentee's parents have helped me develop/support my mentee's sparks.
- 3) **The mentor's identification and use of community resources to support the youth's sparks (mentor report; alpha baseline =N/A; alpha follow up =.76):** This scale included the following questions: I can identify community resources that can help develop my mentee's spark; I have connected my mentee to at least one resource in his/her community or school to help develop his/her spark.

Box 4. Proximal Outcomes

We identified five families of outcome measures within the proximal outcomes indicated in Box 4 in the theory of change diagram. Here we provide a description of each of the individual measures within each family—all of which were collected at follow-up. In Appendix E, we provide more details on the distribution for each variable, and the preparation of each measure for inclusion in the analyses.

1. Mentoring Relationship Orientation [3 measures]
 - a. **Growth Focus (youth report; alpha baseline = N/A, follow up = .89; DuBois & Keller, 2017):** This 6-item measure reflects the extent to which the youth feels they are engaging in activities with their mentor that help them set goals and grow. Response options range from 1 = Not at All True to 4 = Very True. Sample items include: My mentor and I spend time working on how I can improve as a person; My mentor helps me to set and reach goals; and, Learning new things is an important part of our relationship. Scores for each item were averaged to create a mean, with higher scores indicating a greater emphasis on personal growth of the youth.
 - b. **Support Seeking (mentor report; alpha baseline= N/A, follow up= .94; Karcher, Nakkula, & Harris, 2005):** This 4-item measure indicates the extent to which the mentors perceive that the youth talk to them when they are upset about their circumstances and relationships. Response options range from 1=Strongly Agree to 5 =Strongly Disagree. Sample items include: My mentee talks with me when he/she is upset about family matters; My mentee talks with me when he/she is upset about school; and My mentee talks with me when he/she is upset about peer relationships. Scores for each item were averaged to create a mean, with higher scores indicating a greater willingness of the youth to talk to the mentors about such concerns.
 - c. **Youth- Centered (youth report; alpha base line=N/A, follow up= .90; Jucovy, 2002):** This six-item measure reflects the extent to which the youth felt their input was considered in deciding what to do during mentoring meetings. Response options range from 1 = Not at All True to 4= Very True. Sample items include: My mentor almost always asks me what I want to do; My mentor is always interested in what I want to do; and, My mentor and I do things I really want to do. Scores for each item were averaged to create a mean, with higher scores indicating more of a youth-centered focus in decisions about how to spend time together.
2. Mentoring Relationship Quality (mentor report) [3 measures]
 - a. **Commitment (mentor report; alpha base line=N/A, follow up= .91; DuBois & Keller, 2017):** This four-item measure reflects the mentor’s level of commitment to sustaining the mentoring relationship. Response options range from 1= Strongly disagree to 5= Strongly Agree. Sample items include: I am determined to make my

- relationship with my mentee successful; I want my relationship with my mentee to last for a long time; and, I want to make my relationship with my mentee work even when times get rough. Scores for each item were averaged to create a mean, with higher scores indicating more of a commitment to making the relationship work.
- b. **Satisfaction (mentor report; alpha base line=N/A, follow up=.91; DuBois & Keller, 2017):** This five-item measure reflects the mentor’s level of satisfaction with the mentoring relationship. Response options range from 1=Strongly Disagree to 5=Strongly Agree. Sample items include: My relationship with my mentee is an important source of fun and companionship in my life; I feel satisfied with my relationship with my mentee; and, My relationship with my mentee gives me the feeling I am doing something valuable with my time. Scores for each item were averaged to create a mean, with higher scores indicating a greater sense of satisfaction with the relationship.
 - c. **Mentor Assessment of Closeness (mentor report):** To capture the extent to which the mentor felt “close” to the mentee, we used the response by mentors to a single question from the follow-up survey: To what extent do you agree or disagree with the following... I feel close with my mentee. Response options range from 1= Strongly Disagree to 5= Strongly Agree.
 - d. **Challenges:** We asked mentors to rate each of 12 potential challenges on a 4-point scale from 1=Not At All Challenging to 4=Very Challenging. Their reports fell into three broad groups:
 - i. **The mentee’s or family’s high level of need (mentor report; alpha baseline =N/A; alpha follow up =.61; implementation only):** Sample items include: Managing my mentee’s behavioral issues; My mentee’s family asking me for too much help; Finding resources for my mentee or his/her family in the community.
 - ii. **Logistical efforts to get together and the family’s support of the match (mentor report; alpha baseline =N/A; alpha follow up =.70; implementation only):** Sample items include: Getting together with my mentee; Getting support from my mentee’s family in fostering our relationship; My mentee’s preparation for our meetings.
 - iii. **Connecting with the child on an interpersonal level (mentor report; alpha baseline =N/A; alpha follow up =.87; implementation only):** Sample items include: Having conversations with my mentee; Differences in our interests or personalities; Figuring out what my mentee’s needs and interests are.

3. (Positive) Mentoring Relationship Quality (Youth Report) [3 measures]
 - a. **Youth Assessment of Closeness (youth report):** This single item is an indicator about how the youth characterized their feelings of closeness to their mentors. Youth were asked to report: “How close do you feel to your mentor?” Response options range from 1=Not Close At All to 4=Very Close.
 - b. **Mentor as a Special Adult (youth report; Herrera, Grossman, Kauh, & McMaken, 2011):** This single item reflects whether the youth’s mentor is an example of a special adult in that youth’s life. Youth were asked if they had a special adult in their life. Youth were told, “A special adult is someone who really cares about what happens to you.; someone: (a) who you look up to and encourages you to do your best, (b) who influences what you do and the choices you make, and (c) who you can talk to about personal problems.” Youth who responded that they did have a special adult were then asked, “Who is this special adult?” and could indicate which of a set of 11 adults filled this role. Youth who responded by indicating that one of their special adults was “an adult mentor” were scored with a 1 on this measure; those not indicating that an adult mentor was a special adult were scored with a 0.
 - c. **Relational Health (RHI) (youth report; alpha base line=N/A, follow up=.87; Liang, Tracy, Kenny, Brogan, & Gatha, 2010):** This six-item measure reflects several characteristics of mentoring relationships focused on growth. Response options range from 1= Not at All True to 4=Very True. Sample items include: My mentor helps me to get to know myself better; My mentor helps me even more than I ask for or expected; and, My mentor tries hard to understand my feelings and goals about school, my life or whatever is important to me. Scores for each item were averaged to create a mean, with higher scores indicating a greater growth focus in the mentoring relationship.
4. (Negative) Relationship Tension (Youth Report) [3 measures]
 - a. **Criticism (youth report; alpha baseline=N/A; alpha follow up=.70; Furman & Buhrmester, 2009):** This three-item measure indicates the extent to which the youth feels that their mentor criticizes them. Response options range from 1=Not At All True to 4=Very True. Items include: My mentor points out my faults or puts me down; My mentor says mean or harsh things to me; and, My mentor criticizes me. Scores for each item were averaged to create a mean, with higher scores indicating a greater sense that the youth feel criticized by their mentors.
 - b. **Conflict (youth report; alpha baseline=N/A; alpha follow up=.63; Furman & Buhrmester, 2009):** This three-item measure reflects the amount of conflict youth experience with their mentors. Response options range from 1=Not At All True to 4=Very True. Items include: My mentor and I disagree and quarrel (have upsetting arguments); My mentor and I argue with each other; and, My mentor and I get upset with or mad at each other. Scores for each item were averaged to create a mean,

- with higher scores indicating a greater perception of conflict in the relationship.
- c. **Pressure (youth report; alpha baseline=N/A; alpha follow up=.62; developed for MEDP):** This three-item measure indicates the extent to which youth report feeling pushed or pressured by the mentors. Response options range from 1=Not At All True to 4=Very True. Items include: I wish my mentor wouldn't always try to teach me things; My mentor is always trying to make me learn things I'm not interested in; and, My mentor expects too much from me sometimes. Scores for each item were averaged to create a mean, with higher scores indicating a stronger feeling of pressure by the mentors.
5. Match Length [1 measure¹⁷]
- a. **Program Records of Match Length:** Match length was created by calculating the number of days between the program-reported match initiation date and the program-reported match closure date. This variable was supplemented with data from mentor reports of the last day they met with youth, if we did not receive information on the match closure date from the program. The match length variable is censored to the last date that we received information from the sites if the match was still open at that time.
 - b. **Dosage:** When match length was included as an intervening variable in the path analyses, we calculated a measure of match dosage that represented the length of the match between the match initiation date and the date of the follow-up youth survey.

In addition, we developed two scales about the parent's experiences from parent responses in our parent survey. Both were used only in the implementation study:

- 1) **Parent reported satisfaction (parent report; alpha baseline =N/A; alpha follow up =.94; implementation only):** This six-item measure reflects the parent's level of satisfaction with the mentoring relationship. Response options range from 1=Strongly Disagree to 4=Strongly Agree. Sample items include: I am satisfied with the mentor that was chosen for my child; My child enjoys his/her mentoring relationship.
- 2) **Parent reports of mentor's provision of help to the family (parent report; alpha baseline =N/A; alpha follow up =.93; implementation only):** This four-item measure reflects the parent's level of satisfaction with the help provided to the family by the mentor. Response options range from 1=Strongly Disagree to 4=Strongly Agree. Sample items include: My child's mentor has helped me learn new things about my child; My

¹⁷ For the outcome analyses, we included one measure of match length based on program reports. For the path analyses, though, match length was an intervening variable in the model and so we calculated a measure of match dosage that only captured the period from match initiation to the follow-up survey of the youth.

child's mentor has helped my family deal with unexpected problems.

Box 5. Intermediate Outcomes

We identified five families of outcome measures within the intermediate outcomes indicated in Box 5 in the theory of change diagram. Here we describe the measures within each family. In Appendix E, we provide more details on the distribution of each variable, and the preparation of each measure for inclusion in the analyses.

1. Increased Knowledge about and Access to Community Resources [2 measures]

a. **Youth Now Receiving Services Needed but not Received at Baseline (parent report):**

We created a single dichotomous variable that indicates whether the youth had unmet needs at baseline that were met by their mentors as a part of the mentoring relationship. For each of several potential needs, the parents were asked at baseline, "Does your child need this type of help?" and "Has your child received this type of help in the past year?" At follow-up they were then asked, "Does your child need this type of help?" and "Has your mentor given (or helped to get) your child this type of help in the last year?" The areas of potential need were: Help with school work; Help to find a job; Help with ongoing physical health concerns; Help planning or preparing for what to do after high school; Help with current or recent negative behaviors; Help to avoid negative behaviors; Help to strengthen a talent; Help with current or recent gang involvement; Help to avoid gang involvement; Help with problems, fears, worries or sadness; Help with current or recent drug or alcohol use; Help to avoid drug or alcohol use; and, Help to learn skills to prepare for a job or college.

b. **Parent has Learned Where to Get Services (parent report):** We created a single dichotomous variable that indicated that the youth had needs that for which the parent did not know how to get help at baseline, but by the time of the follow-up survey, the parent had learned where to get help for that need. Possible areas of need were the same as in the variable, "Youth Now Receiving Services Needed but not Received at Baseline."

2. Connections to Significant Adults [1 measure]

a. **Special Adult¹⁸ (youth report; Herrera et al., 2011):** This one measure indicates whether the youth report having a special adult in their lives. Youth were told, "A special adult is someone who really cares about what happens to you.; someone: (a) who you look up to and encourages you to do your best, (b) who influences what you do and the choices you make, and (c) who you can talk to about personal problems.

¹⁸ The data from this question on the youth follow-up survey are used for two separate outcome measures. Based on the theory of change, one of the proposed intermediate outcomes is whether the youth develop connections to significant adults because of their involvement in mentoring. If there is at least one special adult identified, this is an indicator for this outcome in box 5. If, however, one of the special adults identified is the assigned mentor, we felt that was an indicator of the strength and quality of the mentoring relationship, as presented in box 4.

Right now in your life, is there a special adult who you often spend time with?" We created a dichotomous measure of whether or not there was at least one special adult identified by the youth.

3. Social Emotional Learning [3 measures]
 - a. **Problem Solving (youth report; alpha base line=.83, follow up=.85; developed for MEDP including two items from Snyder et al., 1997):** This six-item measure reflects how skilled the youth is at problem solving. Response options range from 1= Not At All True to 4= Very True. Sample items include: I can think of lots of solutions when something goes wrong; Even when others want to quit, I know that I can find ways to solve the problem; and, When I have a problem, I can come up with lots of ways to solve it. Scores for each item were averaged to create a mean, with higher scores indicating better problem-solving skills.
 - b. **Help-Seeking (youth report; alpha base line=.71, follow up=.75; Karabenick, 2003):** This seven-item measure reflects how adept the youth is at seeking help for problems. Response options range from 1= Not At All True to 4= Very True. Sample items include: I know where to go for help with a problem; I look for people who can give me good advice; and, When I have trouble with something, I try to learn from someone who knows about it. Scores for each item were averaged to create a mean, with higher scores indicating a greater inclination for finding help when it is needed.
 - c. **Future Orientation (youth report; alpha base line=.61, follow up=.66; Arnold, Nott & Meinhold, 2012):** This three-item measure reflects the extent to which the youth had been thinking about and planning for their future. Response options range from 1=Not At All True to 4=Very True. Items include: I have goals for my life; I know what I want to do for a career (or job); and, I am interested in learning about careers (or jobs) I could have. Scores for each item were averaged to create a mean, with higher scores indicating a greater focus on the future.
4. Community Engagement [3 measures]
 - a. **Involvement in Sports/Clubs/Arts (youth report; alpha base line=.59, follow up=.53; Herrera et al., 2007):** This five-item measure captures the number of different types of activities the youth participated in during the past year. Ranging from 0 to 6, the possible activities consisted of: After-school programs or activities at your school; Clubs during the school day at your school; After-school program or club but not at your school; Played on or helped with a school sports team or league; Played on or helped with a sports team outside of school; and, Took lessons in or practiced music, art, drama, or dance after school on weekends.
 - b. **Involvement in Career Preparation (youth report; developed for MEDP):** This three-item measure indicates whether the youth had already been involved with activities in preparation for a future career. The youth were asked whether they had: Worked at a job for pay; Visited a workplace to see what it would be like to work there; or

Visited a college to learn about college life or what subjects they might be interested in studying? We created a single dichotomous variable that was set to 1 if the youth participated in any of the activities we asked about or 0 if they had not participated in any of the activities revolving around career preparation.

- c. **Community Service (youth report; developed for MEDP):** This single-item measure indicates participation in community service. Youth were asked: “Over the past year have you participated in community service or volunteering?” We created a single dichotomous variable that was set to 1 if the youth participated in a community service activity, and 0 otherwise.
5. Development of Interests and Talents [1 measure]
- a. **Youth Reports Mentor Helped Develop New Interests or Talents (youth report; developed for MEDP):** This single-item measure indicates whether the mentor had helped the youth develop new interests or talents. Youth were asked: “Has your mentor helped you find new interests or sparks that you didn’t know you had?” We created a single dichotomous variable that was set to 1 if the youth answered in the affirmative, and 0 otherwise.

Box 6. Distal Youth Outcomes

We identified four families of distal youth outcome measures that are about avoiding or reducing problem behaviors, as indicated in Box 6 in the theory of change diagram. Here we describe each of the measures within each family. In Appendix E, we provide more details on the distribution for each variable, and the preparation of each measure for inclusion in the analyses.

1. Involvement in Delinquency [5 measures]
 - a. **Stopped by Police or Arrested (youth report; alpha base line=.57, follow up=.79; developed for MEDP):** This two-item measure reports whether they had been arrested and taken to the police station during the past year. On the follow-up survey, each youth was asked to report whether they had been arrested and taken to the police station during the past year. The youth were also asked to report if they had been stopped, picked up, or warned by the police, without being arrested. We created a combined measure indicating whether the youth had been stopped or arrested by police, (coded 0 if the youth indicated they never had been or had been but not during the past 12 months; and coded 1 otherwise).
 - b. **Delinquency-Person Offenses—Onset (youth report; alpha base line=.69, follow up= .63; Posner & Vandell, 1994):** This five-item measure reflects whether the youth-initiated involvement in violent forms of delinquency during the year since

- their match began. On the baseline and follow-up surveys the youth were asked, During the LAST YEAR, how often have you; Hit an adult (like your parent or teacher); Gotten into a serious fight at school or in your neighborhood; Taken part in a fight where a group of your friends were against another group; Hurt someone badly enough to need bandages or a doctor; or, Used a knife or gun or some other thing (like a club) to get something from a person? If the youth reported having never engaged in any of these activities at baseline, and then reported having committed ANY of these activities at least once during the 12 months after baseline, then Onset was set to 1. Otherwise, Onset was coded as 0.
- c. Delinquency-Person Offenses—Frequency (youth report; alpha base line=.69, follow up= .63; Posner & Vandell, 1994):** For each of the person offense measures from the youth follow-up survey (noted above), we assigned 0 points if the youth indicated either “NEVER EVER” or “not in the last year”; 1 point if the youth indicated “1-2 times in the last year”; and 3 points if the youth indicated “3 or more times in the last year.” We then calculated the sum across all 5 measures for a measure of the frequency with which the youth committed person offenses—responses could range from 0 to 15.
- d. Delinquency-Property Offenses—Onset (youth report; alpha base line=.84, follow up=.74; Posner & Vandell, 1994)** This nine-item measure indicated whether the youth had initiated involvement in various property offenses during the year since their match began. On the baseline and follow-up surveys the youth were asked, During the LAST YEAR, how often have you: Taken something worth under \$50; Taken something worth \$50 or more; Taken from a store without paying; Taken a car – not family; Taken part of a car; Trespassed; Set fire to property; Damaged school property; or, Damaged public property. If the youth indicated having “NEVER EVER” for all the different property offenses at the time of the baseline survey, and then reported having committed ANY of the property offenses at least once during the 12 months after baseline, then Onset was set to 1. Otherwise, Onset was coded 0.
- e. Delinquency-Property Offenses—Frequency (youth report; alpha base line=.84, follow up=.74; Posner & Vandell, 1994):** For each of the property offense measures from the youth follow-up survey, we assigned 0 points if the youth indicated either “NEVER EVER” or “not in the last year”; 1 point if the youth indicated “1-2 times in the last year”; and 3 points if the youth indicated “3 or more times in the last year.” We then calculated the sum across all 9 measures for a measure of the frequency

- with which the youth committed property offenses—responses could range from 0 to 27.
2. Juvenile Justice Involvement [1 measure]
 - a. **Referral to Juvenile Court:** We received records from the probation departments in the jurisdictions in which the youth lived.¹⁹ Referral to Juvenile Court was coded as 1 if the youth had a referral to the probation department for a delinquent act within 365 days of being matched. Otherwise, Referral to Juvenile Court was coded as 0.
 3. Problem Behaviors [3 measures]
 - a. **Conduct Problems (parent report; alpha base line=.71, follow up=.72; Goodman, 1997):** This five-item measure reflected the parent assessments of whether their children had exhibited problem behaviors within the previous six months. Response options range from 1=Not True to 3=Certainly True. Sample items include: Steals from home, school or elsewhere; Often fights with other youth or bullies them; and, Often lies or cheats. We assigned 0 points if the parent indicated “not true”; 1 point if the parent indicated “somewhat true”; and 2 points if the parent indicated “certainly true.” We added the 5 items to create a total sum for Conduct Problems. Scores can range from 0 to 10.
 - b. **Substance Use (youth report; alpha base line=.81, follow up=.77; Herrera et al., 2013a):** We asked youth whether they had used any of five substances during the previous 12 months (i.e., tobacco, alcohol, marijuana, other drugs, prescription drugs). If they indicated using any of these substances during the previous 12 months, then substance use was set to 1. Otherwise, substance use was coded as 0.
 - c. **Negative Peers (youth report; alpha base line=0.80, follow up=.80; DuBois & Keller, 2017):** This six-item measure reflects the proportion of a child’s peers that were getting into trouble. Response options ranged from 1=None Of My Friends to 4=All Of My Friends. Youth were asked, “How many of your friends...:” Get in trouble at school; Get into fights with others your age; and Like to do things that make you scared or uncomfortable? Scores for each item were averaged to create a mean, with higher scores indicating a greater proportion of negative peers.
 4. Misbehavior in School [2 measures]
 - a. **In-School or Out-of-School Suspension:** If the youth indicated that they had received an in-school suspension/detention OR they were suspended/expelled

¹⁹ During the study, we secured agreements from most sites to provide data from official records for the youth in this evaluation. Not all the sites followed through with the transfer of data, and so we received data on referrals to juvenile court from F1, F2, F3, I1, I2, L2, R1, R2, R3, Y1, and Y2.

- during the previous 12 months, then school discipline was set to 1. Otherwise school discipline was set to 0.
- b. **Skipping class/school:** If the youth indicated that they had skipped school OR that they had skipped a class during the previous 12 months, then skipping class/school was set to 1. Otherwise skipping class/school was set to 0.

We also identified five families of distal youth focused on the development of more positive youth outcome measures, as indicated in box 6 in the theory of change diagram. Here we describe each of the measures within each family. In Appendix E, we provide more details on the distribution for each variable, and the preparation of each measure for inclusion in the analyses.

1. Social Competence [2 measures]

- a. **Prosocial Behavior (parent report; alpha base line=.74, follow up=.79; Goodman, 1997):** This five-item measure reflects, from the parent perspective, of the youth's positive interpersonal behaviors with others. These items from the parent follow-up survey focused on behaviors in the six months prior. Response options range from 1=Not True to 3= Certainly True. Sample items include: Considerate of other of other people's feelings; Helpful if someone is hurt, upset or feeling ill; and, Kind to younger children. We assigned 0 points if the parent indicated "not true"; 1 point if the parent indicated "somewhat true"; and 2 points if the parent indicated "certainly true." We summed the scores on the 5 items to create a total score for Prosocial Behavior.
- b. **Conflict Management (youth report; alpha base line=.82, follow up=.81; Dymnicki & Kendziora, 2012):** This ten-item measure reflects the ability of the youth to control their emotions. Response options range from 1=Not At All True to 4=Very True. Sample items include: I am aware of how my moods affect the way I treat other people; I control myself when I am frustrated, angry, or disappointed; and, I stop and think before doing anything when I get angry. Scores for each item were averaged to create a mean, with higher scores indicating a greater degree of emotional control and emotional intelligence.

2. Academic Performance [1 measure]

- a. **Self -Reported Grades (youth report; Herrera, Grossman & Linden, 2013):** This four-item measure reflects the academic performance of the youth in the most recent grading period. Response options range from 1= Not Good At All to 5=Excellent. We calculated an average grade for each student across four subjects: Mathematics;

- Reading or Language Arts; Social Studies; and Science. We recoded each of the included subject grades from a 1-5 scale to a 0-4 scale to more closely reflect a GPA measure.
3. Emotional Well-Being [4 measures]
 - a. **Depressive Symptoms (youth report; alpha base line=.91, follow up=.92; Angold et al., 1995):** This thirteen- item measure reflects the presence of symptoms of depression for the youth participants. Response options range from 1=Not True to 3=True Most of the Time. Sample items include: I cried a lot; I felt lonely; and, I thought nobody really loved me. Scores for each item were averaged to create a mean, with higher scores indicating greater evidence of depression.
 - b. **Positive Affect (youth report; alpha base line=N/A, follow up=.86; Watson & Clark, 1999):** This five-item to measure reflects a range of positive emotional states the youth may be experiencing in the two weeks prior to completing the follow-up survey. Response options range from 1=Not True to 3=True Most of the Time. Sample items include: I felt joyful; I felt proud; and, I felt lively. Scores for each item were averaged to create a mean, with higher scores indicating a more positive affect.
 - c. **General Negative Affect (youth report; alpha base line=N/A, follow up=.82; Watson & Clark, 1999):** This five-item measure reflects a range of negative emotional states the youth may be experiencing in the two weeks prior to completing the follow-up survey. Response options range from 1=Not True to 3=True Most of the Time. Sample items include: I felt miserable or unhappy; I felt scared; and, I felt mad. Scores for each item were averaged to create a mean, with higher scores indicating a greater negative affect.
 - d. **Emotional Symptoms (parent report; alpha base line=.73, follow up=.75; Goodman, 1997):** This five-item measure provides an indication of the extent to which youth exhibit signs of emotional distress, as reported by parents. Response options ranged from 1=Not True to 3=Certainly True. Sample items include the following characterizations that parents could select to describe their children over the previous six months: Many worries or often seems worried; Often unhappy, depressed, or tearful; and, Nervous in new situations. We assigned 0 points if the parent indicated “not true”; 1 point if the parent indicated “somewhat true”; and 2 points if the parent indicated “certainly true.” We summed scores for the 5 items to create a total score for Emotional Symptoms.
 4. Self-Worth [1 measure]

- a. **Self-Worth (youth report; alpha base line=.82; follow up=.86; DuBois, Felner, Brand, Phillips, & Lease, 1996):** This eight-item measure reflects the youth perception of their own self-worth. Responses ranged from 1=Not At All True to 4=Very True. Sample items include: I am happy with myself as a person; I am happy with the way I can do most things; and, I am as good a person as I want to be. Scores for each item were averaged to create a mean, with higher scores indicating a more positive self-worth.
5. Social Support [2 measures]
- Positive Parent Relationship (youth report; alpha base line=.92, follow up=.94; Ridenour, Greenberg & Cook, 2006):** This ten-item measure, created using items from the youth follow-up survey, is used to indicate the extent to which the youth feel supported by their parents. Responses ranged from 1=Almost Never or Never True to 4=Almost Always or Always True. Sample Items include: My parent is proud of the things I do; I get along well with my parent; and, My parent pays attention to me. Scores for each item were averaged to create a mean, with higher scores indicating a more positive/supportive relationship.
- a. **Peer Problems (parent report; alpha base line=.59, follow up=.60; Goodman, 1997)** This 5-item measure reflects challenges in how the youth relate to peers, based on parent reports. Responses ranged from 1=Not True to 3=Certainly True. Sample items include the following characterizations that parents could select to describe their children over the previous six months: Would rather be alone than with other youth; Picked on or bullied by other youth; and, Gets along better with adults that with other youth. We assigned 0 points if the parent indicated “not true”; 1 point if the parent indicated “somewhat true”; and 2 points if the parent indicated “certainly true.” We summed the scores across the 5 items to create a total score for Peer Problems. The score can range from 0 to 10.

Multilevel Analyses

The impact analyses compared the outcomes for youth in mentoring matches exposed to the program enhancements (EG) with the outcomes for youth who received services as usual (BG). As we described above, the study involved 10 separate collaboratives, each consisting of three to four mentoring programs that developed and implemented program enhancements for matches randomly assigned to the intervention condition. The nested structure of the data called for the use of multilevel modeling techniques that account for interdependencies within the data.

Baseline equivalence. The equivalence of the two randomly assigned groups was assessed by comparing them on relevant baseline measures.

Treatment of missing data. We used the multiple imputation by chained equations technique, as implemented in the Multiple Imputation (**mi**) command in Stata.²⁰ Since many of the variables for which imputations were needed were continuous but non-normal, we used the predictive mean matching method of imputation. For dichotomous outcome variables, we used the logit method of imputation.

Missing data occurred primarily because of youth and parent/caregiver study attrition prior to the 12-month follow-up (25% of the total), although small numbers of youth who did complete the survey had missing data on various outcomes. Because the total proportion of missing data for the outcomes was about 30%, we created 30 imputations for each imputed variable.

Imputation was applied to the full set of outcome measures. Missing values for control variables and baseline predictor variables were replaced with sample mean values (or sample modal values for categorical variables) for each program.²¹ The outcome analyses were then conducted with the full set of imputed values. Sensitivity analyses were performed to examine whether results were robust with different imputations.²²

Impact model. For each outcome of interest, we estimated intent-to-treat effects (i.e., analyzing all cases assigned to either EG or BG regardless of exposure to treatment). The intent-to-treat analyses sought to estimate the average effect of *offering* youth the opportunity to receive enhanced mentoring on each of the outcomes.

²⁰ We utilize estimation procedures in Stata that provide calculations consistent with the Rubin (1987) procedures to average parameter estimates across the different analyses. Standard errors for the aggregated results are calculated using Rubin's (1987) formula, which combines variability within and between datasets. We created a set of dummy variables for missingness for each of the variables (i.e., 0=not missing, 1=missing). In sensitivity analyses, after we completed the multiple imputation procedures, we provided analyses to examine whether the data appeared to be "Missing at Random." To control for potential systematic sources for missingness, we examined associations between the missing dummies and the following variables that reflect propensity to be missing: demographic characteristics like gender, age, and race/ethnicity; individual and environmental risk; and match length, which at the lower end of the distribution, reflects matches that ended early and/or did not turn into meaningful relationships.

²¹ We replaced missing values in the control and predictor variables based on the mean (or mode, as appropriate) for the program ($N = 30$) where that case is from. We did this because of the variability across the sites on many of the control variables (i.e., race/ethnicity, age).

²² We set the random seed to 6337 for the imputations. Then we created a separate set of imputations for the sensitivity analyses with a random seed of 65537. We present comparisons of the distributions of observed and imputed values for each of the outcome measures, looking for any imputed values that appeared to be unreasonably large or small and for variables for which we failed to impute valid values. We also conducted post-imputation sensitivity analyses that examined the (missing at random) MAR assumption.

The impact evaluation compared the outcomes of youth offered the program enhancements to those offered services-as-usual. The study involved 10 separate collaboratives, each consisting of one to four mentoring programs, which developed and implemented program enhancements for youth randomly assigned to EG. Consequently, the study design parameters were those of a three-level multisite randomized trial. For these models, the unit of analysis is the individual youth. In this case, youth (Level 1-L1) are nested within programs (Level 2-L2), and programs are nested within collaboratives (Level 3-L3). The nested structure of the data calls for the use of multilevel modeling techniques to account for interdependencies within the data.

There were 10 clusters at L3, and the number of L2 cases per cluster is also low, ranging from one to four. Recent scholarship has cautioned about modeling effects at L2 or L3 when there are fewer than 30 groups.²³ Therefore, we estimated multilevel models for two levels only, since there are 30 groups at L2.

At the first level for each outcome, the basic model used was:

Equation 1: Level-1 Model for Enhancement Effects on Youth in Programs (Y_{ij}).

$$Y_{ij} = \beta_{0j} + \beta_{1j}X_{ij} + \beta_{kj}(Z_{ik}) + r_{ij} \quad (1)$$

for

$i = 1, \dots, N$ individuals

$j = 1, \dots, 30$ programs

$k = 1, \dots, K$ baseline youth-level control variables

where

β_{0j} is the intercept for program j ;

β_{1j} is the effect of participation in Enhancement Mentoring for program j ;

X_{ij} is an indicator variable equal to 1 if youth i in program j was randomly assigned to the Enhanced Mentoring group or 0 if the youth was randomly assigned to the Business-as-Usual Mentoring group;

Z_{ik} is a vector of k baseline youth-level control variables (see Exhibit X for full list); and

r_{ij} is the individual-level error component.

²³ McNeish and Stapleton (2016); see also Raudenbush and Bryk (2002).

Variables identified for the vector Z_{ik} , as shown in Exhibit 8, were identified based on the following decision rules: (1) Demographic characteristics (variables 1-7); (2) Other background characteristics about the youth and family, including individual and environmental risk factors (Variables 8–16); (3) any covariates with absolute values of effect size differences between EG and BG greater than 0.05 (Variables 17–21); and (4) baseline measure of the outcome being tested (Variable 22, unless the baseline measure is already included among Variables 17–21).

Exhibit 8. List of Variables in Vector Z_{ik} *

No.	Variable shorthand	Variable name	Source
1	Age	Age	Parent baseline
2	R_Black	Black/African American	Parent baseline
3	R_Alndian	Native American or Alaska Native	Parent baseline
4	R_Asian	Asian or Pacific Islander	Parent baseline
5	R_Hisp	Hispanic/Latino	Parent baseline
**	R_White	White/Caucasian	Parent baseline
6	R_Other	Other race	Parent baseline
7	Female	Gender	Parent baseline
8	ESL	English as a second language	Parent baseline
9	Pri_Mentor	Prior involvement in mentoring	Youth baseline
10	FamSize	Size of family	Parent baseline
11	ERisk_EA	Environmental risk: economic adversity	Parent baseline
12	ERisk_FR	Environmental risk: family risk/stress	Parent baseline
13	ERisk_PD	Environmental risk: peer difficulties	Parent baseline
14	IRisk_AC	Individual risk: academic challenges	Parent baseline
15	IRisk_PB	Individual risk: problem behavior	Parent baseline
16	IRisk_MH	Individual risk: mental health concerns	Parent baseline
17	Cond_Prob_BL	Conduct problems	Parent baseline
18	ProbPeer_BL	Problematic peer relationships	Parent baseline
19	Grades_BL	Self-reported grades	Youth baseline

No.	Variable shorthand	Variable name	Source
20	PosParRel_BL	Positive parent relationship	Youth baseline
21	FutOrient_BL	Future orientation	Youth baseline
22			

* Z_{ik} is a vector of k baseline youth-level control variables. All variables are to be mean-centered before including in analyses;

** This variable is a reference category that is not included in the analyses.

For example, when testing Positive Parental Relationships as our outcome, we used the following equation:²⁴

$$\begin{aligned}
 PosParRel_{ij} = & \beta_{0j} + \beta_{1j}(X_{ij} - X_{i..}) \\
 & + \beta_{kj}((Age_i - Age_{i..}) + (R_Black_i - R_Black_{i..}) \\
 & + (R_AIndian_i - R_AIndian_{i..}) + (R_Asian_i - R_Asian_{i..}) \\
 & + (R_Other_i - R_Other_{i..}) + (Hispanic_i - Hispanic_{i..}) + (Female_i - Female_{i..}) \\
 & + (ESL_i - ESL_{i..}) + (Pri_Mentor_i - Pri_Mentor_{i..}) \\
 & + (FamSize_i - FamSize_{i..}) + (ProbPeer_BL_i - ProbPeer_BL_{i..}) \\
 & + (Cond_Prob_BL_i - Cond_Prob_BL_{i..}) \\
 & + (PosParRel_BL_i - PosParRel_BL_{i..}) + (FutOrient_BL_i - FutOrient_BL_{i..}) \\
 & + (ERisk_EA_BL_i) + (ERisk_FR_BL_i) + (ERisk_PD_BL_i) + (IRisk_AC_BL_i) \\
 & + (IRisk_PB_BL_i) + (IRisk_MH_BL_i) + (Grades_BL_i) + r_{ij}
 \end{aligned}$$

Next we estimated a model that included random effects:

Equation 2: Level-2 Model for Fixed Effects (γ) and Random Effects (u) in estimating β s.

$$\begin{aligned}
 \beta_{0j} &= \gamma_{00} + \gamma_{01}C_{im} + u_{0j} \\
 \beta_{1j} &= \gamma_{10} + u_{1j} \\
 \beta_{kj} &= \gamma_{k0}
 \end{aligned}$$

Where:

C is a vector of $m - 1$ indicator variables for the collaboratives;²⁵

²⁴ Note that we will group mean center X_{ij} , to avoid confounding the effect of the treatment with any variation across programs in the actual proportion assigned to the Enhancement Mentoring condition.

²⁵ This allows us to test whether there are differences in the outcomes across the 10 collaboratives. If we find that there are no statistically significant differences across any of the collaboratives, we can simplify this equation to $\beta_{0j} = \gamma_{00} + u_{0j}$.

γ_{00} is the mean value of the L1 dependent variable (i.e., Positive Parental Relationships);
 γ_{01} is the effect (i.e., slope) associated with the L1 intercept for each collaborative (C_{im});
 γ_{10} is the effect associated with the L1 slope for the treatment condition (X_{ij});
 γ_{k0} are the effects associated with the L1 slope for the control variables (Z_{ik});
 u_{0j} is the unmodeled variability (i.e., error) for program j ; and
 u_{1j} is the unmodeled variability (i.e., error) associated with the effect of X_{ij} .

Controlling the false discovery rate. Based on the theory of change, there were several outcome measures that we assessed within each of the 19 families of outcomes. Including more outcome measures increases the likelihood of statistically significant findings, which could lead us to conclude that enhanced mentoring contributes to a particular outcome, even if the intervention did not actually have a true effect on the outcome. To decrease the probability of falsely rejecting the null hypothesis, we used the Benjamini-Hochberg (BH) procedure (Benjamini & Hochberg, 1995). Families within which we controlled for multiple comparisons were listed earlier, along with the individual measures in each family. We considered statistically significant results to be those where the calculated value of p was less than a critical value estimated using the BH procedure.

Path modeling. Following the evaluation of treatment effects, we investigated the causal processes proposed in the theory of change by testing for mediation in path models. Mediation models were analyzed with structural equation modeling (SEM) techniques in Stata. Using path analysis, we tested the model shown in Exhibit 7. In the path from Box 1 to Box 2, we test whether being assigned to treatment was associated with greater exposure to the programmatic enhancements. In the path from Box 2 to Box 3, we test whether the enhanced programmatic practices are related to the incorporation of the teaching and advocacy functions into the mentor role. The paths to Boxes 4, 5, and 6 test for the effects of the program practices and mentor practices on the proximal, intermediate, negative and positive youth outcomes.

As we were testing the mediation model, as proposed in the theory of change, we estimated only those paths depicted with arrows in the diagram. That is, we tested for direct effects of the variables in Box 2 on the variables in Box 3. The structural equation models we tested did not include any direct paths from the variables in Box 2 to any of the outcome measures in Boxes 4 to 6. We did, however, use post hoc procedures in Stata to estimate indirect effects for all variables in the full model on all of the outcome variables. In the results that we present later in this report, we decompose the total effects of the treatment condition and the measures from Segments 2 and 3 on each of the outcomes from Segments 4 to 6 into direct and indirect effects.

We used the standard structural equation modeling (i.e., SEM) module in Stata, with the imputation of missing values on the outcomes using the full information maximum likelihood (FIML) method. Because the data were from a multisite experiment, we prepared the data with adjustments to each variable by subtracting the mean at the program level. The group-mean-centered variables were then used as the variables in the path analyses.

Chapter 5. Characteristics of Participants

Youth Characteristics

Youth in the initiative were more likely to be female (55%) than male (45%). Although programs were asked to recruit youth between the ages of 11 and 15, one school-based program enrolled youth in 4th grade, resulting in some 10-year-olds in the study. The average age was 12.4 (the median was 12). Almost half the youth (49%) were 11 or 12 years old and less than 1% were either 9 or 16.

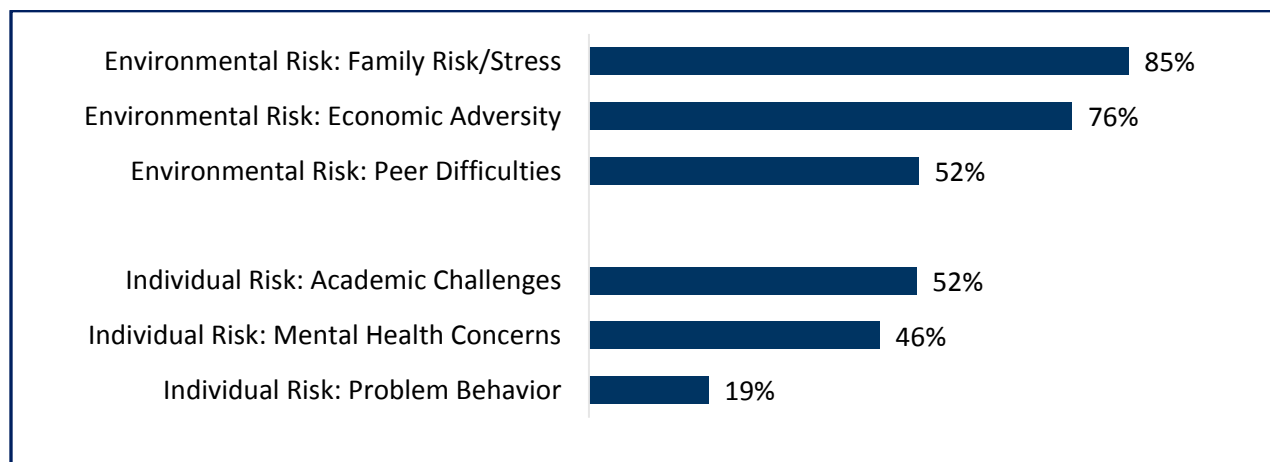
Less than half (43%) of participating youth were African American, 30% were white, and 29% were Hispanic/Latino. Only 5% were Native American or Alaska Native, 2% Asian/Pacific Islander, and 2% designated as an “other” racial group.

As part of our baseline parent survey, we asked youth’s parents about a wide range of difficulties the youth may have been facing at that time, using a revised version of the risk assessment questionnaire developed by Herrera et al. (2013a). This questionnaire asks parents 34 Yes/No questions about challenges the youth may have faced recently in both “environmental” areas (i.e., economic adversity, family stress, and peer difficulties) and “individual” areas (i.e., academic challenges, mental health concerns, and problem behavior). See Exhibit 9.

The vast majority of participating youth faced at least one environmental challenge; 85% of the responding parents reported that the child had been recently exposed to family stress (e.g., a family member struggling with substance use, frequent family arguments, homelessness), while more than three quarters noted that their child faced economic adversity (e.g., housing insecurity, gangs or drugs in the neighborhood, parent job instability). These latter reports are in line with parent-reported income; the median annual income for participating families was in the range of \$20,001 to \$30,000. Finally, slightly more than half the parents reported that their child was facing difficulties with peers (e.g., being bullied, not having any close friends).

Fewer youth experienced individual-level risk factors. For example, only slightly more than half of parents reported that their child was having academic struggles (e.g., failing or at risk for failing two or more classes/subjects in school, missing school three or more times a month). A little less than half (46%) reported that their child had mental health concerns (e.g., frequent sadness, being under the care of a mental health care provider), and 19% reported that their child had exhibited problematic behavior (e.g., suspensions, substance use, gang participation).

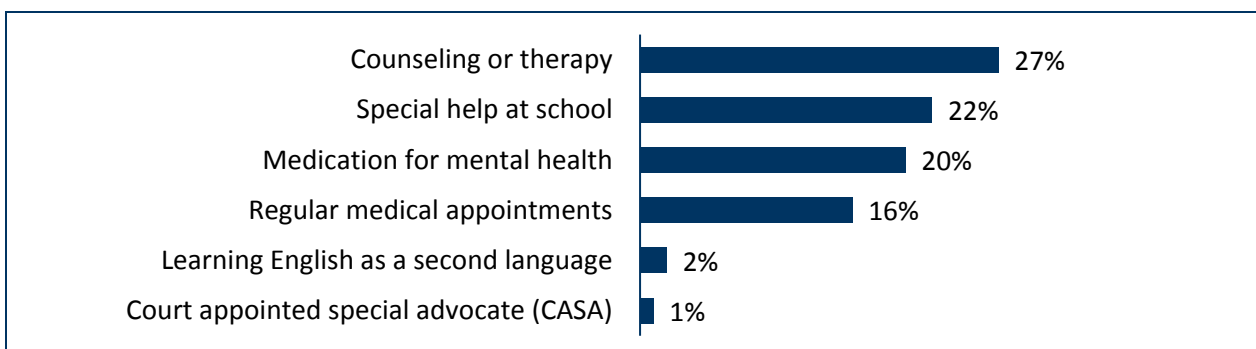
Exhibit 9. Percent of Youth Presenting at Least One Risk Factor at Baseline



Note: Data are from parent baseline surveys. *N* = 1,855.

Most youth lived with at least one parent (90%) as opposed to living only with grandparents or other relatives (8%) or in foster care (1%), although many lived in single-parent homes (69%). And a little more than half (53%) were already receiving at least one service at the start of the study (e.g., counseling, special help at school, medication for a mental health issue), as shown in Exhibit 10.

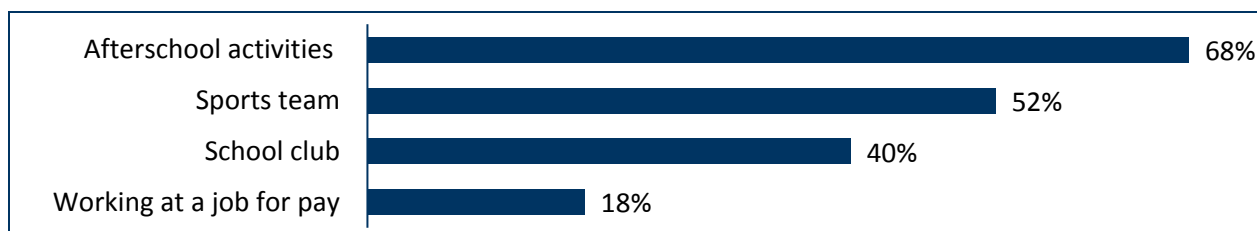
Exhibit 10. Percent of Youth Receiving Different Types of Services at Baseline



Note: Data shown in this chart are from parent baseline surveys. *N* = 1,840.

As shown in Exhibit 11, many youth also engaged in afterschool activities (68%), sports teams (52%), or school clubs (40%), with fewer working at a job for pay (18%). A little more than a quarter (27%) had been involved in a mentoring program in the year prior to entering MEDP.

Exhibit 11. Percent of Youth Reporting Involvement in Extracurricular Activities



Note: Data shown in this chart are from youth baseline surveys. *N* = 2,015.

In Exhibit 12, we present the baseline means for all EG and BG youth participating in the MEDP evaluation on all baseline measures of outcomes from the theory of change and key demographic and control variables that we intended to use in our outcome analyses. The Exhibit also presents information about the equivalence of these two groups at random assignment. In the last column, we present effect sizes to indicate the size of the differences between the means for the BG and EG participants. We followed the guidance in the standards from the What Works Clearinghouse in setting a conservative effect size of .05 or greater (in absolute value) as an indicator of lack of equivalence. These values (12 of the 45 comparisons) are bolded.²⁶

Exhibit 12. Characteristics of MEDP Participants in Initial Sample and Results from Equivalence Analyses

Control/predictor variables	Measures (N)	BG	EG	Effect size
Youth age	Age (2096)	12.46	12.35	-0.077
Youth race	African American/Black (1,896)	42.9%	41.5%	-0.014
	Caucasian/White (1896)	32.8%	28.4%	-0.048
	Native American or Alaska Native (1,896)	3.9%	6.8%	0.064
	Asian (1,896)	1.9%	2.5%	0.022

²⁶ With randomization, we expected few significant differences between the EG and BG participants. Recall in Footnote 11 that there were a small number of sites where randomization was not possible at the level of the youth. When we redo the equivalence analysis for only the sites where we randomized at the level of the individual youth, there were fewer differences. In addition, siblings were assigned to the group where the first child in the family was assigned. We also found that limiting the equivalence analysis to only the first child in each family resulted in fewer differences. Results in Exhibit 12 are presented for all youth eligible for inclusion in the outcome analyses.

Control/predictor variables	Measures (N)	BG	EG	Effect size
	Pacific Islander (1,896)	0.7%	0.5%	-0.009
Youth ethnicity	Latino/Hispanic (1,896)	26.8%	30.6%	0.041
Youth gender	Female (1,901/1,427)	54.6%	57.2%	0.027
Family structure	Single parent family (1,875)	58.4%	61.9%	0.036
Language in home	English as second language (1,889)	8.3%	8.0%	-0.006
Incarcerated family	Family member in jail or prison (1,900)	18.7%	18.0%	-0.009
Prior mentoring	Has been mentored previously (2,040)	37.3%	41.3%	0.041
Size of family	Number of people in household (1,864)	4.46	4.43	-0.018
Environmental risk	Economic adversity (1,907)	1.60	1.53	-0.055
	Family stress (1,899)	2.11	2.20	0.054
	Peer difficulties (1,897)	0.67	0.62	-0.066
Individual risk	Academic challenges (1,909)	0.77	0.71	-0.072
	Problem behavior (1,909)	0.36	0.26	-0.118
	Mental health concerns (1,901)	0.68	0.61	-0.083
Delinquent involvement	Property offenses (frequency) (2,037)	0.07	0.07	0.002
	Property offenses (onset) (2,050)	17.0%	17.7%	0.009
	Person offenses (frequency) (2,039)	0.14	0.16	0.054
	Person Offenses (Onset) (2,045)	28.4%	26.8%	-0.019
	Arrest or pick-up (2,044)	2.9%	1.9%	-0.033
Problem behaviors	Conduct problems (1,845)	2.31	2.16	-0.073
	Substance use (2,041)	8.0%	9.2%	0.022
	Negative peers (2,045)	1.76	1.76	0.002
Misbehavior in school	School discipline (2,044)	34.3%	33.7%	-0.007
	Skipped school or class (2,041)	10.9%	10.8%	-0.001
Social competence	Prosocial interpersonal behaviors (1,857)	2.52	2.53	0.009

Control/predictor variables	Measures (N)	BG	EG	Effect size
Academic performance	Self-reported grades (GPA) (2,040)	2.63	2.62	-0.006
Emotional well-being	Self-worth (2,060)	3.27	3.27	-0.008
	Depressive symptoms (2,051)	0.38	0.40	0.063
	Emotional symptoms (1,870)	1.59	1.61	0.026
Perceptions of social support	Positive parent relationship (2,049)	3.44	3.41	-0.050
	Peer problems (1,846)	2.59	2.69	0.049
Increased knowledge and access to community resources	Unmet needs (2,064)	64.9%	64.7%	-0.002
	Parent does not know where to get services (2,064)	48.5%	48.7%	0.002
Connections to significant adults	Special adult (1,993)	71.6%	71.2%	-0.004
Social-emotional learning	Help seeking (2,059/1,537)	3.04	3.05	0.022
	Problem solving (2,059)	3.05	3.04	-0.015
	Future orientation (2,060)	3.38	3.33	-0.070
Community engagement of youth	Involvement in sports/clubs/arts (2,049)	86.7%	86.4%	-0.004
	Career preparation involvement (2,049)	43.3%	43.5%	0.003
	Community service (2,049)	32.6%	33.1%	0.005

Note: Data are from baseline surveys. Values presented in columns 3 and 4 are means values for the variables, or in the case of dichotomous measures, the percentage of the sample meeting that characteristic.

When we collected follow-up data, 12 months after the start of each match, there was some attrition (see Exhibit 13). A total of about 25% of youth attrited from the study. This rate differed slightly for BG and EG youth: About 28% of BG youth attrited, compared to about 23% of EG youth.²⁷

²⁷ This difference in attrition meets the What Works Clearinghouse (WWC) liberal maximum threshold for acceptable differential attrition of 9.2, given our overall attrition rate of 25%; but not the WWC conservative maximum threshold of 4.8. The same is true for parent attrition. Mentor differential attrition was negligible and thus meets both the WWC liberal and conservative guidelines.

Exhibit 13. Attrition Rate for Youth, Parents, and Mentors

Respondent	Overall	BG	EG	Difference
Youth	25.4%	28.4%	22.6%	5.7%
Parent	28.3%	31.1%	25.6%	5.6%
Mentor	23.5%	23.5%	23.4%	0.1%

To test whether attrition may have affected the comparability of the two groups (i.e., whether different types of youth attrited from the two study groups), we made the same baseline comparison described in Exhibit 12, but used the analytic sample (i.e., the sample on which we have follow-up data and with which we conducted the outcome analyses) instead of the original sample (i.e., all participating youth who were baselined).

Again, we compared EG to BG youth on baseline measures of the outcomes and key demographic and control variables. These results are presented in Exhibit 14. Effect sizes for comparisons between the BG and EG groups in the analytic sample are presented in the last column. Those 10 effect sizes that were equal or greater in absolute value to 0.05 are bolded and were included as additional controls in the intent-to-treat analyses. Seven of the 10 effect sizes that suggested differences between the two groups in the analytic sample had also suggested differences at baseline, suggesting very little difference in the *types* of youth who attrited from the sample from the two groups. That is, the BG youth who attrited were very similar to the EG youth who attrited, leaving the analytic sample of the two groups similar in these key baseline characteristics.

Exhibit 14. Characteristics of MEDP Participants in the Analytic Sample and Results of Equivalence Analyses

Control/predictor variables	Measures (N)	BG	EG	Effect size
Youth age	Age (1571)	12.45	12.37	-0.057
Youth race	African American/Black (1422)	43.7%	41.8%	-0.020
	Caucasian/White (1422)	32.4%	28.5%	-0.043
	Native American or Alaska Native (1,422)	4.7%	7.5%	0.059
	Asian (1,422)	2.0%	1.7%	-0.009
	Pacific Islander (1,422)	0.3%	0.7%	0.026

Control/predictor variables	Measures (N)	BG	EG	Effect size
Youth ethnicity	Latino/Hispanic (1,422)	26.5%	29.5%	0.033
Youth gender	Female (1,427)	55.7%	56.6%	0.009
Family structure	Single parent family (1,407)	59.3%	61.5%	0.022
Language in home	English as second language (1,415)	8.3%	7.6%	-0.013
Incarcerated family	Family member in jail or prison (1,423)	18.4%	17.3%	-0.015
Prior mentoring	Has been mentored previously (1,528)	39.7%	41.3%	0.017
Size of family	Number of people in household (1,397)	4.48	4.40	-0.047
Environmental risk	Economic adversity (1,429)	1.59	1.49	-0.079
	Family stress (1,424)	2.10	2.15	0.033
	Peer difficulties (1,423)	0.65	0.63	-0.028
Individual risk	Academic challenges (1,431)	0.72	0.69	-0.039
	Problem behavior (1,431)	0.30	0.24	-0.093
	Mental health concerns (1,425)	0.65	0.59	-0.083
Delinquent involvement	Property offenses (frequency) (1,533)	0.07	0.06	-0.019
	Property offenses (onset) (1,534)	16.2%	17.1%	0.012
	Person offenses (frequency) (1,531)	0.13	0.14	0.023
	Person offenses (onset) (1,531)	26.6%	25.6%	-0.012
	Arrest or pick-up (1,528)	2.1%	1.5%	-0.024
Problem behaviors	Conduct problems (1,403)	2.19	2.05	-0.069
	Substance use (1,527)	8.0%	8.6%	0.010
	Negative peers (1,526)	1.75	1.74	-0.020
Misbehavior in school	School discipline (1,530)	33.0%	32.0%	-0.010
	Skipped school or class (1,526)	10.6%	9.7%	-0.015
Social competence	Prosocial interpersonal behaviors (1,396)	2.54	2.55	0.023
Academic performance	Self-reported grades (GPA) (1,527)	2.67	2.61	-0.061

Control/predictor variables	Measures (N)	BG	EG	Effect size
Emotional well-being	Self-worth (1,537)	3.30	3.28	-0.033
	Depressive symptoms (1,532)	0.36	0.38	0.044
	Emotional symptoms (1,406)	1.58	1.60	0.031
Perceptions of social support	Positive parent relationship (1,530)	3.48	3.43	-0.076
	Peer problems (1,402)	2.50	2.64	0.071
Increased knowledge and access to community resources	Unmet needs (1,600)	63.7%	62.4%	-0.014
	Parent does not know where to get services (1,600)	46.5%	47.2%	0.008
Connections to significant adults	Special adult (1,487)	72.2%	70.6%	-0.018
Social-emotional learning	Help seeking (1,537)	3.07	3.07	-0.002
	Problem solving (1,536)	3.06	3.04	-0.021
	Future orientation (1,537)	3.38	3.32	-0.103
Community engagement of youth	Involvement in sports/clubs/arts (1,532)	87.3%	86.5%	-0.011
	Career preparation involvement	44.9%	42.6%	-0.023
	Community service	35.0%	33.2%	-0.019

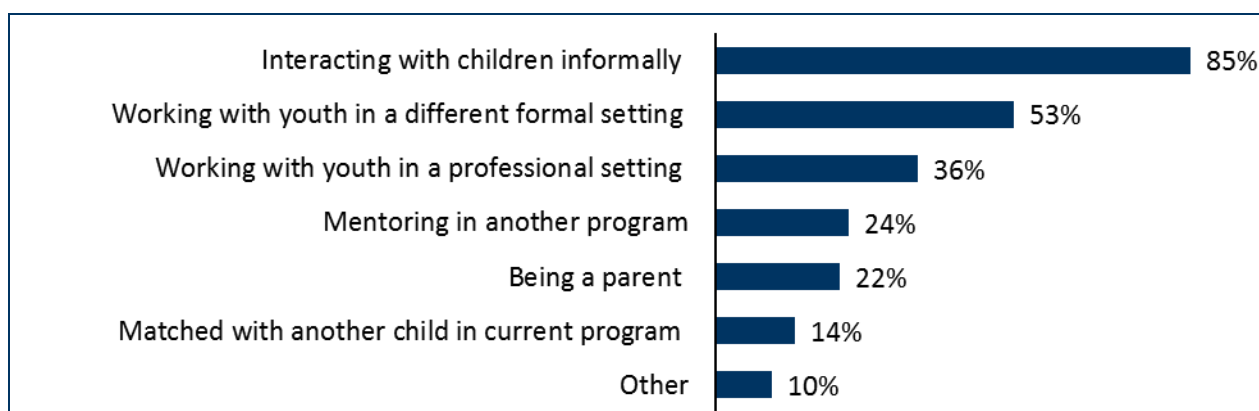
Note: Data are from baseline surveys. Values presented in columns 3 and 4 are means values for the variables, or in the case of dichotomous measures, the percentage of the sample meeting that characteristic.

Mentor Characteristics

About 57% of the mentors matched with youth in the study were female, and 43% were male. They ranged in age from 18 to 77, with an average age of 32 and a median of 27. Although most were white (63%), a substantial minority were African American (20%) or Hispanic (15%). A little less than two thirds (61%) were single; 24% were living with a spouse or partner; and 9% were divorced or widowed. Most mentors (81%) were employed; 31% were students; and 3% were retired. The student mentors came from several different collaboratives, with Collaborative F having a particularly high proportion of student mentors (75%). The programs in this collaborative partnered with local universities and recruited mostly college students.

Although most mentors (67%) had not mentored previously, more than a third (36%) worked directly with youth in their jobs, about a fifth (22%) were parents themselves, and most had at least some experience interacting with youth in other settings (see Exhibit 15). About 33% also reported having a job or role for 10 or more hours a week in a “helping profession,” in which they helped others directly (e.g., tutoring, nursing, counseling, teaching, coaching)—a mentor background that has been linked in previous work to stronger youth benefits (DuBois et al., 2002). Note that 1% of the mentors in this study indicated that they had never interacted with youth in any of the settings/roles described here.

Exhibit 15. Mentor Reports of Experience Interacting/Working with Youth



Note: Data are from mentor baseline surveys. *N* = 1,979.

Paralleling the analyses of baseline equivalence for youth, we also examined the equivalence of the EG and BG mentors. Because randomization took place following the match to the original mentor, we first examine the equivalence of these groups on characteristics of the original mentors (i.e., the first mentors with whom youth in the study were matched). These results are presented in Exhibit 16.²⁸ The results of the analyses find very few differences between the BG and EG mentors (3 of 19 comparisons).

²⁸ It was possible during the 12 months after the start of the match that the relationship between the original mentor and the youth would close. In some cases, the youth was rematched to a new mentor. For the subsample of cases where there was a rematch, we focused on the rematch mentor in the analytic sample. In Exhibit 15 and 16, we present the equivalence analysis first for all the original mentors. Then we redo the analyses swapping in the new mentors where there was a rematch. These results appear in the bottom half of each table.

Exhibit 16. Characteristics of Original Mentors and Results of Equivalence Analyses

Control/predictor variables	Measures (N)	BG	EG	Effect size
Gender	Female (1,927)	54.7%	59.6%	0.050
Mentor race	African American, Black (1,933)	21.0%	18.6%	-0.031
	Caucasian, White (1,933)	62.5%	65.1%	0.027
	American Indian or Alaska Native (1,933)	3.2%	3.7%	0.015
	Mentor is Asian (1,933)	6.1%	4.4%	-0.036
	Pacific Islander (1,933)	1.2%	0.9%	-0.013
Ethnicity	Latino, Hispanic (1,933)	15.2%	14.8%	-0.005
Age	Mentor age (1,847)	31.70	31.21	-0.038
Employment status	Any (2,067)	75.5%	77.1%	0.018
	Full time (2,067)	56.6%	58.5%	0.018
Marital status	Never married (2,067)	55.0%	58.4%	0.034
Helping profession	At time of baseline (1,926)	32.4%	33.5%	0.011
College student	At time of baseline (1,927)	39.2%	34.3%	-0.051
Experience interacting with youth	Volunteering (1,933)	66.1%	63.4%	-0.029
	Professionally (1,933)	37.7%	33.8%	-0.040
	Family (1,933)	88.9%	87.4%	-0.023
Growth mindset	Growth mindset (1,933)	2.44	2.43	-0.012
Self-efficacy	Perceived self-efficacy (1,924)	3.55	3.56	0.014
Resilience	Mentor resilience (1,931)	4.33	4.30	-0.070
Gender	Female (1,926)	54.6%	59.6%	0.050
Mentor race	African American, Black (1,931)	20.6%	18.3%	-0.030
	Caucasian, White (1,931)	62.7%	64.8%	0.022
	American Indian or Alaska Native (1,931)	3.1%	3.9%	0.023

Control/predictor variables	Measures (N)	BG	EG	Effect size
	Asian (1,931)	5.9%	4.5%	-0.030
	Pacific Islander (1,931)	1.2%	0.9%	-0.013
Ethnicity	Latino, Hispanic (1,931)	15.6%	14.9%	-0.010
Age	Mentor age (1,848)	31.62	31.34	-0.022
Employment status	Any (2,063)	75.8%	77.1%	0.015
	Full time (2,063)	57.2%	58.6%	0.014
Marital status	Never married (2,063)	55.4%	58.3%	0.029
Helping profession	At time of baseline (1,923)	32.4%	33.4%	0.011
College student	At time of baseline (1,926)	39.6%	34.0%	-0.058
Experience interacting with youth	Volunteering (1,932)	66.7%	64.1%	-0.028
	Professionally (1,932)	37.7%	33.5%	-0.044
	Family (1,932)	88.7%	87.3%	-0.022
Growth mindset	Growth mindset (1,932)	2.43	2.43	-0.006
Self-efficacy	Perceived self-efficacy (1,924)	3.56	3.56	0.014
Resilience	Mentor resilience (1,931)	4.33	4.31	-0.060

Note: Data are from baseline surveys. Values presented in columns 3 and 4 are means values for the variables, or in the case of dichotomous measures, the percentage of the sample meeting that characteristic.

The quantitative analyses presented in this report focus on the most recent mentor at the time of the follow-up, who was different from the original mentor in those few cases in which the child was rematched to another mentor after the first match ended. There was also some mentor attrition prior to the follow-up. In this next table, we consider equivalence for the analytic sample of mentors at the time of follow-up, replacing the original mentor with the new (rematched) mentor, where appropriate. These results are presented in Exhibit 17. Four of 19 comparisons yielded an effect size of .05 or higher (bolded in Exhibit 17).

Exhibit 17. Characteristics of Mentors in Analytic Sample and Results of Equivalence Analyses

Control/predictor variables	Measures (N)	BG	EG	Effect size
Gender	Female (1,499)	55.6%	58.9%	0.034
Mentor race	African American, Black (1,508)	21.4%	17.6%	-0.047
	Caucasian, White (1,508)	62.7%	65.7%	0.031
	American Indian or Alaska Native (1,508)	3.8%	4.6%	0.020
	Mentor is Asian (1,508)	5.8%	4.6%	-0.027
	Pacific Islander (1,508)	1.4%	1.0%	-0.019
Ethnicity	Latino, Hispanic (1,508)	15.3%	14.9%	-0.006
Age	Mentor age (1,447)	31.52	31.53	0.001
Employment status	Any (1,602)	77.4%	77.3%	-0.001
	Full time (1,602)	58.0%	59.3%	0.012
Marital status	Never married (1,602)	55.1%	56.4%	0.014
Helping profession	At time of baseline (1,501)	32.9%	33.0%	0.001
College student	At time of baseline (1,502)	39.3%	33.2%	-0.063
Experience interacting with youth	Volunteering (1,505)	68.0%	64.3%	-0.039
	Professionally (1,505)	39.9%	33.3%	-0.068
	Family (1,505)	89.8%	87.1%	-0.041
Growth mindset	Growth mindset (1,506)	2.46	2.44	-0.022
Self-efficacy	Perceived self-efficacy (1,499)	3.56	3.54	-0.061
Resilience	Mentor resilience (1,506)	4.33	4.30	-0.071
Gender	Female (1,497)	55.6%	58.9%	0.034
Mentor race	African American, Black (1,505)	20.9%	17.2%	-0.047
	Caucasian, White (1,505)	62.8%	65.5%	0.029
	American Indian or Alaska Native (1,505)	3.7%	5.0%	0.032

Control/predictor variables	Measures (N)	BG	EG	Effect size
	Asian (1,505)	5.8%	4.7%	-0.024
	Pacific Islander (1,505)	1.4%	1.0%	-0.019
Ethnicity	Latino, Hispanic (1,505)	15.9%	14.7%	-0.016
Age	Mentor age (1,446)	31.40	31.66	0.019
Employment status	Any (1,599)	77.2%	77.3%	0.001
	Full time (1,599)	58.2%	59.5%	0.013
Marital status	Never married (1,599)	55.7%	56.1%	0.004
Helping profession	At time of baseline (1,497)	32.9%	33.1%	0.003
College student	At time of baseline (1,500)	39.6%	33.1%	-0.064
Experience interacting with youth	Volunteering (1,503)	68.5%	65.3%	-0.034
	Professionally (1,503)	40.3%	33.2%	-0.074
	Family (1,503)	89.6%	87.3%	-0.036
Growth mindset	Growth mindset (1,504)	2.46	2.45	-0.010
Self-efficacy	Perceived self-efficacy (1,497)	3.57	3.54	-0.064
Resilience	Mentor resilience (1,504)	4.33	4.31	-0.066

Note: Data are from baseline surveys. Values presented in columns 3 and 4 are means values for the variables, or in the case of dichotomous measures, the percentage of the sample meeting that characteristic.

Match Characteristics

By design, youth should have been matched “on paper” with a mentor prior to random assignment. We know that, ultimately, a small number of those planned matches did not actually result in a mentor–mentee match. In addition, some of the matches ended after only one or two interactions between the mentor and youth. In total, 7.9% of the youth in our study did not experience mentoring beyond one or two interactions.²⁹

Programs often try to match youth with mentors based on demographic characteristics, as well as interests and preferences stated by both the youth and the mentor. The vast majority of

²⁹ There was no difference between EG (8.0%) and BG (7.7%) youth on this result.

youth in this study (97%) were matched with a mentor who shared their gender. Of the 3% who were matched with a volunteer who did not share their gender, most involved boys matched with women, or youth matched with couples.³⁰ A little more than half (53%) of youth shared the same ethnicity with their mentors. Among those youth matched with a mentor who did not share the same race/ethnicity, 40% were African American youth matched with white mentors and 33% were Hispanic youth matched with white mentors.

All MEDP programs were charged with enhancing the way they matched the youth and mentors in the study. These enhancements were meant to be implemented with all participating matches. At the 12-month follow-up (or as their match closed in cases that closed prior to follow-up), we asked mentors how well they felt they “matched” their mentees on several characteristics. In general, mentors felt they were well matched with their mentees in several ways. For example, 80% felt that their skills matched areas in which their mentee needed guidance or support, and more than 70% felt their interests or talents aligned well—a key ingredient in fostering strong mentoring relationships (Herrera et al., 2000). Fewer, though still a substantial minority (44%), felt that they were well matched in terms of challenging life experiences they both had faced.

³⁰ No 1:1 matches involved a female youth matched with a male mentor.

Chapter 6. MEDP Implementation

In this chapter, we examine the first research question focusing on **the extent to which the enhancements were implemented**. We first describe implementation fidelity, review the extent to which the enhancements were implemented as intended, and rate each collaborative model by degree of implementation (i.e., full or partial). Then, we examine implementation quality and review the factors that influenced the implementation of MEDP enhancements, using an ecological framework. Next, we examine mentor experiences with the MEDP enhancements and analyze their level of participation in the program enhancements, their responsiveness to the interventions, and whether they perceived the enhancements as feasible. Finally, we analyze the way program staff conceptualized teaching and advocacy within the context of youth mentoring relationships and outline these roles in the mentor–mentee matches that they worked with.

Within this report, the focus of our implementation analysis is primarily at the level of the collaborative. That is particularly true in this chapter since it was at the level of the collaborative that the planning for MEDP took place. The research team came to see the collaborative structure as having important implications for the programmatic enhancements and the evaluation. Before beginning the discussion on the implementation analysis, we offer some introductory remarks on the MEDP collaboratives.

Overview of the MEDP Collaboratives – Climate, Capacity, and Contrasts

The concept of “collaboration” has a long history with a variety of definitions and frameworks that have been formulated by a range of different types of collaborators. This overview has drawn from a report issued by the White House Council for Community Solutions published in 2012.³¹ While the MEDP collaboratives had not, for example, specifically agreed upon “needle-moving changes” to occur in their individual local contexts, they needed to reach agreement about the nature of mentoring program enhancements that would be introduced to foster more intentional advocacy and teaching on the part of volunteer mentors. Three of the five key questions that the Toolbox articulated as key to successful collaborations were consistent with what the MEDP collaboratives did...whether they knew it or not.

First, the collaborating agencies were, by virtue of earning their OJJDP grants, involved in a 3-year grant which the White House Council on Community Solutions defined as a “long-term investment in programming activities.” Second, due to the requirement to participate in a

³¹ Toolbox Overview for Building Needle-Moving Community Collaborations, retrieved from: <http://intersector.com/resource/toolbox-overview-for-building-needle-moving-community-collaborations>.

rigorous randomized control trial, the “collection and use of measurable data for the evaluation” was a given. In addition, community residents were *partners* in this remarkable endeavor—volunteer mentors and participating youth and their parents/caregivers.

Some service providers within the collaboratives were familiar with their partners on the OJJDP proposal. Yet, the degree to which staff from these agencies had worked together formally varied. In other words, the agencies had come together to seek a new funding opportunity and needed to find partners with a shared purpose. Cultivating the uniform vision of that purpose took time and effort to be manifest. This was a new endeavor and posed normal challenges with respect to communication, management, and overall implementation of the enhancements.

In developing this *Overview*, the MEDP evaluation team drew from study reports, site visits, focus groups and materials and information that grantees provided to AIR through the course of the evaluation study. In addition, the grantees provided information on their progress each year to OJJDP, and those continuation applications and progress reports became available to the study team. These reports provided further insight into the processes that emerged as the collaboratives matured and adapted to local circumstances and needs during the initiative.

Across three key areas, as drawn from the ‘Toolkit,’ there was a natural alignment for the MEDP grantee collaboratives as they began to implement the enhancements in individual agency programs. We present reflections on the range of experience for the MEDP collaboratives for these three areas: leadership and governance, shared vision, and capacity and structure.

Competent Administrative Leadership and Stable Governance

It is important to highlight the role(s) of the lead agency in each OJJDP MEDP collaborative. Lead agencies had responsibility to oversee communications, training; program monitoring; data reporting and funding dispersal. This included operationalization of “advocacy” and “teaching” and working with each partnering agency to ensure their participation in a rigorous random assignment evaluation. Several agencies within collaboratives had not had previous experience in this arena. By contrast, some agencies had their own internal evaluators and/or had participated in previous or ongoing rigorous evaluations. For this dimension, there were several factors that were important to examine:

- Who the key personnel were mattered. It was important to understand if the programs in the collaborative had previous experience working together on such things as proposals, projects, curriculum development, and evaluations. Such a track record was an advantage. A prior working relationship among the three or four implementing agencies appears to have been an advantage.

- It was also found to be important if the CEO and project/grant coordinator out of the lead agency provided strong ongoing support, training and monitoring throughout the course of the project. When executive-level leadership in the partnering agencies brought relevant experience to administering grants, this often translated to effective leadership and governance for the collaborative overall.
- In contrast, where we found that the partnering agencies were quite different in organizational culture and program practices, we anticipated that there would be collaboration challenges and this was often borne out.
- We found differences in terms of the extent of mentoring service provision experience and credibility. Previous experience of the lead agency in the collaborative as well as partnering sites in mentoring-related initiatives serving vulnerable youth set the stage for potentially effective leadership and governance.
- A common feature of the more effective collaboratives was the establishment of a full-time MEDP Project Director position for the initiative and study. The regularity and consistency of support from the Project Director translated into strong leadership and governance. Such a structure often made it more likely there would be regularly scheduled in-person meetings, conference calls, one-on-one training along with coaching of staff, and ongoing attention to the enhancements.
- Finally, whether there was stability among the principals in the lead applicant agency was often related to how well the collaborative functioned.

Shared Vision on the Intended Enhancements

It became clear to the research team that the implementation of enhanced practices was a function of the multiple sites within each of the grants fully embracing and agreeing to the administrative and substantive requirements associated with a described “enhancement model.” There are a variety of reasons why the shared vision of a model may fall short among multiple sites within a grantee grouping as those in the MEDP collaborative study. Stated differently, uniform adherence to a particular enhancement “model” may be challenging in sites faced with very different circumstances, conditions, demographics, and target populations.

- At least one highly competent program staff in each of the partnering agencies was critical to the maintenance of fidelity in the enhancement model.
- Creation of tools to guide the implementation of the enhanced practices was another indicator of better adherence to a shared vision. For instance, the incorporation of a match support checklist and a match support quality assurance process, along with regularly scheduled team all-site team calls and several retreats were noted as a reinforcement of the enhancement vision.

- Shared vision was not always a given. Despite agreement in principle that there would be enhancements in terms of mentor/mentee matching, mentor training and mentor support, it became clear in some collaboratives that the vision was not uniformly shared by key staff across the partnering programs. Some of this may be because there was less than consistent and clear articulation and formalization of expectations, as well as monitoring by coordinators and case managers. It was also more likely to be found to be a challenge where some of the partners were smaller with limited staff dedicated to MEDP.
- That so many of the collaboratives featured programs from the same national affiliate organization could not be overestimated in terms of the impact regarding shared vision. For example, the uniformity and consistency of the Big Brothers Big Sisters (BBBS) programming features informed the designs of collaboratives involving BBBS agencies.
- In contrast, the eclectic nature of some of the collaboratives by virtue of populations and neighborhoods served across partnering agencies in diverse communities is a feature that created early challenges on the part of some of the partnering agencies with respect to learning how to work with one another.
- Similarly, for some collaboratives, the nature and diversity of the communities served by the partnering agencies, e.g., urban versus rural, school dropout issues, economic differences, in the collaborative, posed distinct challenges in overall services delivery and implementation.
- Finally, staff from all agencies within the collaboratives participated in early trainings around the content of the new enhancements which helped to gain buy-in to the type of PRACTICE(S) that would be introduced through the enhancements

Capacity and Structure

Collaborations involve people—an inherently tricky aspect of getting collaborations up and running and keeping them on course. Personality conflicts get in the way. Staff turnover, which is common in the mentoring and other human services worlds can impede progress as new staff are brought in to lead efforts. Funding differences and shifts within partnering agencies can become problematic and challenging. As ably stated by Ehrlichman, Sawyer & Spence (2018), “Collaboration is appealing in concept but challenging in practice.” With regard to the capacity and structure of collaboratives in MEDP, several factors were found to be important.

- Changes in leadership and key staff were a limiting factor and posed a challenge in the capacity and structure in some of the collaboratives. This was particularly true when the transition in the Project Director position did not bring the same level of experience as the previous project director.

- Smaller agencies with fewer staff available overall, which necessitates staff having to devote time to multiple tasks, reportedly had a constraining impact on capacity and structure. Even with a reduction in caseload size and the provision of more structured training that was made possible because of MEDP funding, staff found it challenging to keep up with mentor training and monitoring of match activity
- It was not uncommon over the life of the MEDP for there to be changes in leadership, prolonged absences of some key staff, staff turnover, and the reliance on very few staff who had to handle multiple tasks. All of this contributed to the unevenness that was found in some of the collaboratives.
- A further complication involved the situation where personnel in positions responsible for key aspects of MEDP implementation did not bring extensive experience in mentoring and/or youth development. Staff turnover of key personnel in program implementation influenced momentum at different times during the study.
- It mattered to the extent that communication lines were strong and well maintained.

To What Extent Were the Enhancements Distinct from the Business-as-Usual Approaches of the Agencies?

It was left to the mentoring programs within each of the MEDP collaboratives to determine how they would enhance practices to encourage mentors to incorporate teaching and advocacy functions into their roles. In preparing for the evaluation, it was important for the research team to understand what business-as-usual looked like and to assess how different the proposed enhancements were to the existing practices. Because the enhancements were designed to be the same for each agency within the collaborative, it was also important to understand how similar the collaborating partners were to one another in their existing practices.

The collaboration involving two 4-H programs was an example of strong consistency in the BG model within the collaborative. The six collaboratives that included Big Brothers Big Sisters (BBBS) agencies were also quite consistent across the member sites in their preexisting program practices, which were guided by BBBS of America (BBBSA) national standards. Nevertheless, there was still some variation between and within the BBBS collaboratives varied in how they trained their mentors and monitored the matches. For example, the agencies varied with respect to whether and what type of postmatch trainings were offered to the volunteers once they were matched. Variation among partnering agencies within a collaborative were more evident for the three collaboratives that were not guided by the national BBBS or 4-H standards. These agencies started the project with different mentoring

models and standards and even varied in the types of youth and volunteers they recruited for mentoring.

Some of the MEDP enhancements were entirely new program elements, including new in-person and/or online trainings, structured match activities, and mentor support groups. In some cases, the collaboratives and programs added new structures and supports to deliver these enhancements. Other enhancements were add-ons to existing practices that the agency was already implementing to some extent in their BAU model. For example, in some cases, the existing match planning that took place when the match first met was enhanced with goal setting that guided match support. As another example, some agencies reduced the match caseload so that the staff could provide more intensive support to matches in the intervention group.

To represent the contrast between the EG mentoring models and the BG models, we organized the various enhancements into four types: training, match support, peer support for mentors, and structured match activities. Enhancements to training included (a) new in-person trainings that did not exist before, and (b) new online trainings that the partnering sites had not used before. Enhanced match support practices included: (a) focused match support promoting teaching/advocacy in the mentoring relationships, (b) new targeted practices for the mentoring relationships (e.g., goal setting, sparks development), and (c) increased number/frequency of staff contacts with match participants. The new practices designed to provide peer support for mentors included: (a) blog-like communications made available in an online format for mentors to promote peer-to-peer coaching and interaction, and (b) in-person mentor support groups. Finally, some of the collaboratives offered enhanced practices in the form of structured match activities, including: (a) structured activities for the match (e.g., service learning), and (b) group activities for the matches, and often, the family.

On average, collaboratives developed more than four (average = 4.6) new enhanced practices. For each collaborative, we outline the planned enhancements in Exhibit 18. We also created a summary score based on a count of the number of different enhancement elements for each collaborative. A score of 1, 2, or 3 reflects that the EG model was just *a little* distinct from the collaborative's BG model. A rating of 4 or 5 indicates that the EG model was *somewhat* distinct from the BG model, and a rating of 6 or more indicates that the EG model was *quite* distinct from the BG model. One collaborative (I) had a score of 7, one (L) had a score of 6, two had scores of 5 (K, R, and Y), three had scores of 4 (A, E, and H), and two (F and S) had scores of 3.

Exhibit 18. A Comparison of Business-as-Usual and Enhanced Program Services

Collaborative	BG		EG (new practices)									Rating (number of enhancements)	
	Mentor training	Mentor support	Training		Match support			Peer mentor support		Match activities			
			New in person trainings	New online trainings	Focused match support to promote T/A	Focused practices (e.g., sparks, goal setting)	More frequent staff contact with match**	Mentor blog	In person mentor groups	Focused match activity	Group activities with matches***		
A		Different at each site, monthly mentor activities at one site		✓	✓	✓			✓				4
E		Match activities and group meetings only at school-based sites		✓	✓	✓			✓				4
F	Mentor resource guide	Monthly mentor activities	✓							✓	✓		3

Collaborative	BG		EG (new practices)									Rating (number of enhancements)
	Mentor training	Mentor support	Training		Match support			Peer mentor support		Match activities		
			New in person trainings	New online trainings	Focused match support to promote T/A	Focused practices (e.g., sparks, goal setting)	More frequent staff contact with match**	Mentor blog	In person mentor groups	Focused match activity	Group activities with matches***	
		with other matches										
H	Prematch training	Monthly phone contact*		✓	✓	✓		✓				4
I	Prematch training	Monthly phone contact*	✓	✓	✓	✓			✓	✓	✓	7
K	Prematch training	Monthly phone contact*	✓		✓	✓				✓	✓	5
L	Prematch training	Monthly phone contact*	✓	✓	✓	✓	✓				✓	6
R	Prematch training	Bi-monthly in-person contact*		✓	✓		✓	✓		✓		5

Collaborative	BG		EG (new practices)									Rating (number of enhancements)	
	Mentor training	Mentor support	Training		Match support			Peer mentor support		Match activities			
			New in person trainings	New online trainings	Focused match support to promote T/A	Focused practices (e.g., sparks, goal setting)	More frequent staff contact with match**	Mentor blog	In person mentor groups	Focused match activity	Group activities with matches***		
S		No established mentoring structure	✓					✓				✓	3
Y	Prematch training	Monthly phone contact*	✓		✓	✓				✓		✓	5

*These sites implemented the national guidelines as required by the BBBS national service delivery model, which required two phone calls during the first 3 months of the match and monthly calls during the first year of the match with the mentor or the guardian/mentee in the match.

**One collaborative additionally implemented a 6-month home visit with the mentor to discuss match progress.

***These activities were also open to families.

In addition, the research team, in collaboration with OJJDP staff, provided an assessment of how likely each program model was to achieve positive youth outcomes. As a precursor to these assessments, we asked staff in each of the 30 programs to complete an inventory around the Elements of Effective Practice for Mentoring (MENTOR, 2015). Up to 24 points were possible for each program if they reported having each of the elements we listed in place. Scores for partnering agencies were averaged together to obtain the scores presented in column 2 of Exhibit 18. These data were provided to members of the research team who then reviewed written materials from the collaborative to answer a series of questions about the likelihood the planned enhancements would make a difference for the youth being served. Each collaborative was rated by two different reviewers from the research team. The ratings were averaged together and are provided in Exhibit 19.

The planned enhancements were rated in terms of whether the new practices would encourage mentors to incorporate advocacy and teaching functions into their mentoring. These ratings were combined across five items and the scores are reported in column 3 (scores can range up to 15). In columns 4-10, scores (possible scores for any particular item can be from 1-3) are averaged across the two reviewers. These scores reflect the reviewer ratings of the following:

- Will the enhancements promote the engagement of youth participants in the intermediate outcomes proposed in the theory of change?
- If the full set of enhancements were implemented, would the youth participants benefit?
- Will the enhancements, if implemented as planned, provide a foundation for meaningful mentor-mentee relationships?
- How different are the proposed enhancements from the BAU model?
- Does the collaborative seem strong enough to implement the enhancements effectively?

Scores across these items are combined into a weighted overall rating—low, medium, and high. These preliminary overall ratings are consistent with the ratings determined in the implementation evaluation, which we turn to next. For the collaboratives rated “high” on the preliminary assessments shown in Exhibit 19, all of them were able to achieve full implementation of their enhancements.

Exhibit 19. Preliminary Ratings by Research Team on the Likelihood of Impact of Proposed Enhancements

Collaborative	Agency Reports of Elements of Effective Practice	Total Score on Practices to Encourage Teaching and Advocacy	The program enhancements will promote youth’s engagement in proposed intermediate outcomes.	If the full set of enhancements were implemented as planned, the program would significantly benefit youth.	Evidence based practices in place provide a solid foundation for the establishment of effective mentoring relationships.	How different is the enhanced mentor training from BAU mentor training?	How different is the enhanced ongoing mentor support from BAU mentor support?	The collaborative is strong enough to drive the implementation of the enhancements.	If full set of enhancements implemented as planned, how likely we will detect impact?	Overall Rating
A	18.7	12.0	2.0	2.5	2.0	1.5	2.0	3.0	2.5	Medium
E	21.0	8.5	2.0	2.0	1.5	2.0	1.5	1.5	1.5	Low
F	19.0	11.5	2.0	3.0	2.5	2.0	2.0	3.0	2.0	Medium
H	23.3	8.0	1.5	1.5	3.0	1.5	1.5	1.5	1.5	Low
I	20.5	15.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	High
K	22.0	14.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	High
L	20.0	11.0	2.0	2.0	3.0	3.0	2.0	3.0	2.0	Medium
R	22.0	14.0	3.0	3.0	2.5	2.5	2.5	2.5	3.0	High
S	21.5	7.0	2.0	2.0	1.0	1.0	1.5	1.0	1.5	Low
Y	21.7	12.5	2.5	3.0	3.0	2.5	2.5	3.0	3.0	High

To What Extent Were the Programmatic Enhancements Implemented?

Within each collaborative, the partnering agencies agreed to implement the same set of programmatic enhancements as part of MEDP. The collaboratives (and the agencies within the collaboratives), however, varied in how well they could implement their proposed enhancements. We observed that not all proposed enhancements were implemented with fidelity. In this section, we examine the extent to which the enhancements were implemented. “Full” implementation occurred in cases where the collaborative developed and implemented all its proposed enhancements, as indicated in Exhibit 18. If, along the way, the enhancements needed to be adapted to address challenges around their implementation, we rated the collaborative as “full—adapted.” When only some of the planned enhancements were implemented, we rated implementation as “partial.” In Exhibit 20, we apply this assessment rubric to each collaborative, along with explanatory comments.

Exhibit 20. Characteristics of Implementation Fidelity, by Collaborative

Collab.	Extent of Implementation	Number of Enhancements	Fidelity to the Enhanced Program Models
A	Partial	4	The four enhancements were partially implemented. The initially proposed 4-hour training was condensed into a 2.5-hour in-person training that included three core topics. Advocacy was embedded into training content but was not a primary focus. It was, though, promoted through staff contact with mentors. The matching tool was fully implemented and used as a match support tool to facilitate communications between program staff and the mentors. To facilitate match support calls, one site created a checklist of “touch points” of teaching and advocacy, goals and sparks development. This tool, however, was not used consistently by other sites. An online portal for mentor support and online trainings was developed in the second year of the intervention and was also not fully implemented.
E	Partial	4	The four enhancements were not fully implemented as intended. The initially proposed 4 hours per month online mentor trainings were first developed into nine online modules and were then condensed to three (1-hour) online

Collab.	Extent of Implementation	Number of Enhancements	Fidelity to the Enhanced Program Models
			<p>modules that included 8 core topics to be administered through their online system. One site offered these modules during in-person group trainings. Advocacy was embedded into training content and match support. The monthly mentor gatherings were implemented partially in school-based sites, but it is not clear if these were part of the afterschool activities implemented for all matches. Staff calls to mentors to monitor the matches and implementation of the match plan were somewhat implemented with community-based mentors. An online mentor blog was not implemented.</p>
F	Full	3	<p>The three proposed enhancements, including the monthly group meetings with mentors, engaging mentors in ongoing family activities, and the annual mentor conference, were implemented as intended. Teaching and advocacy were supported through more guided conversations during these meetings.</p>
H	Partial	4	<p>The four proposed enhancements were partially implemented. The initially-proposed online training modules and mentor blog were not developed and implemented until the second year of the intervention and were not utilized fully because of access issues. Instead, collaborating agencies developed and delivered four 1.5-hour in-person trainings on specific topics. The content and delivery of trainings were inconsistent among the partnering sites. Advocacy was embedded into training and promoted through staff contact with the mentors. Match plans based on youth risk factors were developed and presented at the time of matching, although were implemented and supported inconsistently across the various staff. Another planned enhancement for the collaborative, but only carried out by one site staff member, involved emailing EG mentors relevant online links to brief videos covering topics to promote advocacy.</p>

Collab.	Extent of Implementation	Number of Enhancements	Fidelity to the Enhanced Program Models
I	Full-adapted	7	<p>Seven enhancements were implemented as intended. Three trainings (intended for 3, 6, and 12 months after the start of the match), about 1.5 hours each in length, were implemented. Each site organized social events as intended, although the numbers varied across sites (from three to 11). Goal setting was implemented as intended in match support and incorporated into the 3-month training. Mentor support groups were implemented as intended. Advocacy was embedded into training content and promoted through support groups and staff contact with mentors. Match support staff were supervised through an ongoing assessment, to reinforce their focus on teaching and advocacy skills during match support meetings.</p>
K	Full	5	<p>The five proposed enhancements were implemented as intended. The primary enhancements of two 2-hour trainings were implemented as intended, although the length varied from 1.5 to 3 hours. They also implemented two match activities that were required enhancements. Match support involved a revised set of discussion questions for monthly match support contacts between staff and mentors. Advocacy was embedded into training content and promoted through staff contact with mentors. Mentor activities were also monitored through online logs completed by the mentors. Focused match activities and group activities were implemented as intended.</p>
L	Full	6	<p>The six proposed enhancements, including online and in-person training, quarterly group match activities, more frequent staff contact with all parties of the match and 6-month home visits, were implemented as intended. Advocacy was embedded into core program documents, the first online training, and the in-person training, and was promoted through match goals identified during this training and followed up on during match support calls.</p>
R	Full	5	<p>All five proposed enhancements, the in-person 2.5-hour training, 12 online training modules, mentor support</p>

Collab.	Extent of Implementation	Number of Enhancements	Fidelity to the Enhanced Program Models
			portal, and focused match activities (i.e., service learning activities) were implemented as intended. Advocacy was promoted through an initial training, an online training module that focused on the topic and more frequent staff contact with the mentors. The research-based models (e.g., motivational interviewing) were incorporated into trainings and in-person match support as intended.
S	Partial	3	Each of the three proposed enhancements were partially implemented. There was one designated enhancement training that was delivered regularly. Advocacy was built into the training content but was not a primary focus. In addition, mentors were asked to spend twice as much time with their mentee, monthly, as their BAU counterparts. Staff were asked to have more regular contact with EG mentors and there was an expectation that there would be a higher number of match activities for the enhancement group. Program records showed that there was ongoing contact with mentors across the course of the program, but this collaborative did not have a structured format for those discussions and the program staff focused more on achieving the contacts than in targeting the conversation during the contacts. Group activities took place periodically, but perhaps less frequently than would be suggested by having this as one of three enhanced practices for the initiative.
Y	Full-adapted	5	The five proposed enhancements were implemented as intended. Trainings were delivered consistently to all sites and monthly mentor and program-sponsored activities were initially developed and implemented as intended but the frequency of them were reduced from monthly to quarterly because of low/no attendance. Advocacy was promoted through content embedded into training but not as a primary focus. Advocacy was, however, primarily promoted through staff contact with the mentor.

In scoring the collaboratives in terms of the extent to which they implemented their proposed enhancements, two patterns emerged. First, all six of the collaboratives that fully implemented the enhanced practices were affiliated with national organizations, and this meant that they abided by national standards in their BG model. This likely had implications for the quality of mentoring that was provided by BG mentors and whether the enhancements would realize a measurably different impact relative to the effect of BG mentoring. Second, all the partial implementers struggled with implementation of planned online components (i.e., mentor blogs, an online portal for mentor support, online trainings). The proposed online components were often new practices, rather than modifications to existing practices.

One might expect that collaboratives proposing fewer changes might have achieved higher levels of implementation, but that does not appear to have been the case. The collaboratives that we categorized as planning enhancements that were just a *little* distinct from the BAU model were not necessarily the most successful in implementing those changes: The full implementers had an average rating of 5.0 on our measure of how distinct their practices were from the BG model, whereas the other collaboratives averaged a 4.2 on this measure.

We examined whether implementation fidelity related to the type or number of the enhancements proposed. For example, we observed that five of the six collaboratives identified as demonstrating full implementation were attempting to offer five or more different types of enhancements. In comparison, four collaboratives rated with partial or limited implementation were attempting to offer three or four enhancements. Yet, one collaborative proposed only three new practices and implemented all those practices. Thus, we hypothesized that it was more important to understand program processes and capacities that supported or challenged the extent to which the collaboratives could implement the enhancements with fidelity. We explored whether what mattered most was how well the collaborative sites were positioned to overcome their challenges of implementation. We discuss factors linked with implementation quality in the next section.

What Were the Adaptations to the Enhancements?

As we described above, some collaboratives elected to make changes to their proposed enhanced programmatic models. The purpose of these adaptations was to address challenges in implementing the enhancements as designed. They were also intended to ensure that the mentors would be exposed to the intended information and supports.

Three of the partial implementers (A, E, and H) adapted their enhancements because they faced challenges developing the online platform that would be used to train the mentors, engage them in blogs, and provide them with access to resources.

- Collaborative A had initially proposed online trainings that were ultimately not fully developed and available online until more than six months after the launch of the initiative. Because of the delays, some mentors received the trainings in person, while others received them online. This collaborative also developed the training components incrementally. This meant that the mentors matched in the first year did not receive the full training *content* that was available to those who were matched in the second year. As part of their adaptations, the collaborative, which had proposed 4 hours of in-person training, condensed the training to 2.5 hours. In addition, the school-based partnering site within this collaborative implemented several adaptations to the planned enhancements. For example, the school-based site delivered all trainings to mentors on-site and did not involve their mentors in the trainings that were scheduled for the other two partners.
- Collaborative H was not able to develop the online platform for the trainings and mentor support in a timely manner. They had contracted this component to an outside agency. To ensure that their mentors received this information, they converted the trainings into PowerPoint presentations to deliver to mentors during in-person trainings. When the online platform was launched at the end of the first year of MEDP, many mentors had already hit their first-year mark, and others had technical issues with logging in to the portal. Consequently, the online platform, although developed, was not implemented consistently, and some mentors received their trainings in person, while others received them online.
- Collaborative E had initially proposed to develop nine online training modules but condensed them into three modules when they received feedback from the mentors, most of whom were college students, that they could not realistically complete so many trainings. One of the planned trainings that was focused on crisis situations was deemed to be relevant to only one of the partnering agencies, which was working more with gang-involved and high-risk youth, while the other partners served lower-risk youth with little to no gang involvement. Thus, the collaborative revised the content of that module. In addition, mentors at the two school-based sites received the trainings in person, whereas mentors from the other agencies received them online.

Two of the full implementers also saw the need to adapt their enhancements. However, these collaboratives did not make any programmatic changes to the design, but instead added different formats of delivery or reduced the frequency of required activities to increase mentor participation.

- After experiencing low attendance rates for the enhanced training that was intended to be completed about three months after the start of the mentoring relationship, Collaborative I offered its 3-month training online for those mentors who did not attend the in-person training.
- Also in response to low attendance rates, Collaborative Y offered one of its trainings in a webinar format and reduced its monthly mentor support meetings to a quarterly schedule, right after trainings, to promote attendance. This collaborative also reduced its match activity offerings from monthly to quarterly.

Program Differentiation

We found that those collaboratives we rated as having full implementation put a lot of effort into implementing the intervention as close to the proposed model as possible and sought to implement the enhancements *consistently* at all partnering sites. In contrast, in some individual sites within collaboratives that only partially implemented their enhancements, staff diverged from the agreed-on program model or employed additional strategies in efforts to more successfully implement the enhanced practices. These creative practices that were implemented at some sites within a collaborative but not others—which we characterize as “program differentiation”—were intended to boost mentor engagement in the enhancements. These local efforts, however, also meant that not all mentors within these collaboratives received the same enhancements.

- In response to a lack of mentor engagement in other planned enhancements (e.g., in-person trainings), one of the Collaborative H partners e-mailed mentors links to brief online videos (e.g., TED talks) covering a range of topics. Staff hoped that these brief but powerful videos could be viewed by mentors at their convenience and that they would find them relevant to their own mentoring relationship. The selected videos focused on topics that could help mentors serve as teachers or advocates for their mentees. This strategy was not, however, implemented by the partnering agency. In contrast, the other agency launched a Facebook page for their mentors to communicate with one another and with match support staff—a strategy that was not used by the partners that promoted the online videos with mentors.
- Two school-based sites in Collaborative E provided group activities to EG matches (with BG matches included), but mentors in the other two sites in this collaborative did not have this opportunity.

- To compensate for lack of attendance at in-person trainings, one of the sites in Collaborative A trained as many as half of the mentors one-on-one by phone. One of the implementation sites also added a training that included both the EG and BG matches to address a traumatic event that the school had experienced:

One of our students committed suicide during the program, and this affected the entire mentoring program, not just the enhanced group. It was a challenge to make sure that everyone's needs were met with a training that did not just happen for the enhanced group.

Chapter 7. What Did It Take to Implement the Enhancements in Mentoring Programs?

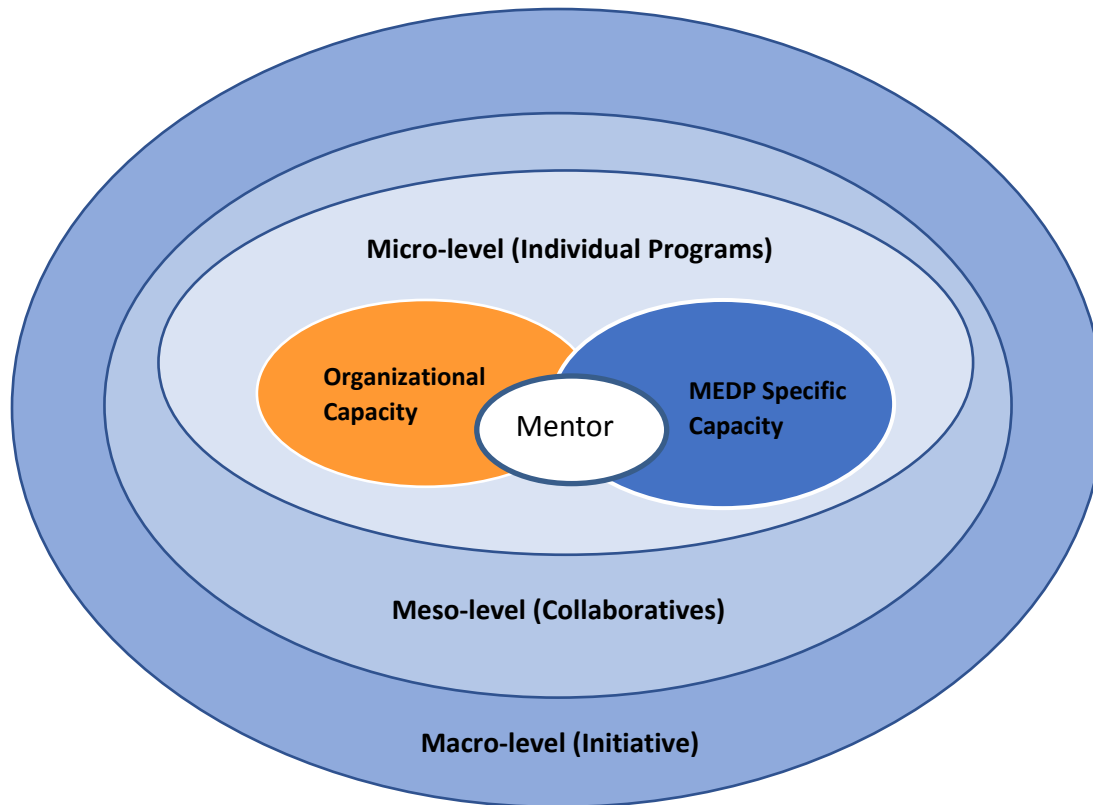
In this chapter, we discuss the findings from the analyses that addressed the second research question, which examined what it took for the participating programs to implement MEDP. In the first part of the chapter, we explore the factors that affected the implementation of the programmatic enhancements. The second section of the chapter presents results from our qualitative analyses on how the programs defined teaching and advocacy functions. The final section provides findings from the cost analysis.

What Factors Affected the Implementation of the Enhancements within Programs?

As part of the process evaluation, we were particularly interested in the various factors that facilitated the implementation of the programmatic enhancements as well as any factors that had limiting effects on the initiative’s progress. In examining these factors across the MEDP collaboratives, we considered their influence on the extent to which the collaboratives (and the individual agencies within collaboratives) could implement the MEDP enhancements with fidelity. We identified factors at multiple levels, including characteristics of the program staff, the organization itself, the broader collaborative, and the communities where they were situated. These multi-level factors seemed to influence—both directly and indirectly—how well staff could implement the enhanced program practices.

We explored the interrelationships among different levels of implementation factors using the ecological framework described by Durlak and DuPre (2008). Durlak and DuPre’s ecological framework applies a systems approach to understanding the implementation of innovations by emphasizing the importance of context and explaining the influence of context in terms of interrelated settings. In considering how this framework might apply to MEDP, we hypothesized that several levels of contextual factors would influence the initiative’s implementation, as depicted in Exhibit 21: (1) the match level (i.e., the interactions between the mentor and his/her mentee); (2) the micro level (i.e., the implementing programs); (3) the meso level (i.e., the collaboratives); and (4) the macro level (i.e., the structure of the MEDP requirements). We examine each of these contextual levels in turn in this next section.

Exhibit 21. The Ecological Framework as Applied to the MEDP Implementation Evaluation



Macro-Level Factors Associated with Implementation Fidelity

We refer to the outer circle in this diagram as the Macro Level. At this level, there are factors that we expected to shape the efforts of the collaboratives, which in turn were expected to shape the delivery of the MEDP enhancements at the level of the mentor-mentee match. Macro-level influences include aspects of the community context, which in the case of the MEDP initiative could involve the location of the collaborative. Across the ten collaboratives, the partnering agencies were sometimes all located in the same metropolitan area and were sometimes geographically dispersed across the state. There were also differences in the types of community partnerships that were important across the various collaboratives. In addition, *within* some collaboratives there were also macro-level differences across programs—for example, in whether the programs operated in urban or rural contexts.

We found the greatest influences at the macro level to be due to the nature of the MEDP initiative. For instance, OJJDP's solicitation for the MEDP initiative laid out certain parameters that established the overall context in which collaboratives and sites developed and implemented their distinct and innovative practices. While the federal funding meant access to resources that the agencies did not have before, the funding requirements stipulated that recipients would participate in the evaluation of the initiative. The required evaluation imposed additional expectations and demands on the agencies.

To explore the macro-level effects of the MEDP initiative, we administered a staff survey toward the end of the data collection phase. We sought to administer the survey to all involved MEDP staff from every program. The survey included questions about positive and negative outcomes that they felt resulted from their program's involvement in MEDP and to what they attributed those outcomes.

Positive outcomes or improvements attributed to MEDP

MEDP as an initiative influenced implementation quality perceived by staff in programs. Respondents to the staff survey were given a list of 16 potential positive outcomes or improvements that might have resulted from their involvement in MEDP and were asked to identify which ones they had experienced and attributed to MEDP. The responses endorsed by at least 50% of staff were as follows:

- The relationships they developed with the collaborative agency partners (endorsed by 61% of staff respondents)
- Match support (57%)
- Staff–mentor relationships (55%)
- Mentor–youth relationship (54%)
- Documentation of match progress (51%)

Thus, a majority of staff reported that MEDP led to key improvements in several areas that they might not have experienced if they had not taken part in the initiative. These improvements were key focal points of MEDP: building collaborative partnerships with other similar agencies, providing enhanced match support, enhancing the relationship between staff and mentors, and creating more effective mentoring relationships. We revisit several of these areas again in the quantitative analyses using data from the mentor, youth and parent surveys.

Staff were also given a list of 17 components of the initiative and asked to select those that they considered to be responsible for these positive outcomes. Among the choices offered, the three most commonly cited factors to which staff attributed the positive outcomes were:

- funding to implement the enhancements (58%)
- greater emphasis on advocacy in the mentor role (55%)
- stronger training for matches (53%)

That the OJJDP funding was selected most often among the list of 17 components is an acknowledgement that improvements like these likely require access to additional resources. These responses also provide support for key tenets underlying the theory of change—namely, that intentional emphasis on supporting the incorporation of advocacy functions into the mentor role as well as stronger training for mentors are key ingredients in supporting the intended outcomes of MEDP. We explore these potential “paths” further in our quantitative analyses.

Negative outcomes or strains attributed to MEDP

While participation in MEDP was seen as contributing to positive outcomes and improvements, staff also reported that participating in an experimental study with specific requirements resulted in some negative outcomes or strains. Less than one-third of participating agencies (only 9 out of 30) had previously received federal grants. In addition, three of the ten collaboratives did not include any agencies with previous federal grant experience. Nine of the agencies had previously been subject to external program evaluations, and only five had taken part in another OJJDP-funded research study. Despite this variability across collaboratives and agencies in their experience with federal grants and program evaluations, all MEDP agencies were expected to participate in the MEDP evaluation. This study was rigorous in its requirements for staff to adhere to the experimental research design and collect extensive data about participants and matches. Many MEDP staff found these requirements challenging. On the staff survey, more than 40% reported that collecting data for the study was challenging. In fact, it was the second most commonly reported challenge. The task that was reported to be challenging by the highest number of staff was getting mentors to participate in the enhanced ongoing training.

Another common concern raised by program staff had to do with the expectation for enrollment of youth and mentors. While the programs did enroll an average of 72 matches (minimum=40, maximum=96), this was a major undertaking for some agencies that had not recruited mentors and youth at this pace prior to the study. Although many of the programs reported serving similar numbers of matches prior to the initiative (i.e., had large numbers of active matches in their records at the start of the study), they were not accustomed to recruiting volunteers and families at the pace expected by MEDP (i.e., 75 matches in a 12-month period). Many respondents on the staff survey described the challenges they experienced

around their recruitment quota (recruiting families or volunteers were noted as challenges by 62% and 74% of staff, respectively), as seen in one comment shared through the staff survey:

With the emphasis on matching a certain number of teens by a certain time, agency staff rushed to recruit youth and mentors and make matches that were not ideal. Some of the youth and parents recruited for the grant were not invested in the program and did not follow through with the 1-year commitment. This is the first research grant that our agency has participated in. In retrospect, we did not have the capacity to make teens a priority and make the number of matches that was expected.

We did find, though, that agencies and collaboratives were able to find creative approaches to meeting the required recruitment goal, particularly using existing contacts in the community and developing and accessing new partnerships and resources. Some examples included hosting recruitment sessions with for-profit companies, participating in university fairs and partnering with local universities so that college students could satisfy their required community service hours by volunteering. Visiting local high schools, hosting community events, and using local businesses such as barbershops to recruit volunteers were also helpful strategies. Programs also developed campaign materials and slogans such as “30 men in 60 days” or “100 Bigs in 30 days,” and created t-shirts to acknowledge mentors. Many sites relied on social media to boost recruitment or used current mentors, as well as parents of current mentees to support recruitment.

Meso-Level Factors Associated with Implementation Fidelity

Moving from the outer circle to the center of the figure, the second circle is referred to as the Meso Level. At this level, we examined factors influencing the collaboratives and the way they functioned. Note that meso-level factors influenced only the processes *within* each collaborative, not *among* the collaboratives.

The OJJDP solicitation for MEDP required youth-serving mentoring organizations to partner with at least two other mentoring agencies and apply for funding as a collaborative. This requirement was part of a strategy to keep the number of grants to manage at no more than 10, while at the same time including at least 30 programs in the evaluation.³² There was no requirement that the collaboratives should involve existing partnerships, and it was left to the grantees to work out the nature and extent of their partnerships and the way the collaborative would function. This feature of MEDP added a layer of complexity to examining the initiative’s

³² In preparing for this solicitation, statistical power calculations suggested that 30 programs with at least 75 matches each would allow for a rigorous multi-site evaluation.

overall quality of implementation, but also provided a unique opportunity to examine how diverse agencies could benefit from one another and how different types and configurations of collaboratives could contribute to the success of a large-scale initiative.

During the three years of MEDP, the evolution of these partnerships unfolded differently for each of the collaboratives. Analyzing data from our site visits and notes from ongoing work with staff at each agency over the life of the study, we identified three components that were associated with implementation quality at the collaborative level: (a) the leadership of a grantee coordinator, (b) the amount and nature of communication that took place among the collaborating agencies, and (c) the development of capacity through the use of tools and resources developed collaboratively and shared among partnering sites.

The Role of a Grantee Coordinator within the Collaborative

All collaboratives had an identified lead agency (i.e., the grantee) and a key person who served as the grantee coordinator. The lead agency in each grantee collaborative had responsibility for overseeing communications and coordination with OJJDP staff (e.g., data reporting, funding dispersal), the research team (e.g., ensuring that each program site met the study's requirements), and among the partnering agencies (e.g., staff training, program monitoring). The responsibilities of the coordinator also included guiding the partnering agencies in the operationalization of advocacy and teaching in mentoring and determining how related goals would be achieved through the enhancements. Yet, the role of the grantee coordinator and the structure of his or her leadership differed across collaboratives.

Five collaboratives created a centralized effort to develop and monitor the implementation of the enhancements through the grantee coordinator. Even among these five collaboratives, the specific role responsibilities and aspects of the structure of these positions varied. One collaborative (I) hired a full-time grantee coordinator, whose time was fully allocated to MEDP. Two others (K and Y) had grantee coordinators whose primary time was allocated to MEDP and focused on developing the mentor trainings, training and monitoring staff across all partnering sites, and creating monitoring tools for staff. Another collaborative (L) hired a regional training coordinator who then grew into the role of a grantee coordinator for MEDP. And the grantee coordinator for one collaborative (R) was based at the grantee organization that provided support to the three implementing agencies—support that included developing mentor trainings, training new staff, and monitoring implementation. We found that when the partnering agencies had different structures and capacities, it was even more important for the coordinator to facilitate collaboration among the agencies that had.

Despite the different structures among the collaboratives, the grantee coordinators shared several characteristics that benefitted the quality of implementation: (1) they developed training materials for the sites; (2) they created structures that supported ongoing communication and collaboration; (3) they created common tools for all sites to use; and (4) they emphasized adherence to the MEDP model. Three collaboratives also benefitted from a lead agency that had strong organizational capacities and experience participating in a research study prior to MEDP. Grantee coordinators within this centralized model adopted multiple roles as they worked with program staff. When MEDP program staff changed, these grantee coordinators oriented new staff to the MEDP study, trained them in the MEDP enhancements, and supported them in implementing the program. For example, in one collaborative, when new staff were hired to support EG matches and the site coordinator was on maternity leave, the staff were trained by the grantee coordinator and the monthly collaborative meetings with staff from partnering agencies became a major source of support.

Other collaboratives (A and E) used a more distributed leadership model, in which the coordinator had less time devoted to the project and worked closely with site coordinators, who then worked with their own program staff to train, support, and monitor the matches. Two collaboratives (F and H) did not have a dedicated grantee coordinator but delegated key activities among a small number of persons from the lead agency to handle grantee administration and coordinate the enhancements with the partner agencies.

The primary role of the grantee coordinator (in addition to coordinating OJJDP reporting) was to lead the development of the enhancements and ensure that the collaborating sites were working toward a *shared vision* and adhering to the MEDP model. The agencies within each collaborative were expected to implement the same EG model, including enhancements to the mentor trainings, match support/case management structures, mentor support, and match activities, as shown in Exhibit 22. Creating a shared vision at the collaborative level and adhering to the same intervention model was emphasized by OJJDP staff and the research team and was considered key to ensuring that the examined youth outcomes were due to an agreed upon intervention model that was consistently implemented as intended by all collaborating sites.

Exhibit 22. Grantee Coordinator Duties across Collaboratives

Collaborative	Percentage of effort for coordinator on MEDP	Duties				
		Train new staff at all sites	Monitor match support	Regular contact with match support staff	Develop mentor trainings	Conduct mentor trainings
A ⁺	40%					✓
E ⁺	40%				✓	
F	90%					✓
H ⁺	35%				✓	✓
I	100%	✓	✓	✓	✓	
K	95%	✓	✓	✓	✓	✓
L	75%			✓	✓	✓
R	40%	✓			✓	✓
S	50%				✓	
Y	80%			✓	✓	✓

Note: ⁺ Grantee coordinators changed over the course of the program/evaluation.

The role of the coordinator in facilitating the development of a common model for the collaborative was generally easier when the partnering agencies had similar mentoring structures and missions, even when the agencies had different levels of organizational capacities. One coordinator from a collaborative with all BBBS sites noted how much the programs learned from each other despite relatively minor differences in practice:

I felt like we had each other to ask questions [and] figure out best practices. Had we been alone it would have been difficult. Each site does things different and we learned from each other. Like match support is a little bit different. With the match support calls our staff [would say], "I will ask this and this." The other sites said, "This is what we do." So we figured out what is the best approach we could all use. With mentor meetings it is the same; we tried things and they tried things and we talked [about] what could work that we can both do. One of the things [was administering] the surveys. . . They invited people to eat pizza and [participants] came. We had not done anything like that. We learned from each other.

Yet, creating a shared vision was difficult in collaboratives in which program structures for serving youth varied greatly:

[Implementing] a new program and then having the evaluation on top of it was a bit straining for the collaborative. We all have our own organizations and practices, and then trying to agree upon a common standard or practice took a lot of time. We have community-based and school-based [programs], and we operate under different calendar schedules. A lot of the effort was trying to sync all of that. It wasn't because people weren't willing to work. It's because agencies had different timelines.

In general, maintaining a shared vision and adhering to a consistent model across partnering programs within the collaborative introduced a layer of challenges on top of those resulting from developing and implementing the enhancements themselves. This was especially true when there was staff and site coordinator turnover because each new staff member needed to be oriented to the enhancements and requirements of the research study to maintain fidelity to the enhancements.

Communications within the Collaborative

As we have noted, many collaboratives had grantee coordinators who served a key role in the final design and implementation of the enhancements. These coordinators often had a primary contact within each partner agency (i.e., the site coordinator) who worked closely with staff at his or her program and coordinated the enhanced practices. At the start of the initiative, most communication and collaboration focused on developing the enhancements and establishing the structures to deliver them. Once the enhancements were in place and the programs turned their focus to recruitment and data collection, however, the interagency communication and collaboration often decreased. In some cases (e.g., E, F, H, and S), when new staff members replaced the initially trained staff, this transition also affected the relationships that had been built among staff within partnering sites and the exchange of information.

I had lots of communication with the staff [person from that agency], but after she left I did not have contact with the new staff [person]. The calls lately have been very data driven—it hasn't been talking about the enhancement and program.

Creating a structure for regular communications and discussion of the enhancements was found to be important for achieving quality implementation. The partnering agencies within each collaborative were expected to adhere to a single model of enhanced practices. This was more likely when they interacted enough to develop the model jointly and to address challenges as they arose. The relationships between the partnering agencies tended to be stronger when there was active, frequent communication and collaboration. Maintaining

regular collaborative meetings became particularly important later in MEDP as they alleviated the negative impact of staff and leadership turnover that all sites experienced and helped to engage new staff in MEDP processes.

Only half of the collaboratives (I, K, L, R, and Y) maintained ongoing meetings through the full 3 years of MEDP and included all participating staff in regular collaborative-level meetings. Three of these collaboratives (I, K, and L) had sites that were relatively close geographically to one another, which allowed in-person meetings or opportunities for the grantee coordinator to travel to sites. The other two sites consisted of geographically dispersed agencies, which limited their ability to meet in person. However, one collaborative (Y) facilitated annual retreats in the first and second year of MEDP, which proved useful in helping staff across the collaborating agencies to feel comfortable working together:

Sometimes when we leave those meetings, it makes us feel [the lead agency] has some nice resources. It makes us put it into a perspective of what we want to strive to be—“Because of MEDP I am able to learn this.” I can call and ask for help [from our partners and] ask for the best recommendation.

One collaborative (A) started MEDP with a distributed leadership structure in that only site coordinators met to discuss MEDP implementation, but in the second year, with many new MEDP staff coming on board, the collaborative initiated meetings in which all relevant staff participated. This improved staff engagement, helped new staff understand the MEDP enhancements, and increased capacity. Other collaboratives (E, F, H, and S) did not meet regularly beyond the initial stages of the initiative (apart from meetings with the research team to discuss research-related issues). Toward the end of the initiative, several new staff from these agencies noted that they did not know staff from partnering agencies so did not feel part of a support network. This meant they may not have been as informed about MEDP enhancements or the evaluation (e.g., AIR’s newsletters were no longer being published as frequently) as the original staff had been in the initial stages of MEDP:

We had a lot of communications early on—[the] collaboration was very strong. As time went on, we needed to talk less and that’s why it drifted apart. It also has been a challenge even though we are BBBS we have different goals, procedures, [and] structures. [Our partners] have corporate partnerships we don’t have. We scratched out every mentor we could find. Geographically we are also different—we can’t do activities together where they can come or we can’t facilitate trainings together.

Data from interviews conducted during our site visits suggested that, within strong collaboratives, a sense of trust was developed by the partnering agencies, particularly when the

lead agency more established in capacity and resources and could support the others as they faced challenges (e.g., recruitment, staffing). The excerpts below were shared by administrators from two partnering agencies within the same collaborative and seemed to agree about the trust they had created within their collaborative:

Collaboration is one of hardest things you can do. These people were a pleasure to deal with. It is important to choose the right partners. Sometimes we jump on board because the money is there. [But] the rules have to be similar. If you have to play in the same box [you need to be able to trust that] nobody will take the sand box home.

One of the bigger outcomes [of the initiative] will be a stronger sense of organization, since we are all part of the same market, and working together will be good. Recognizing that there is more than one way of doing things, you need to be very respectful of the other organization and not saying that this is what you need [instead, asking], “How can we help you?” [We needed to learn] how to use our resources in a collaborative way as opposed to dictating.

A director from another collaborative described the sense of unity created through MEDP:

There was no way we were going to make 225 matches. So, the fact that we were able to make them as a team, learn from one another, and let those volunteers and kids know that [they are] part of not just [our program], but two other agencies and something bigger than what I think they [were] originally . . . thinking about. It made an impact. . . I know that collaborations go a long way when we're working together. To be able to call them and say, “OK here is my dilemma—what should we do?” or being on those weekly calls is a really big support because you don't feel alone.

The sense of trust and partnership evident in these comments was not experienced across all collaboratives, especially when there was an enhanced practice that was not implemented as planned or when the necessary structures to implement the enhancements effectively had not been created:

Our collaborative is pretty disorganized. Our partners were not very supportive and consistent in how we administered the enhancements such as implementing OJJPD expectations, tracking their enhanced mentor training. There would be times when we came to meetings that we were missing documents. There was a period I would meet with them but more for emergencies, working with both

leadership and staff. Our partners would talk and delegate to me, but they did not have any systems to support the collaborative.

Capacity Development within the Collaborative

While the initial meetings among collaborating agencies were used to review their training content and other proposed match activities, later meetings were often used to create match support/case management tools or share tools and resources that partnering agencies agreed to utilize. The partners in six of the collaboratives worked effectively together (A, I, K, L, R, and Y) to develop match support and monitoring tools, including checklists for staff. These tools were key to supporting the matches and ensuring implementation quality. Two of these collaboratives also created tools to guide staff practices (see Exhibit 23).

Exhibit 23. Examples of Match Support and Monitoring Tools

Advocate, Teacher, Asset Builder
This tool defined three levels of advocates/teachers to support staff practices with mentors: (1) business as usual, (2) emerging advocate/teacher, and (3) master mentor. The tool described the behaviors staff would expect to see at each level to help staff know which mentors may need additional supports.
Match Support Specialist “MEDP Roadmap”
This tool outlined each enhancement component and staff’s role in supporting the implementation of those enhancements. This visual snapshot included required enhancements and reflection elements that were built into regular match support. The reflection elements included debriefing the volunteer after completion of the online and in-person required mentor trainings, a discussion with the mentor about their “purpose survey,” and a youth asset survey debriefing with the mentor and mentee.

Many agency staff regarded the trainings, tools, and resources created collaboratively with partnering agencies as sustainable enhancements that improved the agencies’ program capacities. For example, MEDP expected the mentoring agencies to match youth between 11 and 15 years old and to recruit mentors who were willing to mentor older youth. Implementation sites (particularly BBBS) that were accustomed to serving a larger proportion of younger youth collaborated with one another to creatively develop recruitment and training materials for these matches with older youth. Agencies also benefitted by learning from one another and sharing best practices, as this staff member shared in an interview:

As a collaborative group, we talk to each other about our best practices. So, I think that alone improved our customer service to our matches—just learning from each other as sister agencies. For instance, I really like the match contract that one site was using so I kind of updated ours to not mirror it completely, but to be very similar. I found it to be useful because they gave a little bit more structure to [match] support in general.

Agencies also helped one another by sharing resources to overcome challenges. For example, an intern in one agency was recruited as a full-time staff member in another partnering agency when one of their MEDP staff members resigned. Because two of the agencies in the collaborative were also relatively close to each other geographically, MEDP matches in one of the agencies (Y) were invited to the match activities in the partnering agency. In another collaborative (L), the larger lead agency with more recruitment-related resources helped a partnering agency develop recruitment activities. In a third collaborative (R), one program that had already made its quota of 75 matches agreed to keep enrolling matches to offset a partnering site that was struggling to reach its goal, so that collaboratively the partnership would be able to recruit 225 matches.

Micro-Level Factors Associated with Implementation Fidelity

The third circle, moving from the outside of the ecological framework to the inside, is referred to as the Micro Level. At this level, the factors that influence the fidelity with which the enhancements are implemented are at the organizational level and include the organizational structures, capacities, and support systems available to staff who interact directly with the mentors, the mentees and the mentees' families. While the implementation factors at the macro and meso levels appeared to be indirectly associated with the quality of MEDP implementation, the inner circles in the ecological framework (i.e., organizational capacities and intervention-specific capacities) were expected to have a more direct influence on implementation quality and how mentors experienced the MEDP enhancements.

Research on implementation science suggests that organizations must be “ready” to implement interventions. In other words, they need to be able to demonstrate certain organizational and intervention-specific characteristics needed for implementation integrity (Campie & Sokolsky, 2016; Fixsen et al., 2005; Scaccia et al., 2014; Mihalic, Fagan, & Argamaso, 2008). In this section, we describe the way these factors influenced implementation of the MEDP enhancements.

These components were operationalized as follows. To assess broad *organizational capacities*, we examined the organizational structures and agency culture and climate of each participating program. These capacities influenced the way the enhanced practices were allocated,

coordinated, and supervised by the staff in the organization. To assess the organization's *MEDP-specific capacities*, we examined staffing structures, site leadership to support the staff, and the capacity of the agency to participate in the evaluation.

Organizational Capacity: Structures

The MEDP solicitation required that the youth-serving programs within the collaborative were established agencies with at least 3 years of experience in mentoring and were organizationally “ready” to participate in an experimental study. Most participating agencies were mature youth-serving programs with several years of experience providing youth development, prevention, and intervention services in their communities. For example, participating BBBS agencies were already recognized in their communities specifically for youth mentoring. Thus, they had established structures and systems to recruit volunteers and at-risk youth, train volunteer mentors, and provide ongoing support to the matches. However, agencies in three collaboratives (E, S, and sites A1 and A3) were relatively new to youth mentoring and did not yet have these systems firmly in place. Even BBBS agencies, which were expected to meet national standards, showed variation in their capacities, as well as their structures and supports for staff and for participating matches; some of these agencies emphasized supporting match quality more than others. Although having a well-established mentoring model already in place could help to ensure smooth implementation of the new enhancements (e.g., because the organization wasn't simultaneously trying to establish and refine basic structures needed to support mentoring), it could also mean that these agencies already had strong BAU models in place that resembled the MEDP enhanced model of mentoring (e.g., with an emphasis on advocating for youth). This could have diminished our ability to detect differences between the EG and BG matches in these agencies.

In addition to the agency's previous experience with mentoring, the size of the agency also affected the extent to which organizational structures were established to support the MEDP intervention. When MEDP started, five BBBS agencies within three collaboratives (I, K, and L) reported serving more than 1,000 matches when they were initially funded through MEDP. These agencies had financial and human resources that they could divert to support the implementation of MEDP. For example, they could allocate additional staff to support recruitment and data collection activities. Another agency (A1) in a different collaborative had not been an established mentoring agency but reported that they had been serving more than 2,000 matches for the last three years through federal funding they had received prior to MEDP. Many other agencies were small, with limited resources and limited financial capacity, and were operating with relatively few staff members. While MEDP funding was a major resource that allowing all the programs to bring on staff to deliver the enhancements, we found

that the programs with very few staff focused on the intervention had consequences for sustaining implementation quality and match support during the 3 years of MEDP. For instance, when staff turnover occurred, the agencies did not have the option to pull in existing staff to support the initiative.

Organizational Capacity: Data Collection Systems

Because all MEDP implementation sites needed to participate in the RCT and collect data for the initiative, data capacity was an important ingredient in readiness for the evaluation. All BBBS sites were accustomed to documenting match characteristics and staff contact with mentors and youth in their national AIM database. Similarly, 4-H youth programs had a national system through which staff could monitor match progress and participation in program activities. Partnering sites in the other three collaboratives (A, E, and S), without these types of systems, had varying program structures and different data collection infrastructures, which limited their consistency in data collection as a collaborative and affected their readiness to participate in the evaluation.

We found that even when collaboratives had an established and consistent data collection system among the partnering agencies, none were accustomed to collecting the amount of data and adhering to the processes needed for the MEDP evaluation. As noted before, only three sites had participated in an external evaluation before and, thus, had experience in the research processes involved in MEDP (e.g., consenting, randomization, response rates, documenting match progress).

Organizational Capacity: Agency Culture and Climate

As an element of the general organizational capacity of the MEDP agencies, we asked staff in our staff survey to rate the extent to which they agreed or disagreed that their agency exhibited each of a wide range of program characteristics that contributed to the culture and the climate of the agency. Exhibit 24 shows the proportion of respondents who agreed or strongly agreed with each statement listed. Of the 98 respondents to our staff survey, two thirds or more seemed to be satisfied with their organizational culture and climate. Staff turnover, however, was a concern for almost two-thirds of the respondents (65%) and less than half (42%) agreed that staffing was adequate to meet client needs.

Exhibit 24. Staff Reports on Indicators of Agency Culture

Staff Survey Item	Percentage of staff who agreed or strongly agreed
Most staff in this program get along with one another.	93%
Staff in this program support one another when needed.	92%
Staff in our program have the skills they need to do their jobs.	90%
We have program supervisors who are qualified to support staff.	84%
I have confidence in how decisions at our program are made.	77%
Staff are encouraged to try out different techniques to improve their effectiveness.	77%
I meet frequently with program supervisors about client needs and/or progress.	72%
Much attention is given to staff supervision when needed.	71%
Training and continuing education for staff are priorities in our program.	67%
Frequent staff turnover is a problem in our program.	65%
Our program has enough staff to meet current client needs.	42%
Staff concerns are ignored in most decisions made in our program.	20%
Staff are discouraged from coming up with new ideas for working with participants.	7%

Findings from the site visits indicated that *staff turnover was indeed the most significant challenge* experienced by most agencies. Turnover was related to both agency climate and MEDP implementation fidelity and quality. Only three (out of 30) agencies (A2, L3, and Y2) had consistent staff working with the EG matches throughout the 3 years of MEDP. Turnover at other sites was mostly due to staff leaving the agency for other opportunities, but in a few cases, staff were let go and not replaced with new staff. While turnover is a common challenge in youth-serving agencies, these staffing changes may complicate the implementation of the enhanced practices. For example, staff turnover directly influenced the extent to which, and the quality with which, the matches were supported because it took time for new staff to build rapport with the mentors to guide their teaching and advocacy roles in the mentoring relationship:

Now that we've experienced some turnover with our case managers, we've realized how staff consistency impacts [the enhancements]. We always knew

that it impacts the matches—but for the enhancement piece—even though we had a great turnout for our workshop—that took a lot of leg work because you had a new person [working] on it.

The rapport between program staff and the mentors was especially critical for MEDP because, for many EG mentors, adopting teaching and/or advocacy roles and being exposed to the enhanced program practices (e.g., trainings, match support, match activities) depended on the extent to which they communicated with their case managers and received guidance on their relationship, as these case managers noted:

It's always going to be a challenge how cooperative and engaged a volunteer is going to be. That to me is the hard part for any match. Not knowing what you are going to get. The goal is to keep the family and mentor engaged. It is better if you can get them early in the match to attend the trainings and build that relationship. We do know that mentors who have a relationship with the agency will be more engaged [and] attend the trainings and the activities.

You have to create a relationship with the mentors. Those that I was able to see more in person are more willing to come to me. They open up more to me about their situation, struggles and success. The ones that I did not get to see, the hardest thing is getting them to activities.

I see a huge difference in how much I know about the enhancement matches. Because I see them at least every month or every other month.... And the volunteers are more likely to have conversations with us. Because they're used to seeing us and I think the trust is there a bit more.

MEDP-Specific Capacity: Fit with Program Practices

As we discussed earlier and demonstrate in Exhibit 25, MEDP sites committed to implementing a set of enhancements that were supposed to be different from practices in their BAU program model. Staff roles and workloads, space and logistics for trainings, and match and mentor activities all needed to be developed and set up. Consequently, the development of the MEDP enhancements required extensive time and effort before sites were ready for implementation. In interviews and responses to the survey, staff suggested that their experiences and satisfaction with the MEDP enhancements were greatly influenced by the extent to which the enhancements aligned with existing organizational capacities and with MEDP-specific capacities

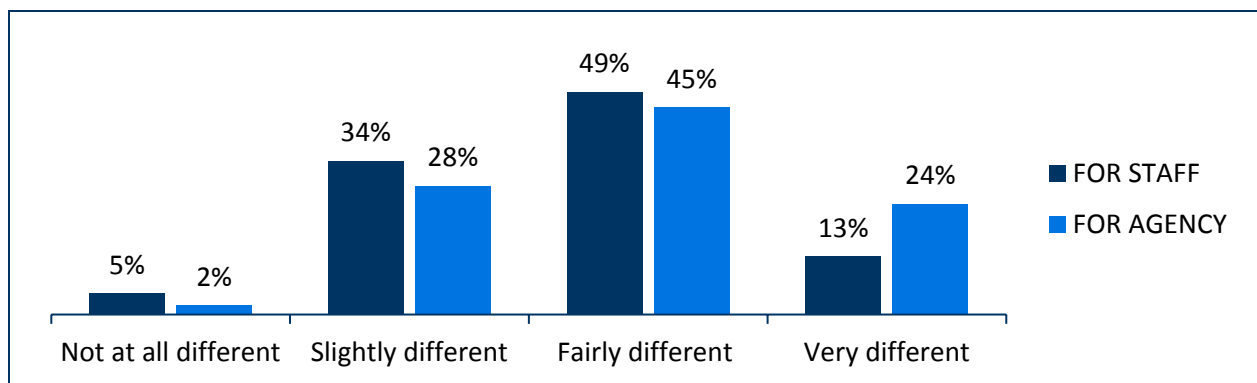
(e.g., site leadership to support MEDP staff) developed to help staff implement the MEDP enhancements effectively.

We asked staff in our staff survey how different the enhancements were: (1) for them personally (i.e., from their own usual daily practices); and (2) for the agency (i.e., from the practices usually implemented by the agency more broadly). Those staff dedicated to working with the BG matches were not involved in implementing the enhancements in their daily work, but we asked them to reflect on how participation by the agency in the MEDP initiative influenced the operations of the program.

As is shown in Exhibit 25, for more than half of the staff who responded to the staff survey, their work on the enhancements felt fairly different (49%) or very different (13%) from their personal day-to-day work and fairly (45%) or very different (24%) from their agency’s BAU program practices. When the enhancements differed substantially from BAU practices, staff also reported that workloads were significantly increased because of MEDP. This included developing and delivering additional trainings, following up with the mentors to ensure participation in the enhancements, increasing intensity of match support, organizing structured match activities, and hosting mentor support groups. In open-ended comments, about one-third of staff referred to the increased workload that was part of MEDP:

The workload was greater in regards to how often I had to contact each party, trying to manage all parties’ (parent, mentor, child, and staff) schedules for training was taxing, and the home visits caused issues when trying to meet deadlines. Also, doing match support took up way too much time (calls that used to take 10 minutes could sometimes be 30 minutes).

Exhibit 25. Extent to which MEDP Enhancements Differed from Usual Practices for Individual Staff and Agency as a Whole



Note: Data are from staff survey, N = 86.

Some staff noted that there were too many enhancements (e.g., “This was a lot to ask people to do in the first year while we’re trying to get them to work on building a relationship”), and a small number of staff—at least one in each of two different collaboratives—further suggested that the MEDP model and the proposed enhancements were not well aligned with the nature of mentoring relationships and what could be expected of the mentors. Other staff lamented the challenges in getting a critical mass of matches together for planned activities:

[Getting] folks to a 6-month match activity is difficult when only 2 matches are ready for that activity [i.e., have reached 6 months]. Getting together for a group activity was difficult as well. We may have had only about 12 enhanced matches. Match support determined what type of activity a match would like to be involved in and we would find that only half of those matches had any interest in say, rock climbing. That would put it down to 6 matches...Then you have the logistics to tackle. In the end, we may have only 2 matches that were able to attend. That was a challenge!

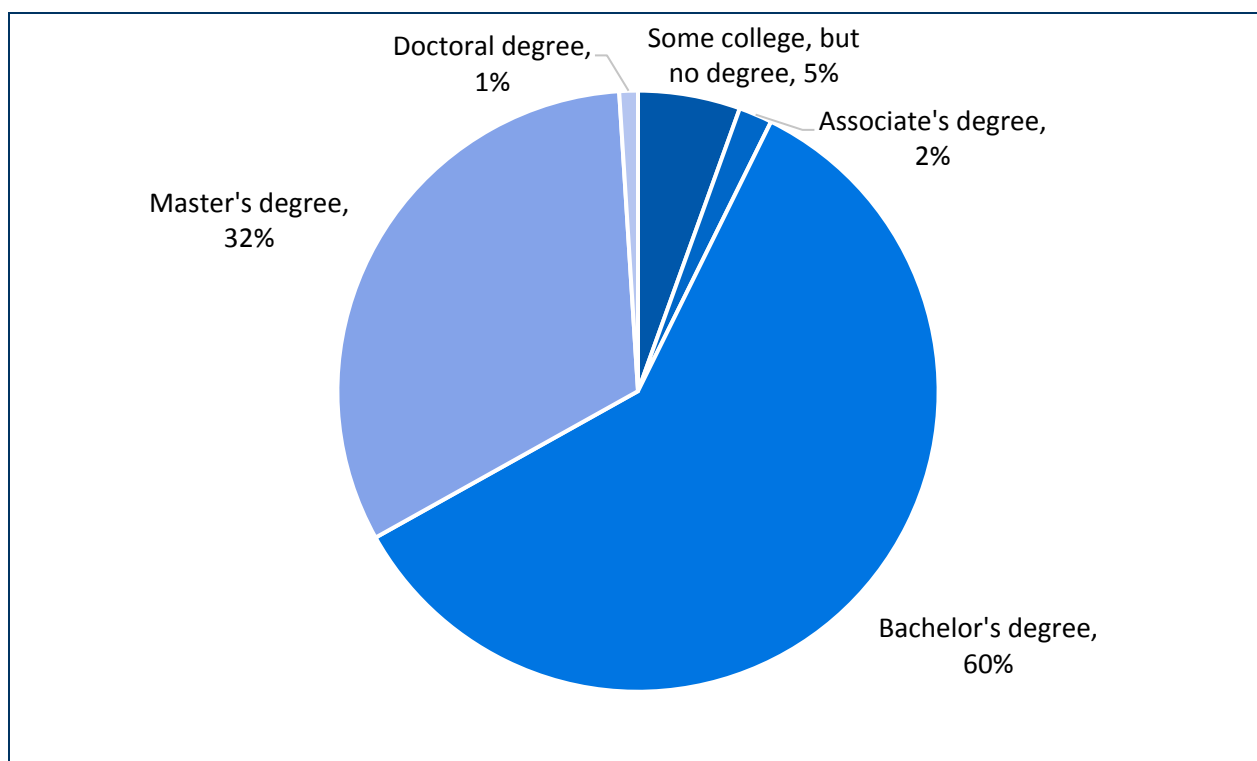
MEDP-Specific Capacity: Staff Training and Support to Implement the Enhancements

Implementing the enhancements was facilitated by agencies and collaboratives focusing on building the capacity of their staff to carry out the enhanced practices. One collaborative explicitly included staff training in its enhancements; this training was aimed at strengthening skills in the areas targeted by the enhancements. In other cases, the programs simply ensured that case managers and other frontline staff understood their role in implementing the enhancements (e.g., conducting the mentor training, providing focused match support). The extent to which staff were prepared for their new roles varied across the sites—particularly in those cases where new staff (in some cases multiple new staff) were brought on to serve in the case management role; those staff needed to be trained not only in the new enhancements but also in providing solid case management for the enhanced matches. Across many of the collaboratives, the staff assigned to work with EG matches were often brand new to the agencies.

The characteristics and skills that program staff brought to the project also varied widely. As shown in Exhibit 26, most MEDP staff had (at most) a bachelor’s degree (59.6%), and almost one third (32.1%) had master’s degrees. Two additional respondents (1.8%) reported having Associate’s degrees, and one had a Doctoral degree. Only six respondents (5.5%) at five implementation sites had some college education but no degree; three of these respondents were college students.

Our interviews with staff also revealed a wide range of experience in mentoring, from no experience to having taken college-level courses on advocacy, which included practice working with youth (e.g., “I took a two-semester course, heavy on advocacy”). Staff similarly reported a wide range of experience at their particular agency. For example, the amount of time at their current agency ranged from 6 months to 30 years, with a median of 2.9 years (i.e., about half of survey respondents had been with their current agency for less than three years), and amount of time in their current *position* ranged from one month to 27 years.

Exhibit 26. Professional Background of Program Staff



Given these variations, training and monitoring staff who worked with the EG matches was key to implementation quality. As we noted earlier, in the initial stages of MEDP most staff and program leadership were engaged in developing the enhancements. Many received training that was meant to prepare them to deliver the enhanced practices with fidelity and quality. When those initial staff did not stay with the initiative throughout its implementation, this had potential implications for implementation quality. We found that even longtime staff and those on board for the entire initiative needed ongoing training and support to have the capacity to

implement the enhancements with fidelity. Site coordinators often served a key role in training staff and monitoring the quality of support provided to participating matches:

I spent every month coaching our staff on how to conduct quality conversations and assess mentors taking on the role of teaching and advocacy. Otherwise, these discussions would likely not have taken place between our staff and the mentors. It is also possible that our staff may not have understood the impact of these roles and been able to identify mentors taking on these roles in their matches without the training I provided.

One coordinator shared the following insight into the level of training and support needed to bring staff to the expected skill level when resources were not adequate to hire additional or more appropriately skilled staff for the intervention group:

There is a different skill level needed for enhanced and [BAU] staff. I think in hindsight, after being 3 years with MEDP, I would have liked someone with a more advanced degree to provide the enhanced services. There are certain skills you need to have to accomplish all this. There are additional skills needed, additional money, time, training. But I think we touched the tip of the iceberg with the enhancements. We had to spend a lot of time training [staff]. If I knew this, I would have looked at this differently. Ideally, it would be good to hire someone new but with a small agency, it is not always possible. Training a new staff person takes 3 months. And then you also have the enhancements for the MEDP study, so it would have taken 4 months to train someone new. We could not train a new person to close the gap and needed to assign someone from within.

MEDP-Specific Capacity: Site Leadership Needed for Support and Resources

When embarking on a new initiative, it is crucial to have buy-in from all levels of staff. For MEDP, this meant frontline case managers, the site coordinators overseeing their work, and the executive directors who ultimately made resource allocation decisions. The strength of leadership and commitment to MEDP was not uniform across all agencies, and a few agencies across different collaboratives struggled more than others in this realm:

Staff buy-in was shaky across the entire project at our agency. We did not receive direct support or enthusiasm from leadership. I came on with more insight and experience than our program director. In addition, our staff was stretched too thin, making a strong commitment to and delivery of enhancements tricky to say the least. I [joined our] staff at a time when the energy for the project was at its

lowest and did my best to “save” what was left of morale. At the tail end of the project some of my duties shifted from match support to program director, but the position was not properly funded nor was enough time allocated to get the appropriate amount of work done.

Nine, or 30%, of the implementation sites changed agency directors over the course of the study. In addition, just over half (53%) of the sites lost a site coordinator during the initiative. In another five (17%) sites, the coordinator was on leave for at least part of the initiative. The site coordinator was a particularly difficult staff member to lose as he or she played a central role in the project, coordinating all MEDP activities within the agency, working with the grantee coordinator of the collaborative, and directly working with and supporting MEDP staff. When this role was vacant, it reduced the amount of support and monitoring provided to staff working with the enhanced matches. At the same time, a few sites benefitted from MEDP staff or coordinators being promoted to leadership roles (sites H1, H3, and L3). These staff continued to be champions for and/or support MEDP. They now had more responsibility in the agency, however, which may have pulled time away from their MEDP role.

As we observed throughout the life of the study, the presence or absence of the site coordinator’s leadership and support to staff had implications for MEDP implementation quality. On the one hand, when there was not centralized leadership across the collaborative (i.e., F, H, and S), this may have negatively affected implementation quality. In contrast, in four collaboratives (I, K, L, and Y), the grantee coordinators stepped in to train and support staff when site leadership was reduced, which was crucial in getting the agencies through this transition. Yet, even with this extra support, the lack of site leadership and the disruption caused by the turnover had such an impact to sites in Collaboratives I and Y that even a strong grantee coordinator at the collaborative level could not effectively ensure MEDP implementation fidelity and quality

MEDP-Specific Capacities: Staffing Structures to Support MEDP Matches

MEDP agencies used three different approaches to assigning staff to support the enhanced and BAU matches:

- **Full-time dedicated staff for either EG or BG matches.** In this set-up, one full-time staff member supported EG matches; a separate staff person supported the BG matches. In these cases, the EG staff member was involved not only in supporting the designated matches but in recruiting youth and volunteers and in creating the matches (Collaboratives H, K, L, R, and Y). Two collaboratives also reduced the caseload of staff who were responsible for supporting the EG mentors, to allow for more intensive staff support.

- **Staff supported either EG or BG matches and other non-MEDP matches.** In this case, one staff member supported EG matches; another supported BG matches. However, other staff members were involved in recruiting and matching, and the EG staff member also had other, non-MEDP matches in his or her caseload (Collaboratives A, H, I, and L).
- **Staff supported both EG and BG matches.** In these sites, MEDP matches were assigned to a group of staff members. In one site in Collaborative A, each staff person supported EG and BG matches, while also supporting non-MEDP matches. In others, the same full-time staff member was assigned to all (i.e., EG and BG) MEDP matches (Collaboratives A, E, and H). This was typically the approach in the school-based sites.³³

The staffing structure that was used reflected several factors, including whether the program had the financial resources to support multiple staff, the number of non-MEDP matches that needed to be supported, the organizational structures built into mentor recruitment and screening, and the staff that would be responsible for securing consent and collecting data for the MEDP evaluation.

Many site coordinators described the benefits of having a single staff person to recruit, match, and support the MEDP matches (one for the EG matches and one for the BG matches). This structure enabled staff to build a strong understanding of all components of the enhancements and fostered staff rapport with the mentors—both of which strengthened staff and mentor commitment to MEDP. One site coordinator described this process:

I think the best staffing structure is to have a dedicated staff specifically for those enhancements. Then they know MEDP in and out and they can explain [it] to the volunteer, they're focused on [those volunteers], they're present at the trainings. I think that makes a really big difference. I do know from having conversations with [the grantee coordinator] having the matches kind of split up—you have some case managers that are on it and really, really good and then others that have other responsibilities, so they can't be fully focused—[that] doesn't help with consistency.

The staffing model in which staff were assigned to supporting *both* the EG and BG matches seemed to be the most confusing to staff because they needed to alternate match support practices depending on the match with which they were interacting. From a research perspective, it also raised concerns for contamination:

³³ In Collaborative H, for example, only one school was involved in the study when the project began. Because both EG and BG youth attended that school, and only one case manager worked at the school, the case manager worked with both types of matches.

Although the enhancements were only slightly different from our typical work with youth and mentors, we had to be constantly very mindful of those changes, and not to cross contaminate. It was thus fairly mentally taxing, although the work was only slightly different.

In conclusion, our examination of the implementation of MEDP across 30 sites within the 10 collaboratives, identified several key factors that influenced implementation fidelity and quality:

- Five collaboratives developed their proposed MEDP enhancements as intended and were able to implement them with fidelity. Others elected to adapt some of their enhancements to address challenges in implementing them with fidelity and ensure that the mentors would receive be exposed to the intended information and supports.
- While collaboratives proposed different types and number of enhancements, what mattered was how well the collaborative sites were positioned to overcome their challenges of implementation. In other words, their readiness (capacities and commitments) to implement new enhancements effectively mattered in how well they were able to address their challenges.
- MEDP increased program capacity to focus on advocacy/teaching, to develop training materials and increase recruitment for youth and volunteers.
- We identified factors at multiple levels that influenced implementation fidelity and quality, including characteristics of the program staff, characteristics of the organization itself, the collaborative, and the broader initiative. These multi-level factors seemed to influence—both directly and indirectly—how well staff could implement the enhanced program practices.

Definition of Teaching and Advocacy

The primary goal of MEDP was to examine whether the enhancements implemented at each collaborative site would promote teaching and advocacy behaviors and activities on the part of the mentors and improve the quality of the mentoring relationships to promote positive youth outcomes. With this mandate, it was important for grantees and the evaluation team to have a clear understanding of these concepts and how they might be operationalized in practice. In the early phases of the program, as the grantee collaboratives developed their enhancement strategies, the evaluation team explored their evolving notions of teaching and advocacy by conducting focus groups with each collaborative. Specifically, we held 10 online focus groups with the staff from each collaborative in 2014 to investigate the following questions: (1) How

do the staff define teaching and advocacy? and (2) How do staff describe teaching and advocacy in the context of youth-mentoring relationships?

With guidance from the evaluation team, the lead agency of each collaborative arranged for program staff members to participate in a focus group for the collaborative, including at least one representative from each agency within the collaborative. The agencies were encouraged to invite program staff who were involved in developing or implementing the enhancements, including the local site coordinator for MEDP. The resulting sample included a total of 68 individuals participating in 10 different focus groups, ranging in size from 5 to 11 participants. The focus groups were conducted “virtually” via webinar conferencing, with a consistent moderator following a semistructured set of questions for all focus groups.

The focus group data were analyzed using methods for interpretive description to identify thematic patterns and commonalities across the discussions (Thorne, Reimer Kirkham & O’Flynn-Magee, 2004). The goal was to identify and catalog the full range of definitions and descriptions of teaching and advocacy to reveal what these concepts could mean when applied to youth mentoring. Qualitative content analysis was used to code and classify text into categories with similar meanings to derive a taxonomy reflecting different types of teaching and advocacy in practice, as shown in Exhibit 27 (Bradley, Curry & Devers, 2007; Hsieh & Shannon, 2005).

Exhibit 27. Dimensions of Teaching and Advocacy in Mentoring Relationships

Teaching	Curricular	Instructing —leading a planned group learning activity
		Tutoring —providing individualized assistance focusing on schoolwork
	Contextual	Influencing —structuring an activity to develop a skill or convey a lesson prioritized by the program or mentor
		Responding —structuring an activity to develop a skill or knowledge valued or desired by the mentee
		Embedding —capitalizing on opportunities to share knowledge or practice skills during activities primarily designed for other purposes (i.e., incorporating “teachable moments”)

Advocacy	Contact	<p>Partnering—communicating and collaborating with relevant professionals to support the mentee</p> <p>Representing—speaking on behalf of the mentee in decision-making situations</p> <p>Empowering—coaching the mentee on how to advocate for him/herself</p>
	Connect	Facilitating access to community resources the mentee would not obtain otherwise
	Cheer	Showing up to enthusiastically support mentee interests and activities

Program Definitions of Teaching and Advocacy

In response to questions specifically asking for definitions of teaching and advocacy, staff gave a variety of responses, but for each of these concepts, two general themes emerged. With respect to teaching, the first theme focused on more traditional notions of providing instruction or guidance. The second highlighted teaching as an emergent, interactive process in which the mentor responds to opportunities for promoting the youth’s experiential learning by aligning activities to the interests and priorities of the youth. Staff definitions of advocacy were more wide-ranging and inclusive, but again two general themes were identified. First, advocacy can encompass a range of activities in which the mentor supports or promotes the interests of the youth to improve developmental outcomes. Second, advocacy can involve representing or speaking on behalf of the youth, particularly when an adult voice is needed and carries more influence. A notable finding was the degree to which the staff had difficulty differentiating the concepts and definitions of teaching and advocacy. Some respondents explicitly acknowledged the overlap between teaching and advocacy, noting that “there are a lot of intersections” and “it is really hard for us, as people who have been designing [these enhancements] and implementing them, to separate out advocacy or teaching.”

Teaching in Mentoring Relationships

The analysis of focus group data describing the ways in which mentors demonstrated either teaching or advocacy in their mentoring relationships yielded the categories represented in Exhibit 27.

An overarching distinction for examples of teaching is between curricular teaching and teaching in the context of a mentoring activity.

Curricular teaching includes two subcategories—instructing and tutoring. Instructing is when a mentor is responsible for leading a planned educational activity based on a formal curriculum

with a group of mentees.³⁴ In other words, the mentor is offering a lesson, such as teaching a group of youth how to prepare and deliver a speech. Tutoring is when the mentor provides the mentee with individualized assistance with schoolwork to improve academic performance. For example, the mentor might help the mentee do homework, prepare for a test, or work on a class project. To illustrate, one respondent stated, *“I have a couple matches that really focus on schoolwork or kind of helping the [mentees] with their schooling and education. So that kind of falls naturally into a teaching role.”*

Contextual teaching occurs when a mentor structures a broader activity to include educational opportunities for the youth. It can take several forms, categorized as influencing, responding, and embedding.

- Influencing refers to times when the mentor uses training received from the program to promote specific youth skills or lessons to advance program goals—for example, developing youth confidence. Influencing also refers to instances when the mentor attempts to convey a life lesson or instill a value that is important to the mentor, such as community service. For example, one respondent noted, *“A lot of my matches have taught their [mentees] the importance of volunteering their time.”*
- Responding refers to times when the mentor organizes an activity to develop a talent or skill that has been identified as an interest of the youth, thereby building on the youth’s existing motivation and enthusiasm. As an example, a respondent described how *“the [mentee] wanted to learn woodworking, and the [mentor] is able to help him with that and teaching [the mentee] the steps.”*
- Embedding refers to times when the mentor capitalizes on teachable moments within the context of an activity, such as practice in reading the menu and calculating the bill at a restaurant.

Advocacy in Mentoring Relationships

With respect to advocacy, the analysis of examples provided by focus group respondents yielded categories labeled as “contact,” “connect,” and “cheer.”

Contact occurs when the mentor is in contact with individuals other than the mentee or the family to advance the interests of the youth. This theme was elaborated with three distinct subcategories of mentor activities—partnering, representing, and empowering.

³⁴ We see this strategy as primarily applicable in group mentoring programs.

- In the case of partnering, the mentor might interact with a teacher, coach, or counselor to coordinate on supporting the youth, with the mentor serving as another resource available to reinforce the work of the professional. For example, the mentor might be asked to play a facilitating role; *“We also have kids who are in the juvenile justice system, so we have mentors that help them, as far as when they have to see their social workers.”*
- In the case of representing, the mentor may stand up for the needs and interests of the youth in contexts where decisions are being made, and as an adult, vouching for the youth and *“being that voice for that mentee.”* As indicated by one participant, *“We bring the mentors, if we can get them, into the meeting, so that all the voices that are speaking on behalf of the child . . . [can help] to keep a few of our mentees from being put out of school altogether.”*
- In the final contact category, the mentor empowers the mentee to express needs and concerns and engage in self-advocacy.

The **Connect** category refers to times when the mentor facilitates a connection to community resources to help the youth gain access to goods, services, or personal referrals that could have a tangible benefit. For example, in the case of a youth who experienced sexual assault, *“Her [mentor] has been really an advocate for getting her counseling in the wake of all this.”*

Finally, **Cheer** is when the mentor is an enthusiastic supporter of the youth’s activities and interests in areas such as arts, sports, or performance. The mentor might find related opportunities for the youth to engage in, help to rehearse or practice, provide transportation, or attend events to show encouragement. As an example, *“[The mentee] was so excited that [the mentor] was there supporting her at her volleyball game.”*

What Were the Costs Associated with Implementing the Enhancements?

To this point we have focused on the ways in which the programmatic enhancements differed from the business-as-usual (BAU) approaches of the MEDP agencies. The collaboratives (and agencies) that provided the most distinct enhancements also provided the greatest array of enhancements. This included introducing new trainings, increasing the frequency and focus of contacts between staff and mentors, building in opportunities for peer-to-peer support among mentors, and providing structured activities for the matches. We saw that the capacity for implementing such distinct enhancements often required an infusion of resources, financial and otherwise.

The agencies within a given collaborative were expected to develop and implement the same set of enhancements. However, each collaborative could choose very different enhanced practices from the other collaborative, so we expected the resources that would be required to implement the MEDP enhancements might differ between collaboratives. In addition, within a collaborative, each agency might have allocated its funds and staffing differently.

In this section we present the results from our cost analyses. These analyses aimed to: (1) identify the costs associated with implementing the program enhancements above and beyond the costs incurred in BAU mentoring at both the collaborative and agency levels, (2) examine the variability in expenditures among the implementation sites, and (3) examine the costs of specific programmatic components contributing to the overall expenses.

Analyses of Program Costs

The general approach for the cost analysis was to ask program sites to report on actual expenditures (in terms of both staff time and other types of expenses) in designated cost categories. For each cost category, the site was asked to indicate the amount devoted to the enhancement group (EG) and to the business-as-usual group (BG). After aggregating costs across categories to arrive at an overall cost for EG and BG, this total was divided by the number of matches in the respective groups to arrive at a per-match cost for each group. The difference between the EG per-match costs and the BG per-match costs was determined to be the incremental cost of the programmatic enhancements. This calculation provides an estimate of how much more expensive the enhancements were than BAU mentoring.

In each participating MEDP agency, staff completed a survey (adapted from Herrera et al., 2007) documenting MEDP expenses during Fiscal Year 2014–2015 (the timing of which varied slightly by collaborative).³⁵ Agencies were asked to document: (a) the number of matches they made, using MEDP funding, that were active at the time they completed the survey; (b) the salaries of MEDP-involved staff; and (c) the amount of time each staff member spent on EG versus BG activities. Survey respondents were also asked to estimate the percentage of staff time spent on key programmatic components related to the EG and BG mentors and mentees (e.g., recruitment and screening, matching, training, supervision). Additionally, non-staff expenses were also reported for both the EG and BG matches (e.g., program materials, staff training, match activities, administrative expenses, facility expenses) (see Appendix D for additional methodological considerations for these analyses). The surveys were collected in fall 2015 through the end of

³⁵ FY 2014–2015 was the second year of the 3-year intervention, which represented a time frame when all agencies had their interventions in place. In addition, considering the time and effort for agencies and staff to collect the cost data, the research team requested MEDP agencies to report on only one fiscal year.

2016. The research team received completed forms from 22 of the 30 mentoring program sites (at least one agency from each of eight of the 10 collaboratives). Staff and leadership turnover were the primary reason the other implementation sites did not complete the cost surveys.

Prior to analysis, issues resulting from incomplete or inconsistent data reporting were addressed (see Appendix D). In addition, all monetary data were adjusted for cost of living in respective states using the Cost of Living Index (Council for Community and Economic Research, 2017) to represent dollar values based on the national cost-of-living average. Monetary data were also adjusted to account for inflation from 2014–2015, when these data were collected, to November of 2017, when the data were analyzed, using the Consumer Price Index (Bureau of Labor Statistics, 2017).

Overall Costs at the Collaborative Level

Combining data across all eight collaboratives considered, the overall incremental cost of EG mentoring compared with BG mentoring was \$67.15 per youth, suggesting a slightly higher overall cost of implementing the enhancements (EG per capita mean = \$2,127.72) relative to the agencies' traditional programming (BG per capita mean = \$2,060.57). These figures include the combined costs for staff time and various non-staff expenses. However, as shown in Exhibit 28, there was variability across collaboratives, with a mixed pattern for the difference in per capita costs between the EG and BG groups. For five of the eight collaboratives, the incremental cost per youth was a negative value, meaning the costs per EG youth were lower than the costs per BG youth. In the remaining collaboratives, the incremental costs per youth were higher for the EG. Across the eight collaboratives, the incremental difference between EG and BG groups ranged from -\$750.57 to \$1,165.64.

Exhibit 28. Overall and Per Capita Costs, by Collaborative

Collaborative	EG total costs	Active EG matches	EG cost per capita	BG total costs	Active BG matches	BG cost per capita	Incremental EG vs. BG
E ^a	\$82,992.30	56	\$1,482.01	\$71,482.38	42	\$1,701.96	\$-219.96
F	\$144,820.90	84	\$1,724.06	\$152,402.37	64	\$2,381.29	\$-657.23
H ^a	\$235,320.33	82	\$2,869.76	\$172,318.95	79	\$2,181.25	\$688.51
I	\$335,342.25	150	\$2,235.62	\$167,985.36	157	\$1,069.97	\$1,165.64
K	\$263,285.87	112	\$2,350.77	\$337,487.15	114	\$2,960.41	\$-609.65
L	\$177,313.85	111	\$1,597.42	\$111,354.27	98	\$1,136.27	\$461.15
R	\$262,029.07	128	\$2,047.10	\$285,362.89	102	\$2,797.68	\$-750.57
Y	\$239,369.70	95	\$2,519.68	\$222,305.17	82	\$2,711.04	\$-191.36
All Sites	\$1,740,474.27	818	\$2,127.72	\$1,520,698.54	738	\$2,060.57	\$67.15

Note: ^a Not all sites in these collaboratives provided data.

Overall Costs at the Agency Level

To develop hypotheses about the relatively low-cost differential between the EG and BG conditions (and the fact that EG cost less in some cases), we examined costs at the agency level. As shown in Exhibit 29, the per capita differentials between the EG and BG groups at this level of analysis had a larger range, from -\$2,334.55 to \$1,698.41. This analysis also revealed considerable within-collaborative variability in the incremental costs of EG mentoring. The widely different values in the incremental costs could reflect the ways enhancement implementation costs were shared among sites. For example, one site within a collaborative may have incurred much of the expense for a given resource (e.g., developing the trainings, coordinating communication among collaborating sites, rental of space). The site-level analysis also highlighted some potential anomalies in the reporting of figures from specific programs. For example, one program had identical expenditures in both the EG and BG condition, suggesting a lack of specificity and the likelihood that total costs were simply divided.³⁶ In another such case, the research team had to extract the program cost information from the site budget and therefore split the costs evenly between the EG and BG groups, although staff salaries were appropriately allocated for that site. Furthermore, for that agency, the EG consisted of 50% more matches than the BG, thus driving down the calculated per capita cost for EG matches. In some other cases, the BG expenditures were more than twice those for the EG condition despite having almost the same number of matches in each condition. This pattern may suggest that specific fixed costs in these programs were assigned to BG rather than EG conditions.

Administrative and Program Expenditures

It is possible that the manner of reporting fixed administrative (overhead) costs also may have affected the calculation of incremental cost differences between the EG and BG conditions. Thus, we conducted additional analyses, examining specific categories of expenditures (other than staffing) that were directed to the EG and BG conditions. The mean expenditure in each category was calculated from the data from each individual site. These average site-level expenditures for one year in four administrative categories and six program categories are presented in Exhibit 30, including *p*-values associated with a *t*-test comparison of the means for the two groups.

³⁶ Note: this was not the site for which we simply divided the supports and expenses because of missing data.

Exhibit 29. Overall and Per Capita Costs, by Agency

	Agency	EG funds	EG matches	EG per capita	BG funds	BG matches	BG per capita	Incremental EG vs. BG
E	Agency 1	\$48,844.66	24	\$2,035.19	\$48,844.66	16	\$3,052.79	\$-1,017.60
	Agency 2	\$34,147.63	32	\$1,067.11	\$22,637.71	26	\$870.68	\$196.43
F	Agency 1	\$68,915.81	34	\$2,026.94	\$62,829.37	39	\$1,611.01	\$415.93
	Agency 2	\$75,905.09	50	\$1,518.10	\$89,573.00	25	\$3,582.92	\$-2,064.82
H	Agency 1	\$162,659.44	49	\$3,319.58	\$92,161.78	42	\$2,194.33	\$1,125.25
	Agency 2	\$72,660.89	33	\$2,201.85	\$80,157.17	37	\$2,166.41	\$35.44
I	Agency 1	\$137,508.87	45	\$3,055.75	\$54,293.51	40	\$1,357.34	\$1,698.41
	Agency 2	\$78,177.28	37	\$2,112.90	\$53,684.82	46	\$1,167.06	\$945.84
	Agency 3	\$61,355.52	29	\$2,115.71	\$29,479.45	38	\$775.78	\$1,339.93
	Agency 4	\$58,300.59	39	\$1,494.89	\$30,527.58	33	\$925.08	\$569.81
K	Agency 1	\$103,705.47	40	\$2,592.64	\$221,723.35	45	\$4,927.19	\$-2,334.55
	Agency 2	\$71,818.76	42	\$1,709.97	\$37,290.24	38	\$981.32	\$728.65
	Agency 3	\$87,761.64	30	\$2,925.39	\$78,473.56	31	\$2,531.41	\$393.98
L	Agency 1	\$114,740.35	39	\$2,942.06	\$48,336.80	36	\$1,342.69	\$1,599.37
	Agency 2	\$34,885.54	37	\$942.85	\$38,326.47	35	\$1,095.04	\$-152.19
	Agency 3	\$27,687.96	35	\$791.08	\$24,690.99	27	\$914.48	\$-123.40

	Agency	EG funds	EG matches	EG per capita	BG funds	BG matches	BG per capita	Incremental EG vs. BG
R	Agency 1	\$60,693.76	42	\$1,445.09	\$40,695.63	33	\$1,233.20	\$211.89
	Agency 2	\$142,763.61	55	\$2,595.70	\$121,952.49	36	\$3,387.57	-\$791.87
	Agency 3	\$58,571.70	31	\$1,889.41	\$122,714.77	33	\$3,718.63	-\$1,829.22
Y	Agency 1	\$107,020.78	38	\$2,816.34	\$140,575.50	32	\$4,392.98	-\$1,576.65
	Agency 2	\$76,366.12	35	\$2,181.89	\$55,161.30	27	\$2,043.01	\$138.88
	Agency 3	\$55,982.81	22	\$2,544.67	\$26,568.37	23	\$1,155.15	\$1,389.53
All		\$1,740,474.27	818	\$2,127.72	\$1,520,698.54	738	\$2,060.57	\$67.15

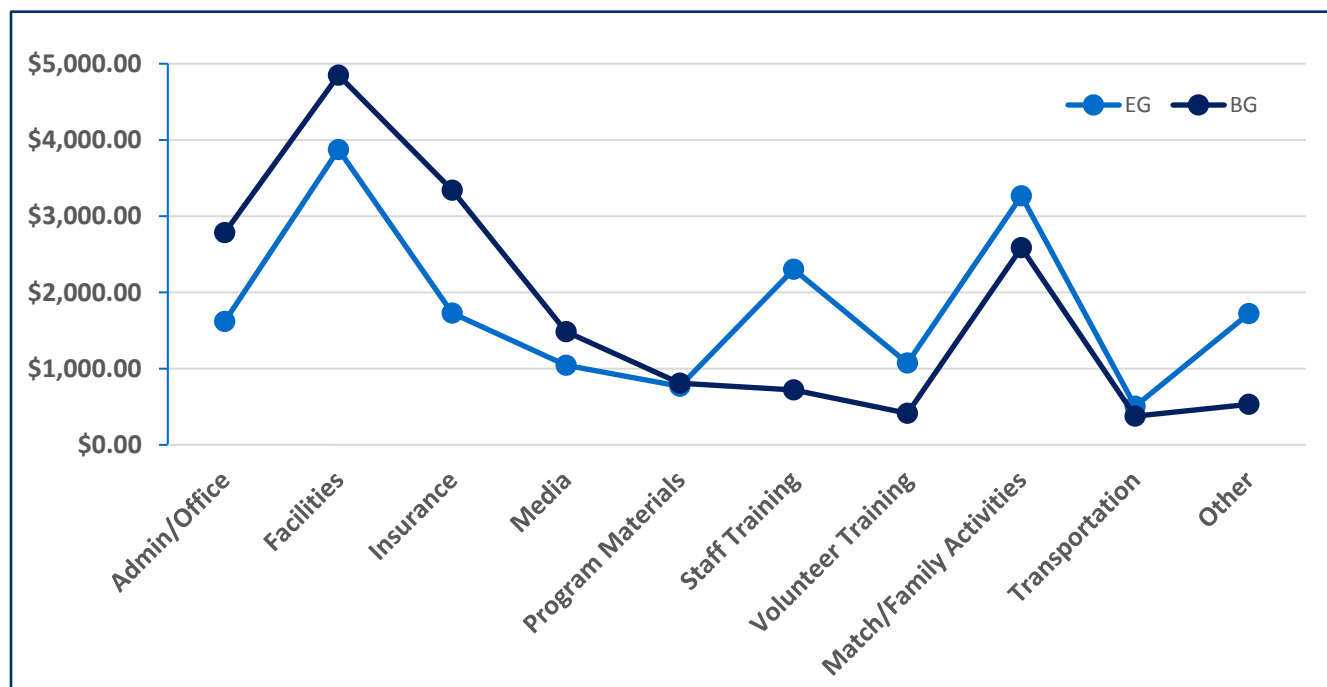
Exhibit 30. Average Agency-Level Expenditures in One Year, by Administrative and Program Cost Categories

Expense category	EG	BG	p value
Administrative Expenses			
Administrative/Office	\$1,618.59	\$2,783.23	.478
Facilities	\$3,874.09	\$4,849.42	.653
Insurance	\$1,727.00	\$3,340.12	.262
Media	\$1,043.76	\$1,485.33	.871
Program Expenses			
Program materials	\$768.67	\$808.38	.936
Staff training	\$2,302.62	\$721.37	.036*
Volunteer training	\$1,072.31	\$414.07	.033*
Match/Family activities	\$3,266.17	\$2,585.46	.163
Transportation	\$506.22	\$376.56	.268
Other	\$1,721.91	\$530.93	.764

Note: * indicates significant difference between EG and BG at $p < .05$.

Statistically significant differences between EG and BG conditions were observed for staff training and volunteer training, with greater resources devoted to the EG in both cases. It is interesting to note that the average total expenditures across all categories differed between EG and BG by only \$6.47. However, the distribution of expenses varied in a systematic way, with BG higher in administrative expenses by \$4,194.66 and EG higher in program expenses by \$4,201.13. This pattern is represented graphically in Exhibit 31, which shows that BG expenses were higher in all administrative categories (although none of these differences were large enough to reach statistical significance) and lower in all program categories except program materials (though, again, only two of these differences were large enough to reach statistical significance).

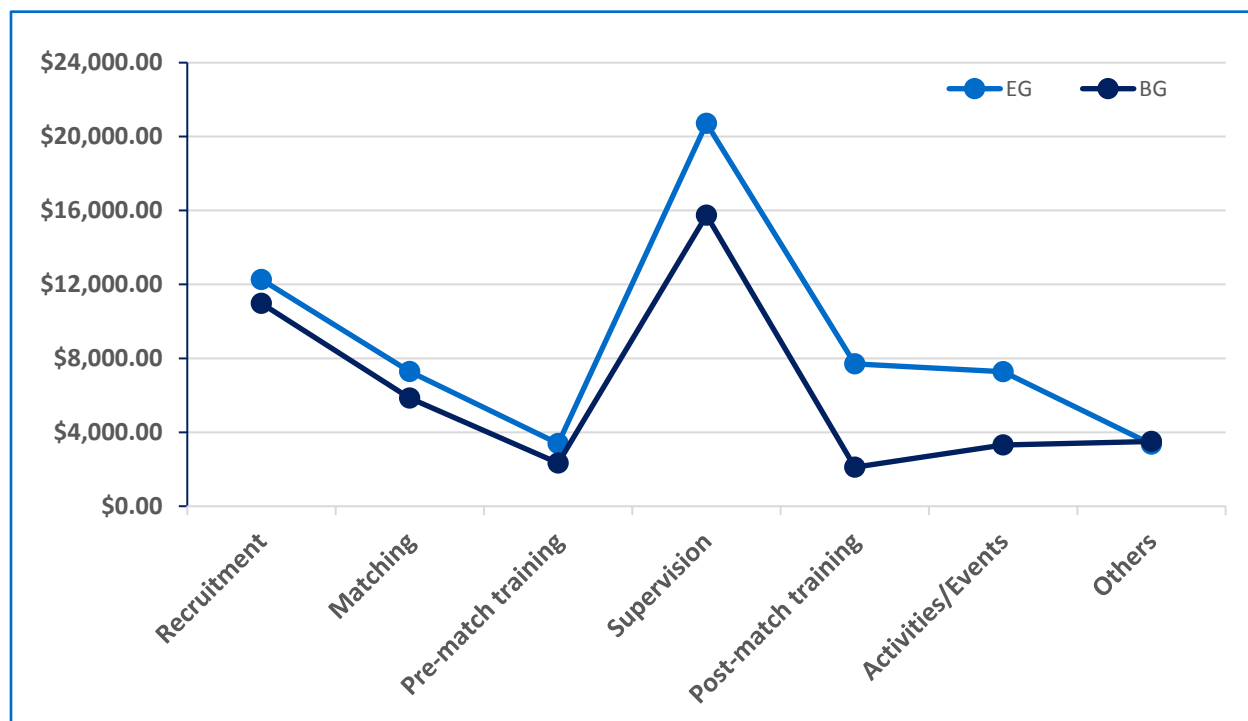
Exhibit 31. Average Site-Level Administrative and Program Expenditures for EG and BG



Staffing Expenditures

An additional analysis was conducted to better understand the way staff time was distributed across specific program tasks in the EG and BG groups. In this analysis, the expenses associated with staff salaries and benefits were allocated proportionally to the staff-reported percentages of staff time spent on specific tasks. Exhibit 32 shows the average site-level expenditures for one year. For both the EG and BG groups, supervisory and recruitment activities cost more than any other program practices. However, as the figure shows, staffing resources were considerably higher for the EG in supervision, postmatch training, and program activities and events than staffing resources for the BG. Thus, these EG practices were relatively costlier for the agencies to add to their normal programming.

Exhibit 32. Average Site-Level Expenditures on Staffing Functions for EG and BG



Sensitivity Analyses

Because of the pattern of reporting noted for administrative expenses, with more of the traditional “overhead” costs being attributed to the BG, a sensitivity analysis was conducted to investigate the per-match cost differentials, by condition (BG and EG), when reanalyzed with the administrative categories removed from the calculations. Removing the fixed administrative costs (e.g., facilities, insurance) was expected to yield a more accurate estimate of the actual incremental cost of an additional youth in either condition. The results of this refined analysis, shown for collaboratives in Exhibit 33, indicates a larger average difference in incremental cost, with EG matches \$212.71 higher than BG matches.

The reanalysis of agency-level per capita costs excluding the administrative categories is presented in Exhibit 34. This table, which reflects the variability in per-youth costs, by site, suggests that some cases in which BG matches had a higher cost than EG matches involve somewhat similar expenditures between conditions but a lower number of matches in BG, which would serve to decrease the cost *per youth* for EG matches relative to BG matches. In other words, considering the denominator in these calculations may offer insights regarding the counterintuitive findings.

Exhibit 33. Nonadministrative and Per Capita Costs for Each Collaborative

Collaborative	EG funds	EG matches	EG per capita	BG funds	BG matches	BG per capita	Incremental EG vs. BG
E	\$74,828.08	56	\$1,336.22	\$62,308.23	42	\$1,483.53	\$-147.31
F	\$139,078.47	84	\$1,655.70	\$148,149.41	64	\$2,314.83	\$-659.14
H	\$178,485.72	82	\$2,176.66	\$98,872.35	79	\$1,251.55	\$925.11
I	\$329,766.71	150	\$2,198.44	\$162,801.83	157	\$1,036.95	\$1,161.49
K	\$241,603.83	112	\$2,157.18	\$325,054.82	114	\$2,851.36	\$-694.18
L	\$159,211.48	111	\$1,434.34	\$93,261.83	98	\$951.65	\$482.69
R	\$217,974.50	128	\$1,702.93	\$183,656.63	102	\$1,800.56	\$-97.63
Y	\$196,614.63	95	\$2,069.63	\$156,108.97	82	\$1,903.77	\$165.86
All Sites	\$1,537,563.42	818	\$1,879.66	\$1,230,214.07	738	\$1,666.96	\$212.71

Exhibit 34. Nonadministrative and Per Capita Costs for Each Agency

Collaborative	Agency	EG Funds	EG Matches	EG per capita	BG Funds	BG Matches	BG per capita	Incremental EG vs. BG
E	Agency 1	\$45,728.91	24	\$1,905.37	\$44,078.91	16	\$2,754.93	\$-849.56
	Agency 2	\$29,099.17	32	\$909.35	\$18,229.31	26	\$701.13	\$208.22
F	Agency 1	\$66,642.44	34	\$1,960.07	\$60,702.89	39	\$1,556.48	\$403.59
	Agency 2	\$72,436.03	50	\$1,448.72	\$87,446.52	25	\$3,497.86	\$-2,049.14
H	Agency 1	\$134,242.13	49	\$2,739.64	\$55,438.48	42	\$1,319.96	\$1,419.67
	Agency 2	\$44,243.58	33	\$1,340.71	\$43,433.87	37	\$1,173.89	\$166.83
I	Agency 1	\$136,614.87	45	\$3,035.89	\$53,379.05	40	\$1,334.48	\$1,701.41
	Agency 2	\$77,352.29	37	\$2,090.60	\$52,687.34	46	\$1,145.38	\$945.23
	Agency 3	\$59,379.61	29	\$2,047.57	\$27,731.15	38	\$729.77	\$1,317.81
	Agency 4	\$56,419.94	39	\$1,446.67	\$29,004.28	33	\$878.92	\$567.75
K	Agency 1	\$99,521.10	40	\$2,488.03	\$218,673.57	45	\$4,859.41	\$-2,371.39
	Agency 2	\$59,315.45	42	\$1,412.27	\$32,304.89	38	\$850.13	\$562.14
	Agency 3	\$82,767.27	30	\$2,758.91	\$74,076.36	31	\$2,389.56	\$369.35
L	Agency 1	\$97,062.64	39	\$2,488.79	\$30,659.09	36	\$851.64	\$1,637.14
	Agency 2	\$35,499.77	37	\$959.45	\$37,938.70	35	\$1,083.96	\$-124.51
	Agency 3	\$26,649.07	35	\$761.40	\$24,664.04	27	\$913.48	\$-152.08

Collaborative	Agency	EG Funds	EG Matches	EG per capita	BG Funds	BG Matches	BG per capita	Incremental EG vs. BG
R	Agency 1	\$52,793.22	42	\$1,256.98	\$33,246.75	33	\$1,007.48	\$249.50
	Agency 2	\$136,994.05	55	\$2,490.80	\$118,848.51	36	\$3,301.35	\$-810.55
	Agency 3	\$28,187.24	31	\$909.27	\$31,561.37	33	\$956.41	\$-47.14
Y	Agency 1	\$76,359.30	38	\$2,009.46	\$85,823.76	32	\$2,681.99	\$-672.54
	Agency 2	\$65,721.17	35	\$1,877.75	\$45,584.93	27	\$1,688.33	\$189.42
	Agency 3	\$54,534.16	22	\$2,478.83	\$24,700.28	23	\$1,073.93	\$1,404.90
All		\$1,537,563.42	818	\$1,879.66	1,230,214.07	738	\$1,666.96	\$212.71

Conclusion

The results of this cost study demonstrate mixed results on cost differences between the EG and BG mentoring groups. Overall differences in per capita costs between the two groups were relatively small, with EG mentoring tending to be slightly more expensive. The analysis demonstrated considerable variability in the per capita cost differential across collaboratives, and particularly across sites. As we described earlier, each collaborative proposed and implemented a different set of program enhancements, so some cross-unit difference in incremental costs was anticipated. In some cases, however, the BG per-match cost was higher than it was for EG matches, which runs counter to the expectation that enhancements would involve extra effort. In these cases, the enhancements may have introduced efficiencies or may have resulted in longer lasting matches, increasing the denominator in the calculations. Another potential explanation is that new staff may have been hired to provide the enhanced services, in which case the salaries for these workers may have been lower than those of more experienced colleagues providing traditional services. For example, in one site, which had substantially higher per capita expenditures for BG relative to EG, the CEO's work was assigned exclusively to BG, and the much higher salary of the CEO compared with that of other workers accounted for almost the entire difference in cost between groups.

We also explored how EG and BG conditions differed in how costs were distributed across staff functions and expense categories. On average, sites devoted more staff time to the EG condition than to the BG for supervising matches, offering postmatch trainings, and organizing activities and events. Likewise, sites tended to devote more non-staff resources to the EG condition for staff training and volunteer training.

The results of the cost study provide some insight regarding the additional resources needed to offer enhancements promoting teaching and advocacy. Nevertheless, some potential limitations in the analysis could affect the accuracy of the results. First, not all sites reported cost figures, so there were incomplete data for some collaboratives. Second, the data were based on survey responses, which may have translated to variability in the way respondents interpreted questions or reported data. Third, some of the data reflect a lack of specificity in the breakdown of costs between EG and BG, as in cases when budgets seemed to be divided between conditions and the same level of expenditure was reported for both. Fourth, as noted above and in Appendix D, the research team was forced to make some decisions regarding data based on best judgment and assumptions in the absence of complete information. Finally, the data are for only one year of the 3-year implementation project, and they don't account for start-up expenses that may have been greater as the enhancements were being developed.

Chapter 8. Mentor Experiences with the Enhancements

Although implementation fidelity and quality are essential ingredients in strong implementation, they do not necessarily ensure that individual program participants were exposed to the MEDP enhancements and received the full intervention. To yield positive impacts for youth, mentors needed to: (1) receive the enhancements (dosage), (2) benefit from them (feasibility/usability), and (3) translate their learning into teaching and advocacy practices in their mentoring relationship (responsiveness).

Demonstrating the way mentors experienced the enhancements in MEDP was complicated because each collaborative developed unique programmatic enhancements, and each had its own unique criteria against which to test full dosage of the intervention. For example, each collaborative offered new trainings, but they differed in content, format, and length. Each collaborative enhanced staff support for the match, but the collaboratives used different tools and strategies to provide match support. Some collaboratives also offered online or in-person mentor support, while others offered structured group activities for the matches.

In this section, we examine mentors' experiences of the enhancements (i.e., training, match support, mentor support, match activities) by addressing three questions related to exposure (or dosage), feasibility/usability, and responsiveness:

- Dosage: To what extent did the mentors participate in the program enhancements?
- Feasibility/usability: What was the quality of mentors' experience of the enhancements?
- Responsiveness: To what extent did mentors incorporate teaching and/or advocacy into the mentoring role?

For all three questions, we first examine the way the initiative fared overall. Then we explore the way participants in each *relevant* collaborative responded (i.e., we examine only those collaboratives that implemented a related practice). We rely on survey responses to explore questions about feasibility/usability and responsiveness. We use both program records of attendance, as well as participant responses to our survey, to understand dosage, or participation. Although self-reports of participation are subject to participant recall and not all participants responded to our surveys, they can still provide useful information and fill in gaps of attendance in agency records.

To What Extent Did the Mentors Participate in the Program Enhancements?

Exposure to Training

Training was a key enhancement for all the collaboratives in the initiative as these sessions were meant to increase mentors' knowledge on a variety of topics, increase their awareness of issues that youth may experience, and build their skills as mentors.

Overall Differences between EG and BG Dosage

About two thirds of both EG (68%) and BG (69%) mentors reported in our mentor survey that they participated in prematch training (i.e., training that occurs before beginning the match relationship)—a difference that was not statistically significant. However, more than twice as many EG mentors (71%) as BG mentors (29%) reported that they attended a training *after* they started meeting with their mentees.

Collaborative-Level Differences between EG and BG Dosage

Records from four collaboratives (A, F, H, and S) suggested that less than 40% of their EG mentors attended at least one training. However, the records we received from these collaboratives did not provide attendance data for all the trainings provided. Thus, to ensure that we had the most complete data possible for all agencies, we also reviewed mentor reports of postmatch training attendance from our 12-month survey. Mentors were asked if they had attended any training after they started meeting with their mentees. In this section, and in the outcome analyses presented in Chapter 9, we supplement the data from program reports (i.e., attendance rosters) with mentor reports (i.e., responses on mentor follow-up surveys).

For mentors in eight collaboratives (all except F and S), there was a significant difference between the proportion of BG and EG mentors who reported that they attended at least one postmatch training. As Exhibit 35 shows, several collaboratives had considerable proportions of their BG mentors reporting that they had attended postmatch training. We were aware that many BG mentors received postmatch trainings designated as enhancement trainings at Collaboratives E, F, and S. This was by design in two collaboratives (E, F) that included BG mentors in the postmatch trainings but offered additional support to the EG mentors (one-on-one mentor support at school-based sites in E, mentor support groups in F). These similarities in BG and EG mentor training experiences could very well affect our ability to detect differences in mentor behavior and youth outcomes in these collaboratives.

Although program records indicate that none of the collaboratives involved all their EG mentors in trainings, most EG mentors did attend at least one, with 70 percent of the volunteers in the

enhanced group experiencing at least one enhanced training. See Exhibit 33. Across the collaboratives, attendance by EG mentors in at least one postmatch training varied from 35% to 94%. In seven collaboratives (A, E, I, K, L, R, and Y) at least 70% of EG mentors completed one or more postmatch trainings. These collaboratives each offered more than one training. Two of these seven collaboratives also offered trainings in both in-person and online formats. These patterns suggest that attendance may depend, at least in part, on the number of options mentors have for attending. With different timing and format options, mentors can respond when they have time or feel they have a need for training and use a format with which they feel most comfortable. Collaborative R, for example, offered 14 trainings, using both online and in-person formats, and achieved an 94% attendance rate of EG mentors attending at least one training after the start of the match.

Exhibit 35. Reports of Mentor Attendance at Postmatch Trainings

Collaborative	Training Format(s)	Trainings	EG	BG
F	in-person and online (first one)	3	35%	33%
S	in-person	1	45%	45%
H	in-person and online (varied by timing of match and site)	4	46%	19%
A	in person and online (varied by timing of match)	1	70%	35%
K	In-person	3	70%	7%
I	In-person	2	75%	22%
L	In-person and online (first one)	1	78%	26%
E	In-person and online, varied by site	3	83%	65%
Y	In-person	5	84%	13%
R	In-person (first one) and online	14	94%	40%

Note: In this table, the number of trainings represents the number of postmatch trainings for which we were able to obtain attendance rosters. Where training rosters were incomplete, we supplemented the data with reports from mentor surveys on postmatch trainings.

Youth Participation in Trainings with their Mentors

Three collaboratives (I, K, and L) offered one training/workshop that the mentor and mentee attended together. The primary purpose of these trainings was to engage the matches in goal setting and/or sparks development. In our 12-month surveys, youth were asked: “Have you gone to any trainings or workshops with your mentor?” As seen in Exhibit 36, many youth from these three collaboratives reported that their match missed these trainings, although in two collaboratives (K and L), almost half attended.

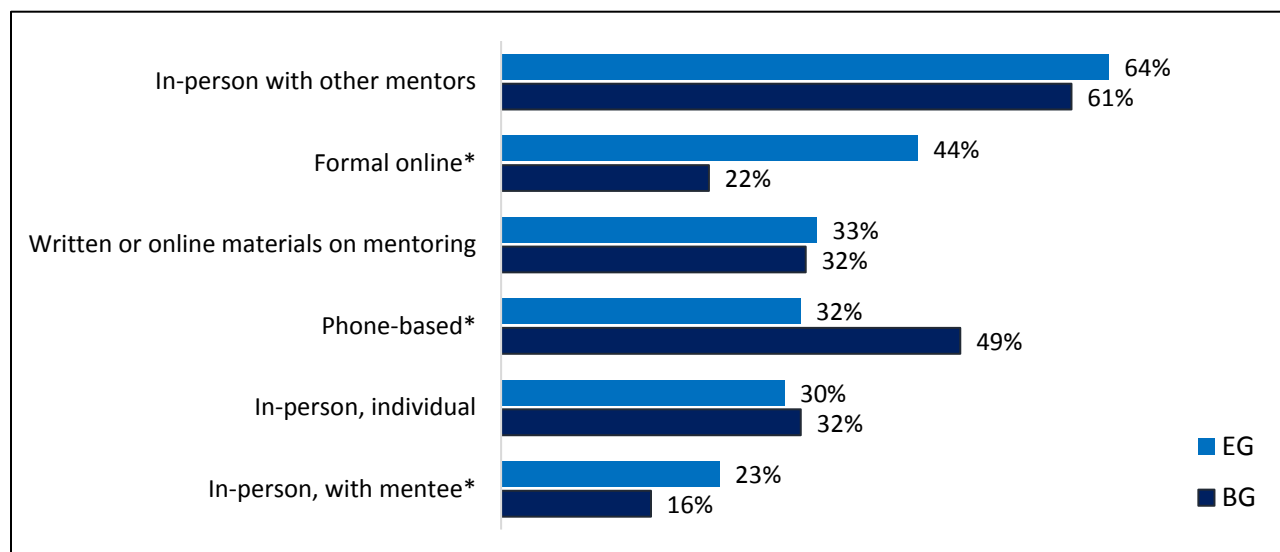
Exhibit 36. Youth Report of Participation in Trainings with the Mentor

(Collaborative) Mentor youth training topic	Proportion of youth reporting attending
(I)—Goal setting for youth	25%
(K)—Catalyst Workshop (e.g., exploring resources for Littles, spark development)	45%
(L)—Big Little-Goal setting	46%

Participation Rates in Different Formats of Training

Our survey also asked mentors in what format their postmatch training was provided. Mentors could select any of six different formats. As Exhibit 37 demonstrates, of those mentors (51% of the full sample) who reported attending a postmatch training, more than half in both conditions reported participating in a face-to-face training that was group based (i.e., with other mentors). Twice as many EG mentors as BG mentors (44% vs. 22%) also reported attending a formal online training. Almost half of the BG mentors (compared with only a third of EG mentors) reported a postmatch training on the phone with staff—a strategy that staff reported to us was used when mentors were not able to attend the trainings in person.

Exhibit 37. Mentor Reports of Format of Postmatch Training Attended



Note. Responses represent 51% of the mentors who said they attended a postmatch training. N = 689. Mentors could select more than one option. * indicates significant differences between EG and BG at $p < .05$.

Exposure to Ongoing Match Support from Program Staff

Ongoing match support refers to the communication and guidance provided to mentors, youth, and families by program staff regarding, for example, match activities, youth progress, and plans. The goal of match support is typically to support the development of the mentor-mentee relationship and troubleshoot challenges that arise. Improvements in ongoing match support were key enhancements in MEDP across all the collaboratives.

Overall Differences Between EG and BG Dosage

In the follow-up surveys, EG mentors reported being contacted by program staff significantly more frequently than BG mentors “to talk about how things were going with their mentee.” Both groups, however, reported fairly high levels of program contact—between 4 (once every month) and 5 (more than once a month): EG mentors rated contact frequency as 4.94 and BG mentors as 4.44.

Mentors were also asked to report on how long their conversations with staff typically lasted, choosing from four options: “1 to 5 minutes,” “5 to 10 minutes,” “11 to 20 minutes,” and “more than 20 minutes.” Again, EG mentors reported significantly longer conversations with program staff than did BG mentors, with EG mentors reporting an average of 2.4 (i.e., between 5 to 10 and 11 to 20 minutes) and BG mentors an average of 2.0 (5 to 10 minutes). This difference

suggests that EG mentors may have spent about 50% longer than BG mentors in match support conversations with program staff.

Collaborative-Level Differences between EG and BG Dosage

At the collaborative level, we conducted analyses comparing reported contact frequency and duration for EG and BG mentors for all 10 grantees, and only three collaboratives (E, H, and R) yielded significant differences favoring EG mentors in contact frequency; while three collaboratives (E, K, and R), yielded differences in contact duration. In Collaborative R, the support enhancement was particularly intensive in that program staff met with the mentor every month in person for the first 6 months of their match (as opposed to the BG standard of bimonthly support). Although Collaboratives E and H did not increase the frequency of their match support as part of their enhancements, they both included school-based sites in which staff were present at all match meetings. This meant easier access to mentors which may have helped to ensure that more consistent support (i.e., beyond “being there when needed”) was provided. Duration of support may have been longer for the EG matches in Collaboratives E, K, and R, given that (like most collaboratives) all three included enhancements to provide targeted support to EG mentors; their specific EG support requirements (e.g., what should be discussed and how) may have lengthened the duration of the typical match support interaction and/or their enhancements may have yielded more questions from, and topics for discussion with, their EG mentors.

One collaborative, in particular (L), offered a 6-month visit with the mentor and support staff at the mentee’s home. In this collaborative, significantly more EG parents (81%) reported that they “met in person with program staff since the start of their child's mentoring relationship” than did BG parents (55%).

Participation in Mentor Support Groups

Seven collaboratives offered mentor support activities through in-person meetings (F, I, and Y) or online portals (A, E, H, and R).

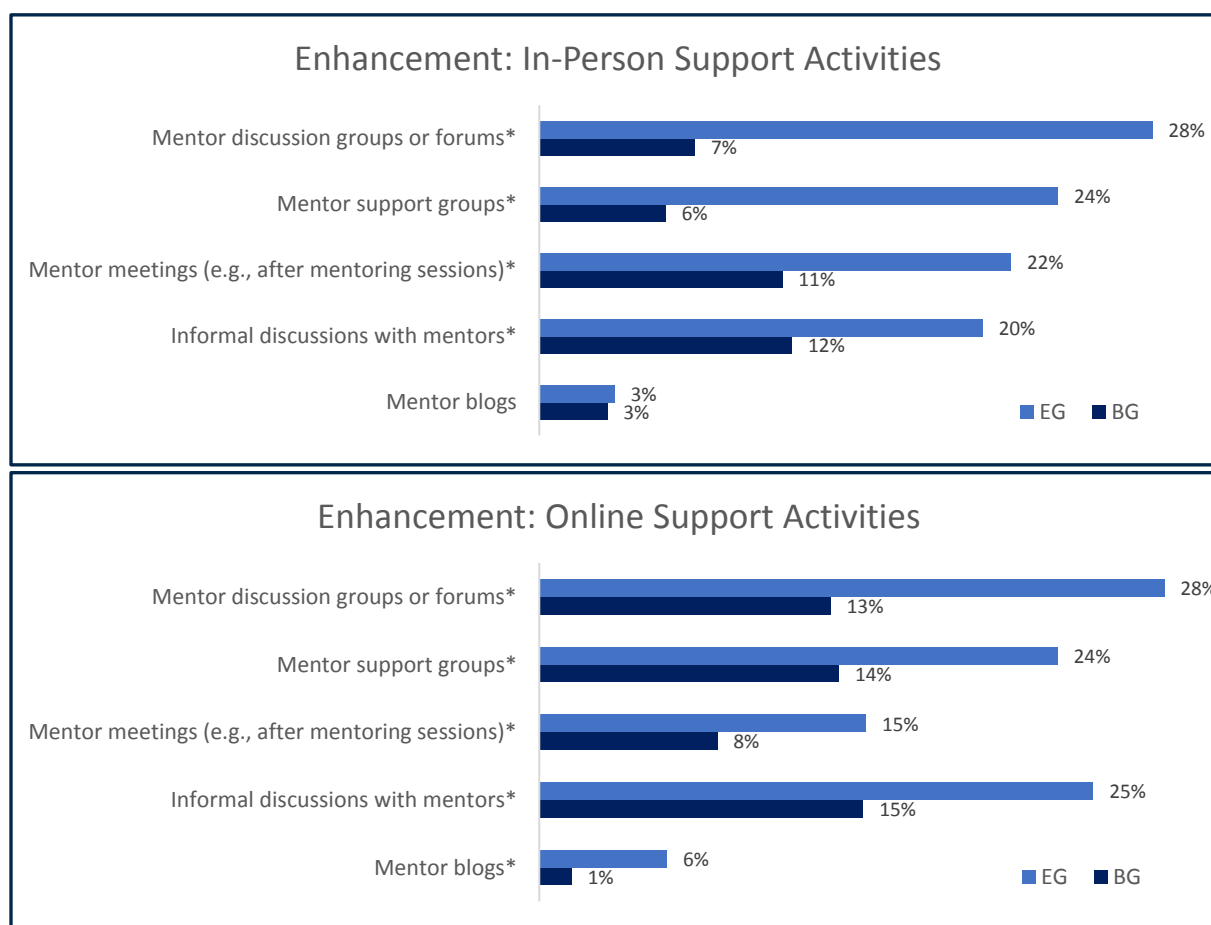
Overall Differences between EG and BG Participation

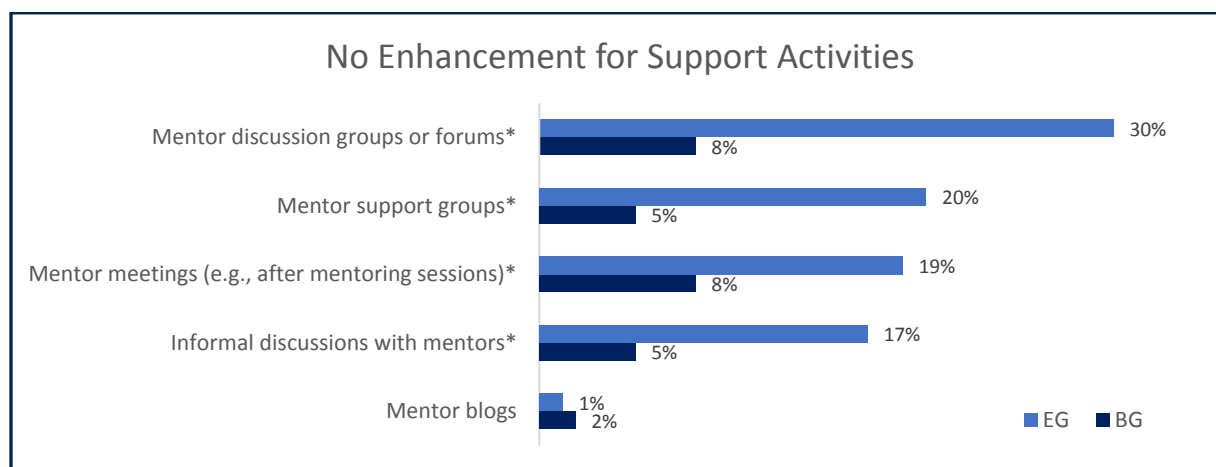
Mentors were asked whether they had participated in any in-person or online mentor support groups, discussion groups/boards, blogs, or other types of interactions with other mentors. About one-quarter of all respondents, and significantly more EG mentors (58%) than BG mentors (38%), said that they had interacted with other mentors.

Format of Mentor Interactions

We also asked the mentors who reported that they interacted with other mentors, about the format of their such interactions, from among five different options. In Exhibit 38, we sort mentors into three groups based on whether their collaborative indicated that one of the enhanced practices involved in-person support activities, online support activities, or no mentor support activities. In comparing the three panels in Exhibit 38, we find similar patterns of responses about how mentors were able to interact with other mentors in their program. Even where there was no official enhancement focused on mentor peer support activities, there were opportunities—structured and informal—for mentors to interact with their peers. It does appear that in the collaboratives where there are online mechanisms in place the BG mentors were more engaged in the support activities.

Exhibit 38. Percent of Mentors Participating in Various Forms of Mentor Support Activities



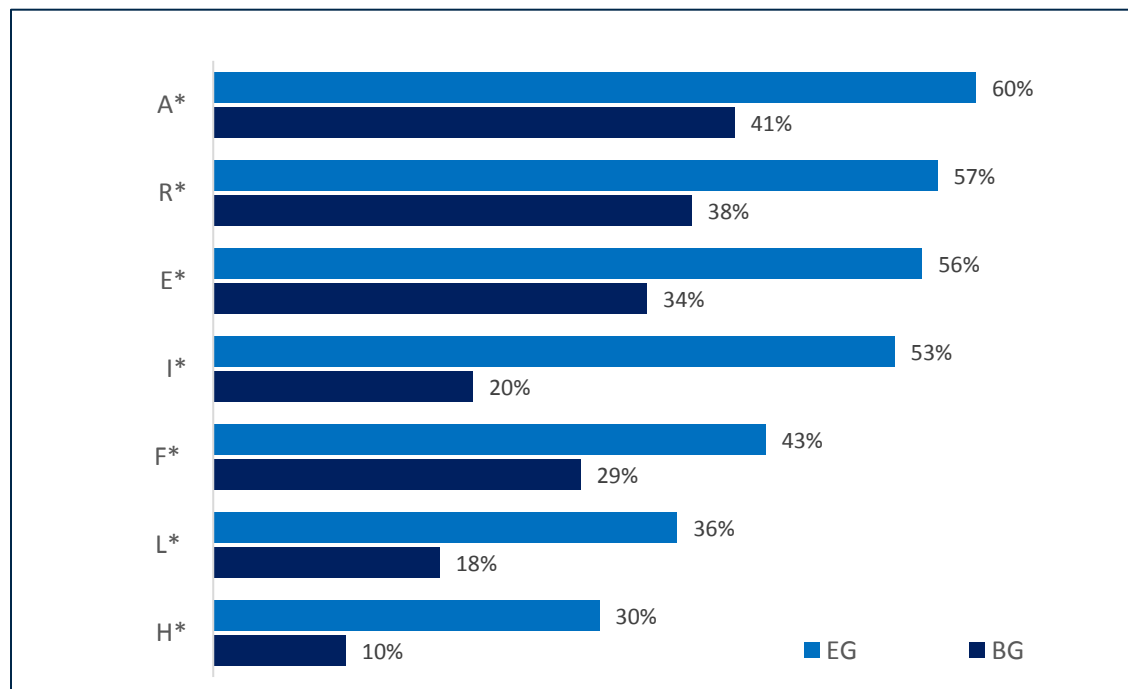


Note: Percentages in the chart represent the percent of mentors from the collaboratives that fit the description for that subgroup (i.e., in-person, online, none) who had already reported that they had participated in activities where they could interact with other mentors in their program. $N = 457/580/318$.

Collaborative-Level Differences between EG and BG Participation

As we see in Exhibit 39, all seven collaboratives that provided enhanced opportunities for mentors to interact with one other (A, E, F, H, I, L, and R) yielded significant differences between EG and BG mentors in their reports of interactions with other mentors, although a considerable number of BG mentors in these collaboratives also reported engaging in these interactions, suggesting that these types of opportunities were also common in BAU models.

Exhibit 39. Mentor Reports of Participation in Mentor Support Activities

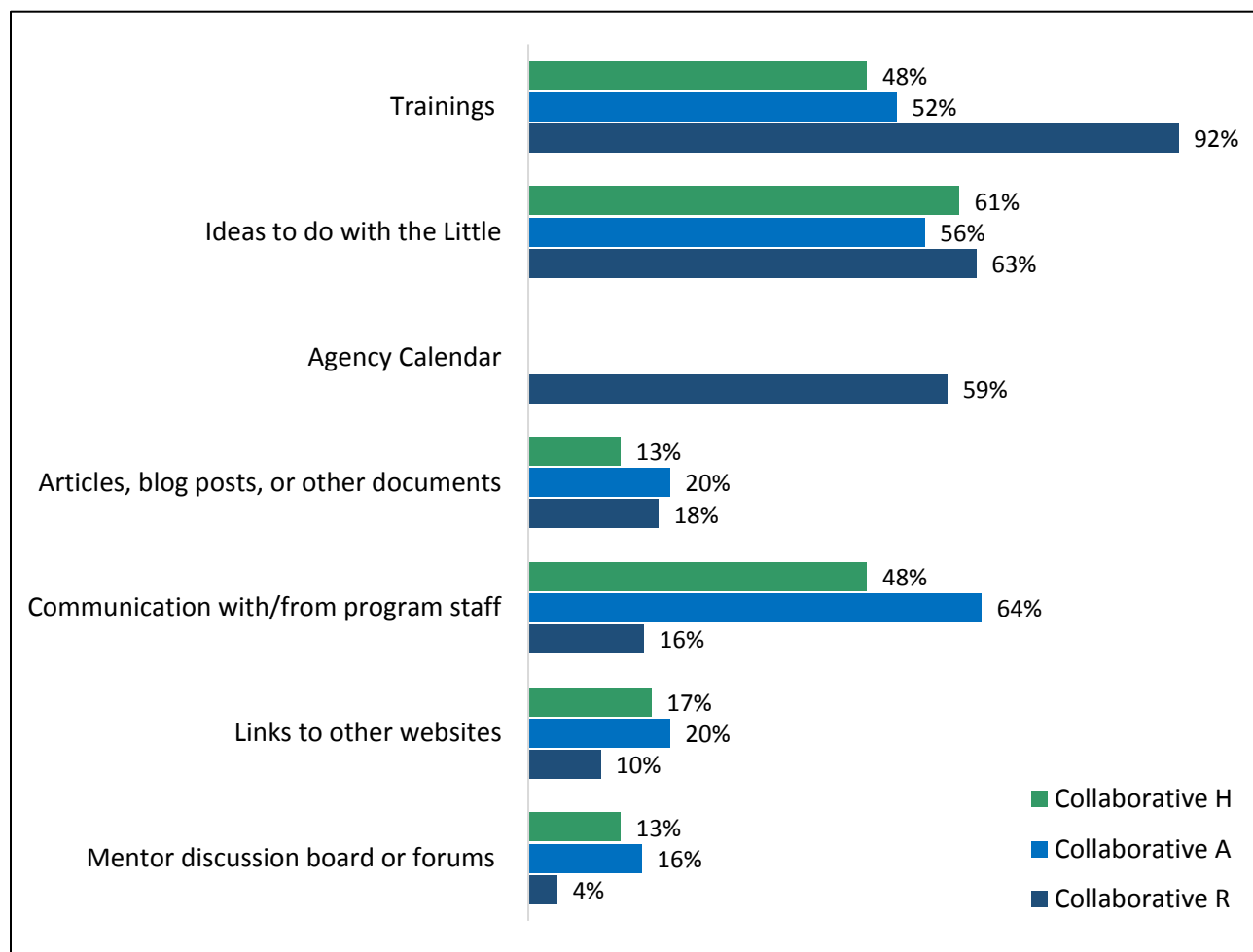


Note: * indicates significant difference between EG and BG at $p < .05$. $N = 1,391$. This chart only includes those sites where there was a structured mentor support activity as part of the programmatic enhancements.

Mentors’ Use of Online Platform

Mentors in three collaboratives that developed an online platform to support EG mentors (A, H, and R) were asked additional questions to examine the way they used these online resources. Exhibit 40 displays responses from EG mentors who visited the program website. These findings align with information gathered from program documents and during site visits: Except for Collaborative R, online platforms were primarily used as an informational resource for mentors rather than to communicate with other mentors. A little less than one third of those accessing the website used it to attend the online trainings. In two collaboratives, about one third of responding mentors visited the website to get ideas for activities to engage in with their mentees or to communicate with program staff. Mentor discussion boards or forums to interact with other mentors were used very infrequently.

Exhibit 40. Mentors’ Use of the Online Platform as Reported by EG Mentors



Note. Only Collaborative R posted the agency calendar on their online platform. Percentages in chart represent the percent of those accessing the platform that used it in different ways. Data are from mentor follow-up survey responses of EG mentors only.

Participation in Program-Sponsored Activities

Many mentoring agencies organize social events and gatherings for matches. Five collaboratives (F, I, K, L, and Y) offered enhanced match activities as part of MEDP in which the activities were intentionally designed to facilitate relationship building, support goal setting, and/or promote teaching and advocacy in the match. Examples included a half-day Junior Achievement World trip, Career Night, a Farm-to-Table Cooking workshop, a tour of a livestock farm, and playing together with Legos.

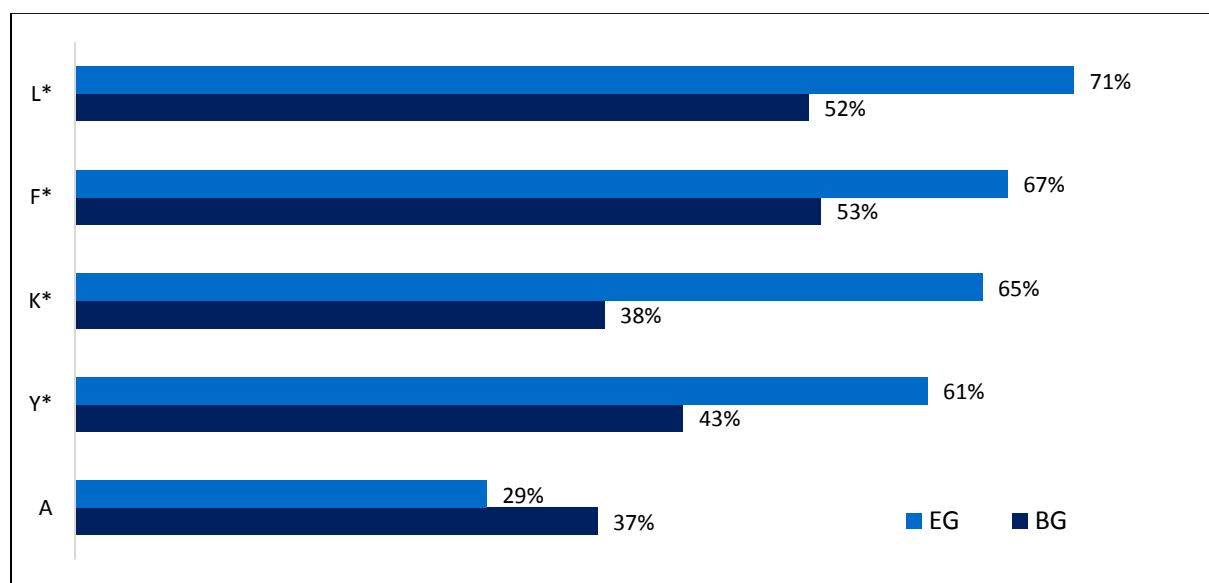
Overall Differences between EG and BG Participation

Mentors were asked in our follow-up survey if they had attended any program-sponsored activities or events with their mentees over the last year. Overall, more than half (56%) of the MEDP mentors replied that they had, and there was no statistically significant difference between the EG and BG groups.

Collaborative-Level Differences between EG and BG Participation

As we see in Exhibit 41, EG mentors from four of the five collaboratives (F, K, L, and Y) that offered enhanced mentor activities were more likely than BG mentors in their collaborative to report that they participated in these activities. There was no significant difference between the two groups within the other two collaboratives.

Exhibit 41. Mentor Reports of Participation in Match Activities



* Differences between EG and BG are statistically significant at $p < .05$. $N = 1,329$.

What Was the Quality of Mentors’ Experience of the Enhancements?

In this section we consider whether the mentors found the enhanced practices that they received to be helpful and how they were able to apply what they learned from training and staff support in their relationship with their mentees.

Usefulness of Training

Mentors from each collaborative were given a list of the enhanced training topics delivered by their particular collaborative and asked if they had attended the training and, if they had (1) the extent to which they found it helpful (rated on a 4-point scale) and (2) how often they had used tips from this training topic in their interactions with their mentees (with three options: “no,” “yes, once,” or “yes, more than once”). Most of the EG mentors that attended the enhanced training sessions found them helpful and used tips or pointers offered in these sessions. We noted that a handful of very specific topics, such as “Crisis,” “Supporting Youth in the School System,” and “ABCs of Healthy Sexual Education” had fewer attending mentors applying tips/pointers in their relationships. Mentors in several focus groups noted that some of these very focused training topics were not relevant to them because their mentees did not fit the developmental stage referenced or had not experienced the issues discussed.

Quality of Ongoing Support by Program Staff

To assess the quality of support EG mentors received from program staff, we asked mentors several questions about their perceptions of communications with program staff.

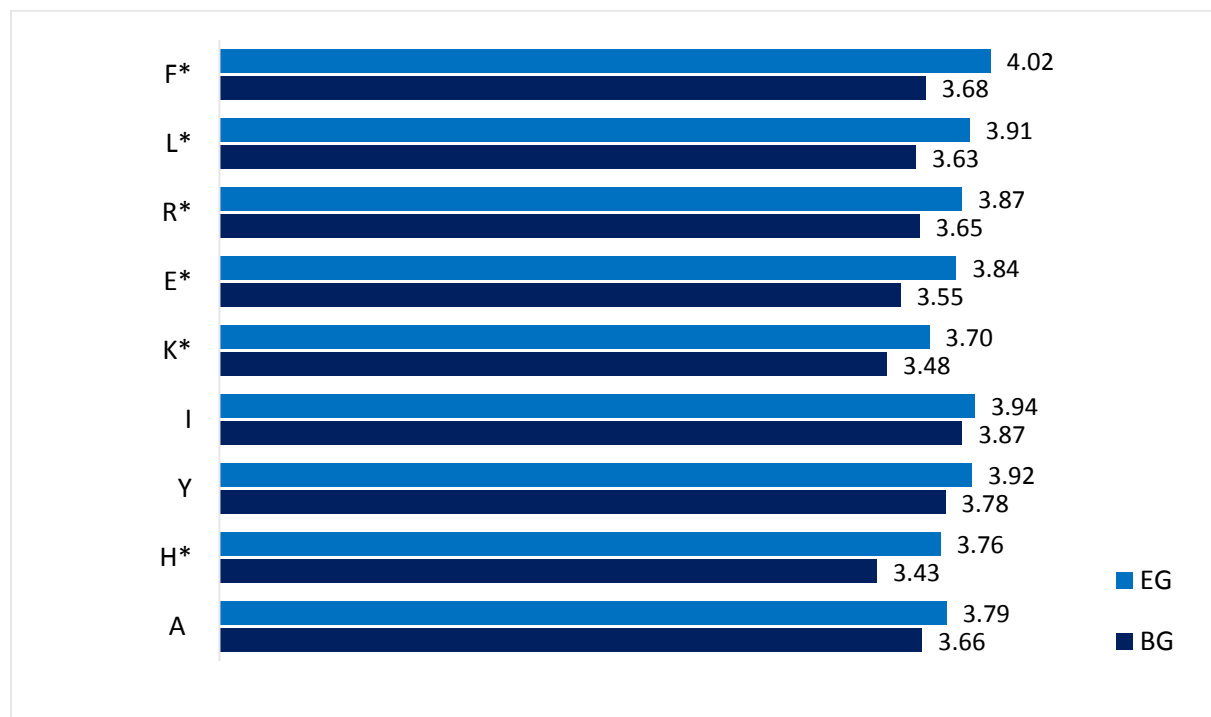
Activity Guidance from Program Staff

Across the initiative, on average, EG mentors reported significantly higher levels of agreement than did BG mentors to the statement: “Program staff have provided suggestions on what I can do with my mentee,” with EG mentors rating this question between “neither agree nor disagree” and “agree” (3.38) and BG mentors rating it between “disagree” and “neither agree nor disagree” (2.83).

Teaching/Advocacy-Related Mentor Staff Support

Of particular interest was the extent to which mentors reported discussing teaching and/or advocacy with program staff to help them consider ways they could incorporate these practices into their mentoring relationships. We asked mentors the extent to which they agreed with seven statements about the quality of the support they received from program staff specific to their role as teachers/advocates. (See page 39 for a detailed description of this scale). EG mentors reported higher levels of this type of teaching/advocacy-focused staff support than did BG mentors (EG mentors scored 3.86 on average; BG mentors 3.65). A significant difference was also found within six of the 10 collaboratives (E, F, H, K, L, and R). These results appear in Exhibit 42.

Exhibit 42. Mentor Reports of Teaching/Advocacy-Related Staff Support



* indicates significant difference between EG and BG at $p < .05$. $N = 1,305$. Data are from mentor follow-up surveys. Values reported are composite mean scores over a 5-item Likert scale.

Quality of Mentor Support Groups

Recall that six collaboratives (A, F, H, I, R, and Y) offered interactions with other mentors as part of their enhancements (e.g., through in-person support groups, blogs, discussion groups/boards, blogs). When asked how helpful these interactions were, across all six collaboratives, 87% or more of mentors who participated in these interactions reported that they found them helpful. Perhaps because of this high overall rate of helpfulness, EG mentors in only one of these six collaboratives (F) reported significantly higher ratings of helpfulness of these interactions than did BG mentors from their collaborative. Essentially, the initiative created more opportunities for mentors to interact with one another, but the initiative did not create *particularly* helpful opportunities—almost all were considered equally helpful to those offered in BG programming.

Quality of Program-Sponsored Activities

Mentors who attended program-sponsored activities with their mentees were also asked to rate the extent to which they found these activities helpful in strengthening their relationships with their mentees. Overall, there were no significant differences between EG and BG mentors.

Eighty-nine percent of EG mentors who attended these activities and 88% of BG mentors who attended found the activities fairly or very helpful. There were also no differences between EG and BG mentors in any of the five collaboratives (F, I, K, L, and Y) that offered these types of enhanced activities.

Service learning. Two collaboratives (I and R) implemented service learning as part of their program enhancements. Another collaborative (F) emphasized projects and contests within which the MEDP matches were expected to work together. Not all matches took advantage of these opportunities. Among EG mentors, a little more than half in one collaborative (R) and less than half in the other two (F, I) reported having participated in service-learning activities. Yet, as shown in Exhibit 43, more than two thirds of those who did engage in service learning noted that their relationships benefitted from this experience “some” or “a lot.”

Exhibit 43. Mentor Experiences with Service-Learning Activities (EG only)

	R	I	F
Percentage of mentors participating	58%	41%	38%
Percentage of those participating who reported that their relationship benefitted “some” or “a lot”	81%	72%	80%

Quality of Youth’s Relationship with Program Staff

We also wanted to understand how program staff were interacting with the youth participants. By implementing the enhancements, programs may have had more opportunities to interact with youth and, through these interactions, could have created relationships with the youth that could enable them to serve as resources for the young people—above and beyond the support they received from their mentors. To explore this possibility, we asked youth to rate the extent to which they agreed with five items assessing their relationship with “the people who work at the program to support your relationship with your mentor” (see description on page 40). Analyses did not show differences when combining all collaboratives in the study (both EG and BG youth rated the quality of their relationship with staff about 2.93, or “mostly true” on a scale from 1 (not at all true) to 4 (very true). However, in two collaboratives (K and L) EG youth rated their relationships with staff as significantly stronger than did BG youth—although these differences were fairly small, with both BG youth (2.81 and 2.79 in K and L respectively) and EG youth (2.98 and 2.94 in K and L, respectively) rating these items between “a little true” and “mostly true”—i.e., a little less than 3.0 on a 4-point scale. Both collaboratives offered enhanced match activities, providing youth with additional opportunities

to interact with staff. In one of the other collaboratives (A), EG youth rated their relationships with program staff as significantly *lower* in quality than did BG youth.

To What Extent Did Mentors Incorporate Teaching and/or Advocacy into the Mentoring Role?

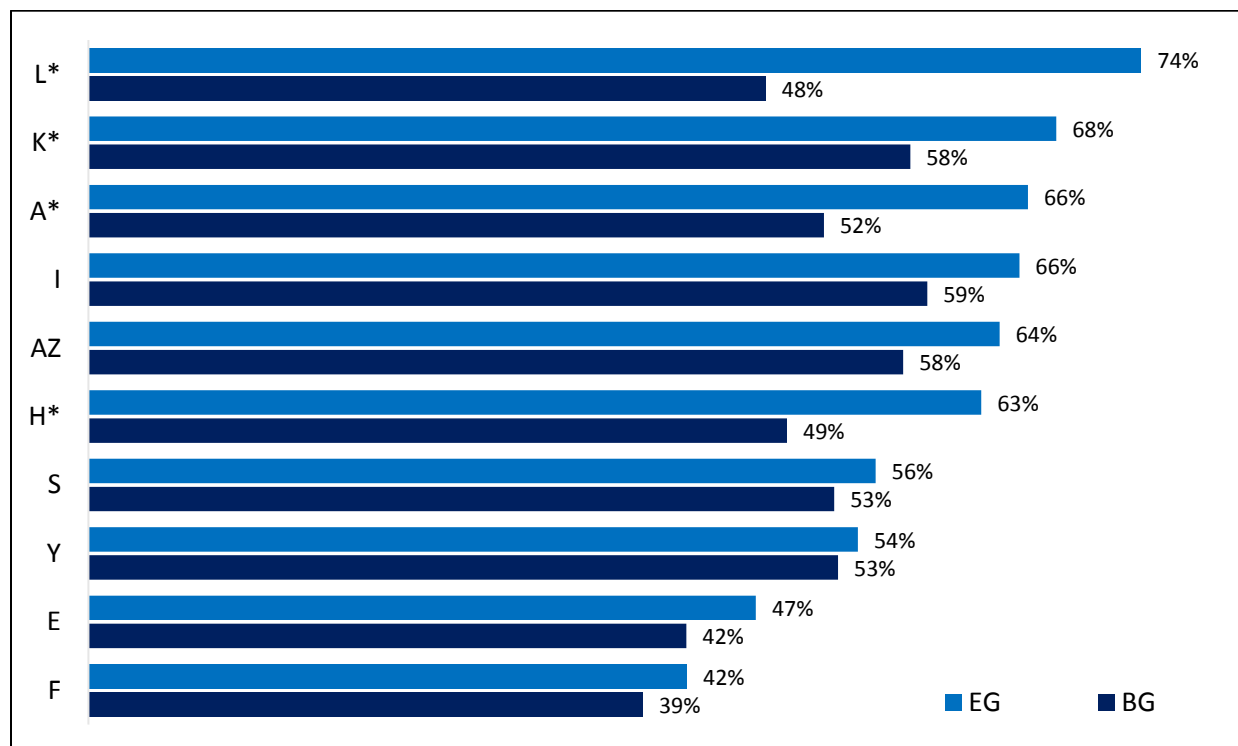
A central proposed mediator in our hypotheses linking the MEDP enhancements to youth outcomes is the behaviors the mentors engaged in during interactions with their mentees. We hypothesized that mentors who received focused training and support would be more likely to engage in teaching and advocacy-related behaviors with their mentees, and through these behaviors, youth would benefit in ways they might not have benefited from BAU mentoring.

We examined mentor behaviors in three areas: the goals they set with their mentees, their support of spark development, and their on-the-ground behaviors around teaching and advocacy. The first two of these sets of behaviors were most relevant for a subgroup of collaboratives that developed enhancements focusing on goal attainment or sparks development. In these cases, we present EG versus BG comparisons only for the sites targeting those outcomes. The last set of behaviors (i.e., those around teaching and advocacy) was relevant for all collaboratives. Thus, when discussing teaching and advocacy behaviors, we present comparisons for all participating collaboratives.

Goals

Recall that adding supports and structures around goal setting was a key enhancement for all but two collaboratives (F and S) in the initiative. Reflecting this strong focus, on average, EG mentors across the entire sample were significantly more likely than BG mentors to report that goals had been set for their mentee as part of their relationship (61% vs. 52%). Similarly, EG youth were more likely than BG youth to report that their mentor was trying to help them reach goals. Parallel differences in mentor reports were also found for three of the eight collaboratives that focused on goal setting as part of their enhancements (A, H, and L; see Exhibit 44). It is noteworthy that, on average, over half of the BG mentors across all sites engaged in goal setting for their mentees—even without the enhancements—either because it was an explicit focus of their standard program or because they chose to set goals on their own.

Exhibit 44. Mentor Reports of Goal Setting

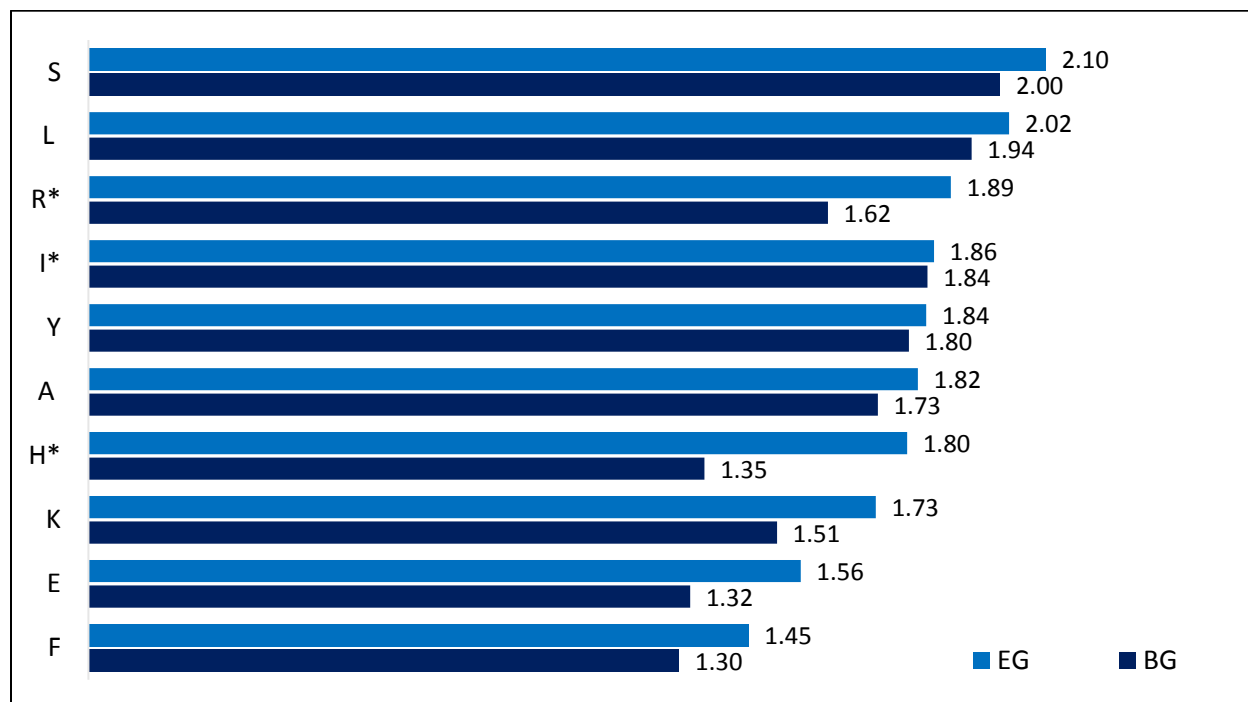


Note. * indicates significant difference between EG and BG at $p < .05$. $N = 1,481$.

How often and the ways in which mentors engaged in supporting this process in their match were similar across condition. For example, the specific focus of these goals did not differ, with academic goals being the most common across both groups (reflecting the focus of about 61% of those who reported having goals).³⁷ Mentors in both groups across the initiative also discussed progress toward meeting goals with similar frequency with both their mentees (65% noted that they had talked with their mentees about them “several times” or more often) and their mentees’ parents (29% noted that they talked with them about these goals “several times” or more often). However, EG mentors, on average, reported discussing progress toward these goals more often with program staff than did BG mentors—a difference that was also apparent in two of the eight sites with a goal focus in their enhancements (i.e., H and R). These results are presented in Exhibit 45. Although we did not find a difference in the full sample on discussions with youth, in these same two sites, EG mentors reported discussing goals with their mentees more frequently than did BG mentors.

³⁷ These analyses were not conducted by collaborative, as we had no a priori hypotheses about why these goals should be differentially prevalent in the BG and EG groups across different collaboratives.

Exhibit 45. Mean Response to “Have You Discussed These Goals with Program Staff?”



Note. Responses ranged from 1 = “less than every 6 months” to 5 = “more than once a month.” * indicates significant difference between EG and BG at $p < .05$. $N = 867$.

The content of EG mentors’ discussions with their mentees also differed from those of BG mentors in some ways, suggesting a more planned approach to goal attainment among the EG matches. We asked mentors whether they had engaged in discussions with their mentees about five different processes that could help their mentees attain their goals (e.g., specific steps to reach them, how long it will take to reach them; see Exhibit 46). On average, EG mentors were more likely than BG mentors to engage in these focused conversations with their mentees in three of the five areas we asked about. We also found similar differences in youth responses (i.e., those three items starred in Exhibit 46), particularly in the items around challenges (i.e., EG youth were more likely than BG youth to say that they had discussed potential challenges and ways to overcome them with their mentors).

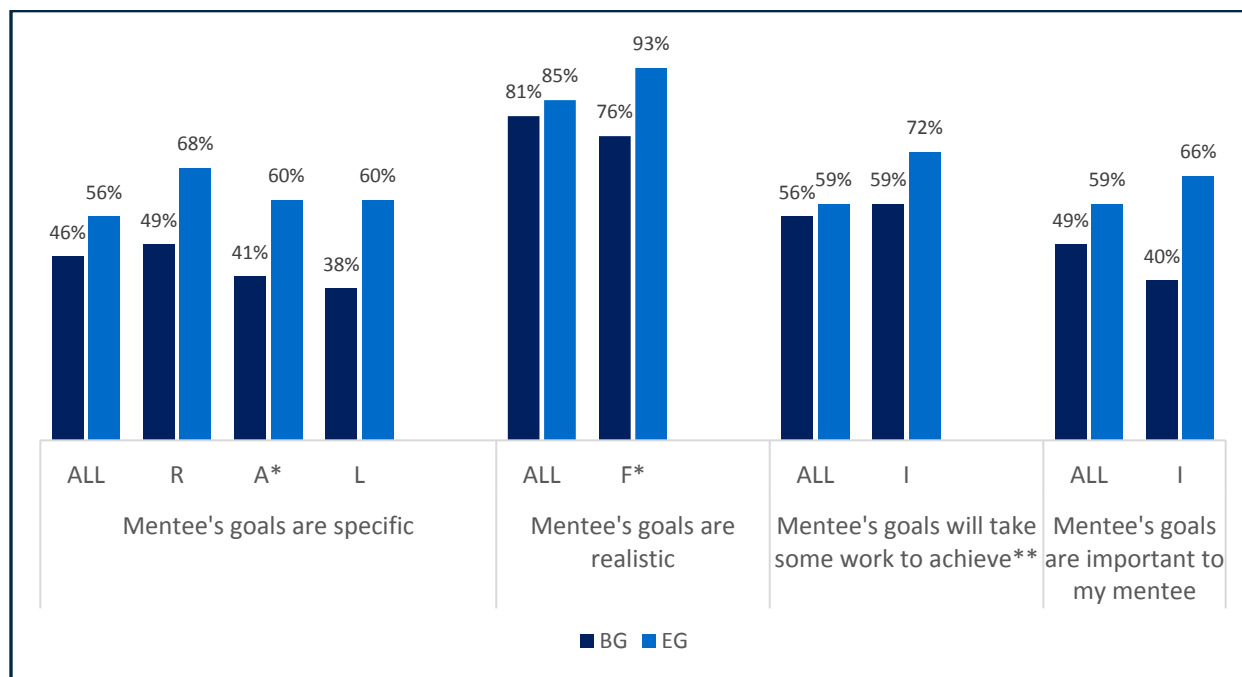
Exhibit 46. Goal-Related Topics Mentors Discussed with Mentees



Note: * Significant difference between EG and BG at p,.05. N = 787.

Also, the types of goals that were chosen differed in ways that reflected a particularly thoughtful, structured approach to goal attainment in the enhanced group. See Exhibit 47. For example, one site asked that matches have goals with specific characteristics—that is, the goals should be specific, realistic, require work, and be important to youth. On average, EG mentors across all sites were more likely than BG mentors to report that their mentees’ goals were both specific and important to their mentees. Youth in the enhanced group were also more likely to report that their goals would take work to achieve and, in addition (a question we did not ask of mentors), that their goals were written down.

Exhibit 47. Mentor Perceptions of Goals Set by Mentees



Note. For each of these questions, comparable questions were asked of youth and we compared EG and BG youth responses. =Items for which comparable youth-reported items yielded significant EG/BG differences are noted with **. N = 813. * indicates significant difference between EG and BG at p<.05.

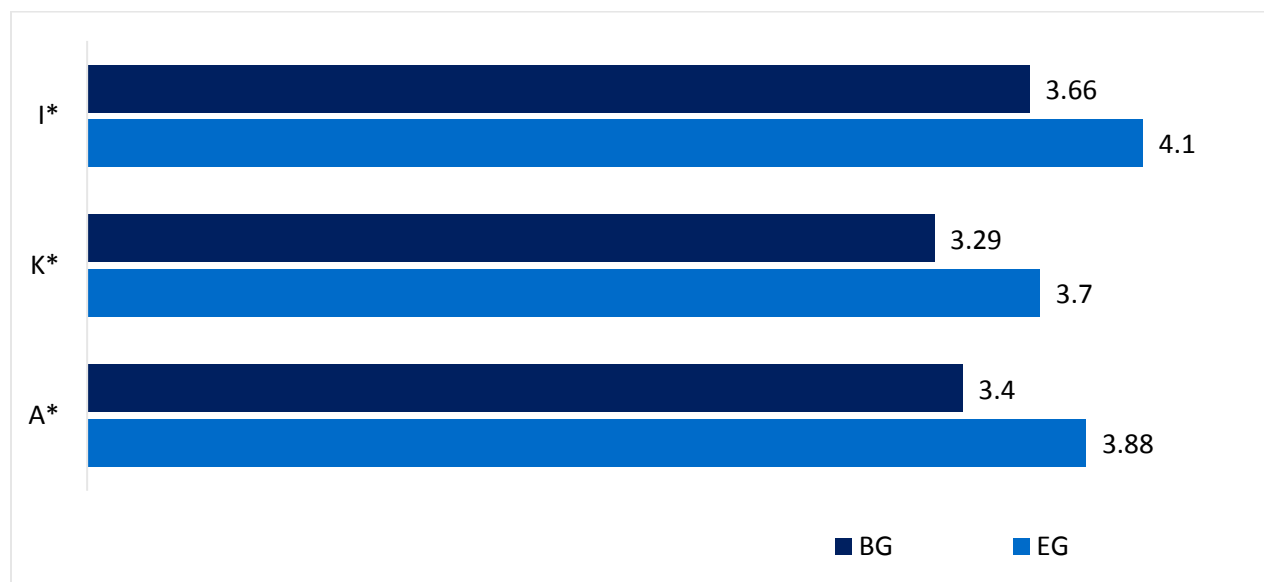
Across these two sets of questions (discussions about goals and specific types of goals), we did not see strong patterns when examining BG/EG differences within each of those collaboratives that focused on goal attainment, except in two sites. One had a particularly strong focus on goals (Collaborative I). A total of four of the nine comparisons we made in these areas were significant for that collaborative. In addition, although Collaborative R did not have a heavy focus on goal attainment as part of their enhancements, six of these nine comparisons were also significant for this collaborative. Collaborative R conducted monthly in-person mentor support as part of their enhancements. Perhaps having more planned, face-to-face time with EG mentors provided the opportunity for staff to delve into more focused, or in-depth, topics including goal attainment.

Spark Development

Three collaboratives focused on encouraging the development of sparks (i.e., strong interests or passions) in their mentees (A, I, and K) (see description on page 41). With regard to program support on spark development, in the three programs overall, and for each of the programs individually, EG mentors were significantly more likely than BG mentors to report that their

program assisted them in supporting the youth’s spark development. These results appear in Exhibit 48.

Exhibit 48. Mentor Reports of Program Help to Develop/Support Mentee Sparks



Note: Mentors from three collaboratives responded to questions on a 5-point scale from “strongly disagree” to “strongly agree.” * indicates significant difference between EG and BG at $p > .05$. $N = 323$.

It is interesting to note that, like goal setting, mentors in both conditions were in fairly strong agreement that they knew what their mentee’s sparks were and that they had helped them to develop their sparks (EG mentors scored, on average, 4.17 of 5, compared with BG mentors’ score of 4.16). Thus, it was not the case that the EG mentors did not encourage spark development, but simply that, on average, mentors across *both* conditions were very likely to do so. Program support for spark development, the one dimension on which there was a significant difference between the EG and BG mentors, was rated, on average, between 3 (“neither agree nor disagree”) and 4 (“agree”) on a 5-point scale by BG mentors, suggesting that even BAU programs were supporting spark development, although not particularly strongly. Thus, at least some of the impetus for this focus may have come from the mentors themselves.

Teaching and Advocacy Behaviors

We also assessed more discreet mentor behavior around teaching and advocacy through responses to our mentor follow-up surveys. Mentors were asked two sets of questions about the focus of their interactions with mentees and the frequency with which they engaged in a wide range of teaching and advocacy behaviors. These items were developed for this study and

were intended to generally reflect the broad definitions of teaching and advocacy stated in the RFA (in italics below). Data generated from focus groups subsequently conducted with MEDP program staff provided more nuanced and contextualized descriptions of teaching and advocacy, as described in a later section.

We developed two measures of advocacy and teaching behaviors as described on page 40. Average scores for each of these two scales for all the EG and BG mentors separately are presented in Exhibit 49. In general, of these two sets of behaviors, mentors reported most frequently engaging in teaching, rating their frequency of engaging in these behaviors as 2.81 (occurring between “a few times” and “several times”). Mentors reported engaging in advocacy behaviors less frequently, with average scores of 1.79 (occurring between “once or twice” and “a few times”).

On average, across most sites, neither of the two sets of behaviors differed between BG and EG mentors. However, in two collaboratives (F and R), EG mentors reported engaging in these behaviors more often than did BG mentors. In Collaborative F, EG mentors reported engaging in both sets of behaviors more often than did BG mentors; in Collaborative R, this difference was only apparent for advocacy functions.

In two other collaboratives (A, K), EG mentors reported engaging in these behaviors *less* often than their BG peers. In Collaborative A, the averages for both EG and BG mentors for both sets of behaviors were lower than the averages for all sites. Thus, in this collaborative, mentors in both groups reported engaging in teaching and advocacy behaviors relatively infrequently. It should be noted that one of the sites was a fairly structured site-based, group mentoring program, in which the types of advocacy behaviors we asked about in our survey may not have been particularly relevant (e.g., contacting others on the youth’s behalf or connecting the youth’s family with resources in the community). Yet, it is unclear why this would have differentially affected rates for EG and BG mentors. In Collaborative K, BG mentors engaged in teaching and advocacy more often than did the average BG mentor across all sites, and EG mentors engaged in these behaviors less often than did the average EG mentor. Perhaps the existing programs in this collaborative were already strongly supporting teaching and advocacy behaviors. However, again, this does not explain why EG mentors would engage in these behaviors relatively infrequently.

Exhibit 49. Mean Levels on Scales for Teaching and Advocacy Functions

Collaborative	Scale	BG	EG	p value
All sites	Teaching Functions	2.81	2.81	0.99

Collaborative	Scale	BG	EG	p value
	Advocacy Functions	1.79	1.79	0.99
A	Teaching Functions	2.58	2.48	0.47
	Advocacy Functions	1.66	1.49	0.02*
E	Teaching Functions	2.88	2.86	0.91
	Advocacy Functions	1.96	1.99	0.79
F	Teaching Functions	3.02	3.33	0.03*
	Advocacy Functions	1.80	2.13	0.01*
H	Teaching Functions	2.70	2.68	0.91
	Advocacy Functions	1.63	1.56	0.48
I	Teaching Functions	2.87	2.93	0.55
	Advocacy Functions	1.86	1.81	0.51
K	Teaching Functions	2.88	2.54	0.01*
	Advocacy Functions	1.82	1.65	0.13
L	Teaching Functions	2.94	2.99	0.75
	Advocacy Functions	1.75	1.82	0.51
R	Teaching Functions	2.80	2.95	0.23
	Advocacy Functions	1.74	1.94	0.02*
S	Teaching Functions	2.25	1.79	0.13
	Advocacy Functions	1.95	1.58	0.20
Y	Teaching Functions	2.84	2.88	0.84
	Advocacy Functions	1.91	1.88	0.81

Note: Data are from the mentor follow-up surveys. * indicates a significant difference between EG and BG at $p < .05$.

Relationship Quality

In this section, we describe the length and quality of the relationships that developed in the MEDP program—both those receiving BAU programming and those receiving the enhancements developed through the initiative. We hypothesized that those mentors receiving

enhanced services would create longer and stronger relationships with their mentees—both key ingredients in fostering youth benefits through mentoring (DuBois & Neville, 1997; Parra et al., 2002; Thomson & Zand, 2010; Zand et al., 2009; Bayer, Grossman, & DuBois, 2015, Grossman & Rhodes, 2002; Grossman et al., 2012).

Frequency of Meetings

Although the specific requirements differed across the MEDP programs, all had meeting requirements for their matches, asking mentors to meet with their mentees a minimum number of hours each week or month. We asked mentors about the amount of time they spent with their mentees in a typical month. Mentors responded on a 6-point scale from 0 (I haven't done this in a typical month) to 6 (10 or more hours). Most mentors (61%) reported spending at least four hours per month with their mentees, with very few (10%) spending 10 or more hours a month and 19% spending less than 2 hours a month in these interactions.³⁸ Mentors in the enhanced group reported spending slightly more time with their mentees than those in the BAU group (3.80 vs. 3.67 respectively, a marginally significant difference).³⁹

We also asked mentors how much time they spent outside of interactions with the child, doing things for their mentee or their mentee's family. Mentors, in general, spent much less time doing things *for* their mentee than they did *with* their mentee, with 42% reporting that they did not spend time doing this in a typical month and the average mentor reporting spending "less than one hour" per month on this. However, EG mentors spent significantly more time doing things for their mentees than their BG peers (scoring an average of 1.06 versus .77 respectively).^{40,41}

Mentors reported being fairly consistent in their meetings with youth, with mentors in both groups reporting that they rarely canceled meetings; almost half (48%) reported never having canceled a meeting with their mentee and 38% reported canceling only once every four or more months or less often. Only about 3% reported canceling their scheduled mentoring

³⁸ About 5% of mentors reported that they hadn't spent time with their mentee in a typical month. These responses were included in this proportion. However, some of these mentors may have been from very short matches or matches that had already closed, and thus were simply reporting that they had not seen their mentee in a typical month, rather than reporting on how often they saw their mentee when they were still meeting.

³⁹ A score of 3 is "2 to less than 4," and a score of 4 is "4 to less than 6".

⁴⁰ A score of 0 is "I haven't done this in a typical month," and a score of 1 is "less than one hour."

⁴¹ The question was worded as follows: In a typical month, about how much time have you spent doing things for your mentee or your mentee's family (but not with your mentee)—for example, finding resources for your mentee, meeting with your mentee's teacher, attending program trainings, talking with program staff (*please do not include time spent getting to and from meetings with your mentee*). Thus, the measure is not entirely distinct from other measures capturing time spent attending or receiving program enhancements.

meetings at least once a month. Despite similarities across mentor reports in the two conditions, we found a marginally significant trend for *parents* of BG youth to be more likely than those of EG youth to report “the mentor misses too many meetings” as a challenge (see “Challenge” section below).

Mentors reported that their mentees canceled meetings slightly more often than they themselves did. But this was still not a frequent occurrence, with 35% of mentors reporting that their mentee never canceled a scheduled meeting and 30% reporting that their mentee canceled only once every 4 months or less often. However, again, there were a handful of mentors (12%) reporting that their mentee canceled their scheduled meetings at least once a month.

Match Duration

The duration of the matches in the initiative was an important outcome for the evaluation, as longer matches, particularly those that do not close prematurely, have been linked with positive youth outcomes in both school-based and community-based programs (Grossman & Rhodes, 2002; Grossman et al., 2012). We assessed the duration of the match through program records. Programs typically reported the start date as the first time the mentor and youth met together and the end date as the date that the match was officially closed in agency records.⁴² For 4 agencies, we did not have official program records for match closures. In these cases, we used the date the mentor provided in the mentor survey as the last date he or she met with the child before the match closed.

We calculated the duration of the match in two different ways. First, we assessed *dosage* prior to our outcome assessment—or how much mentoring the youth received prior to their 12-month assessment. This measure was used in our prediction of youth outcomes, reflecting our hypothesis that youth who received more mentoring *prior* to their outcome assessment would report stronger benefits than those who received less mentoring at that point. Across the initiative, 43% of matches ended prior to their 12-month follow-up, and 57% were still ongoing.

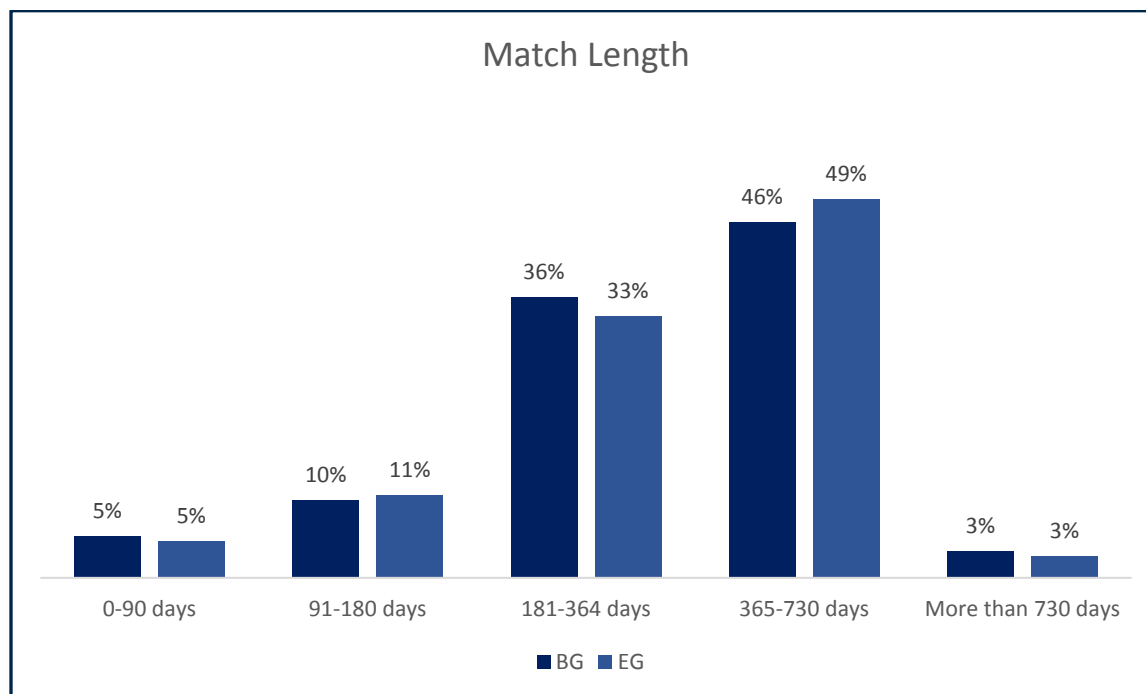
⁴² It is important to note that different organizations have different strategies for assessing the close date of a mentoring relationship. Some agencies, for example, note the close date as the date the match has a formal closure meeting while others note it as the last day that the match met. Most organizations in this study recorded the closure date as the date that the match was officially closed in program records even if the match’s last meeting was earlier than this date. Although these strategies varied across agency, we saw no evidence that it differed within agency for enhanced versus business-as-usual matches. However, it could be the case that enhanced staff expended more effort to keep matches together and thus did not officially close the match until later than they would have if the match were in the business-as-usual condition.

On average, EG matches lasted 317 days prior to the first outcome assessment and BG matches lasted 314 days prior to the assessment—a difference that was not statistically significant.⁴³

Second, we assessed *match length*—a closer assessment of how long the match was in total. This calculation considered the length of the match through the end of the study (several months after the 12-month follow-up window had passed for most matches), regardless of the timing of the outcome assessments. This measure is more accurate than dosage in understanding the effects of the enhancements on match duration because it is a closer estimate of the true length of the match and does not truncate this duration at the point of the youth's outcome assessment.⁴⁴ See Exhibit 50 for the distribution of match lengths across all study participants. Counter to our hypotheses, match length did not significantly differ for EG and BG matches (356 versus 352 days respectively).

⁴³ Dosage and match length were calculated using the youth's most recent match at the time of the first follow-up. Thus, for those youth who were rematched prior to the first follow-up, these measures do not reflect the length of their original match. Note also that, although we tried to time the first follow-up 12 months after the start of the youth's match, it often took time (sometimes several months) to locate the family to administer the follow-up surveys. Thus, these estimates do not necessarily mean that youth had almost a year of uninterrupted mentoring immediately following the start of their match. For some youth, their matches—particularly rematches—started well after they went through random assignment, and their follow-up survey occurred after 12 months had passed.

⁴⁴ Note that there were still some matches that were ongoing at the end of our study. Thus, although this measure is closer to an accurate representation of true match length, it is still somewhat truncated. We also were unable to obtain updated closure information from several agencies at the end of the study.

Exhibit 50. Distribution of Match Length by Treatment Condition

Note: Data are from program reports of match closure. If missing, the information was supplemented by mentor reports on date of last contact. $N = 2,034$.

Relationship Quality

Relationship quality is a multidimensional construct, reflecting several facets of mentor and mentee approaches, experiences, and feelings as well as the context that surrounds them (see Nakkula & Harris, 2014). Thus, we assessed relationship quality through several measures included in our mentor, youth and parent surveys, exploring for example, the activities the matches engaged in, the mentor's goals for the match, youth and mentor engagement and feelings of closeness and satisfaction, the focus of the relationship and perceived challenges. Although we did find several differences between matches in the Enhanced and BAU conditions, for example, in what the matches did together, the mentor's connection with the child's parents, and how the mentor utilized program supports to overcome relationship challenges, for the most part, the quality of relationships in the two conditions was similar, with matches in both conditions reporting fairly high levels of relationship quality.

Activities

We asked mentors how often they engaged in seven different types of activities with their mentees (see Exhibit 51). Mentors reported that they spent time engaging in a broad range of

activities with their mentees, responding on a 5-point scale from 0 (“none”) of their time together to 4 (“most”) of their time together. Their most common activities included simply having fun with their mentee and discussing important things and people in the mentee’s life, reporting on average, spending between “some” and “a lot” of their time engaging in these activities. EG matches engaged in creative activities (e.g., crafts, cooking, drawing) and service activities (e.g., volunteering) more often than BG matches. The latter finding likely reflects the fact that two collaboratives focused on adding service activities to the mentoring relationships. Creative activities may have also been fun and engaging contexts in which to engage in teaching with the mentee. EG matches also tended to engage more frequently than BG matches in more in-depth personal discussions—i.e., talking about personal issues or about important people in the mentee’s life (marginally significant differences).

Exhibit 51. Mentor-Reported Activities

About how much of your time with your mentee did you spend engaging in the following activities?	BG	EG
Making time to have fun	2.60	2.64
Talking about important people in your mentee’s life	2.21	2.28*
Talking about your mentee’s personal issues or problems	2.11	2.20*
Physical activities like sports or hiking	1.81	1.80
Going to cultural or other special events (e.g., plays, ceremonies, concerts, museums, lectures, sporting events)	1.60	1.60
Creative activities	1.52	1.64*
Participating in service activities	0.69	0.92*

Note: * indicates difference between BG and EG is significant at $p < .05$. Data are from mentor follow-up surveys. $N = 1,558$.

Decision Making

A potential concern with asking mentors to take on a teaching role with their mentees is that their relationships could focus more on their own goals—or the program’s goals—for the child, rather than what the child might enjoy, which can lead to less satisfactory relationships (Morrow & Styles, 1995). We did not find this to be the case. We asked mentors who typically made decisions about their activities, and most mentors from both groups reported that they either got ideas from their mentees and then decided what they would do together (33%) or that they gave their mentee ideas and then decided jointly (48%). Only 7% (respectively) reported that they typically decided how they would spend their time or that the program

outlined how they would spend their time together. Youth also agreed that their relationships were fairly “youth centered,” rating the relationship fairly high on a set of questions reflecting the extent to which the relationship focused on youth’s interests, for example doing things the youth wanted to do (see Exhibit 54 in section on assessments of relationship quality). Both mentor and youth reports were similar across the BAU and Enhanced groups.

Challenges

We also asked mentors and parents about a wide range of challenges they might have experienced in or regarding the mentoring relationship. Because EG matches were hypothesized to engage in different types of interactions, it would not be surprising if respondents experienced different types of challenges surrounding these interactions.

We asked mentors to rate each of 12 potential challenges on a 4-point scale from “not at all challenging” to “very challenging.” Their reports fell into three broad categories as described on page 43: the mentee’s or family’s high level of need; logistical efforts to get together and the family’s support of the match; and connecting with the child on an interpersonal level.

On average, mentors did not report feeling particularly challenged by any of these three sets of factors, and their reports were similar across the EG and BG groups. Connecting with the child and logistical efforts/family support were more common than challenges relating to the family’s high level of need. Even so, both were rated fairly low—on average 2.13 for connecting with the child and 2.09 for logistical efforts/family support (i.e., both were rated as “not very challenging”). The family’s level of need was rated, on average, slightly less challenging (1.64—between “not at all challenging” and “not very challenging”).

Although the type of challenges EG and BG mentors faced did not differ, the mentor’s approach to overcoming challenges in their relationships did (see Exhibit 52). In both groups, a little over a third reported that they had not faced any significant challenges in their relationships. Of those that had faced significant challenges, about 8% of both EG and BG mentors reported that they hadn’t tried to overcome their challenges. Similar proportions of mentors in both groups (three quarters or more) got advice from program staff. However, EG mentors were much more likely to report using other program resources to overcome their challenges, including program materials, program events or trainings and access to other mentors.

Exhibit 52. Mentor-Reported Strategies for Overcoming Challenges

Item	BG	EG
Faced significant challenges in our relationship, but haven't yet tried to overcome them	8%	8%
Attended a program event/training	5%	19%
Got advice or help from someone outside of my mentoring program	24%	22%
Got advice or help from other mentors	13%	22%
Read program materials	14%	23%
Talked with mentee's parent/guardian about it	37%	34%
Talked with my mentee about it	64%	68%
Got advice from staff at mentoring program	75%	78%
Haven't faced any significant challenges in our relationship	37%	34%

Note. Percentages for all but the first item represent proportions of only those mentors reporting that they had significant challenges in their relationship. * indicates difference between BG and EG is significant at $p < .05$. Mentors could select more than one strategy. $N = 1,278$.

Parents were also asked if they or their child had experienced any of 15 challenges with the child's mentoring relationship. These results are presented in Exhibit 53. Only about a quarter of the parents (24%) reported experiencing any challenges—a proportion that was similar across both groups. Parents in the two groups were also similar in the challenges they experienced. Only one of the 15 challenges differed by group: 12% of BG parents (compared to 9% of EG parents) reported that the mentor missing too many meetings was a challenge for them (a marginally significant difference). This challenge was also the most common challenge reported by both groups.

Exhibit 53. Parent Reports of Challenges with Their Child's Mentoring Relationship

Challenge	BG	EG
The relationship is not fun for my child.	4%	4%
The mentor is too hard on my child.	0%	0%
The mentor is not hard enough on my child.	2%	2%
The mentor is not helping my child with what he/she really needs help with.	6%	4%
The mentor is not a good role model.	2%	2%

Challenge	BG	EG
The mentor does not focus enough on just being a friend to my child.	4%	3%
The mentor does not interact enough with my child's parent(s) or guardian(s).	5%	5%
The mentor does not interact enough with my child's siblings.	2%	2%
The mentor does not understand my child's culture/background.	2%	1%
The mentor's background is too different from my child's.	1%	1%
The mentor's interests are too different from my child's.	2%	2%
The mentor misses too many meetings.	12%	8%*
The relationship is not focused on what my child wanted from the program.	5%	4%
The relationship is not focused on what I wanted from the program.	5%	4%
The mentor imposes his/her beliefs or values on my child.	1%	1%

Note. The percentages in this table represent the total percentage of parents responding to our survey that responded that they or their child had faced a given challenge with the child’s mentor. * indicates difference between BG and EG is significant at $p < .05$.

Parents were also fairly similar in the strategies they used to overcome these challenges, as shown in Exhibit 54. For example, of those who reported having challenges, similar proportions of both groups reported talking with their child about the problem (52% overall) and talking with the mentor about it (40% overall)—two commonly reported strategies. No parents reported that they attended a program event or training and less than 10% in both groups reported reading program materials to overcome these challenges. However, one notable marginally significant trend emerged across the six strategies asked about: EG parents (52%) were slightly more likely to get advice from program staff than BG parents (41%).

Exhibit 54. Parent Strategies to Overcome Challenges with The Child’s Mentoring Relationship

Strategy	BG	EG
I haven’t yet tried to overcome these challenges.	17%	11%
I talked with my child about it.	50%	54%
I got advice from staff at my child’s mentoring program.	41%	52%*
I talked with my child’s mentor about it.	41%	39%
I got advice or help from someone outside of my child’s mentoring program.	10%	9%

Strategy	BG	EG
I attended a program event or training	0%	0%
I read program materials.	6%	7%

Note. These percentages reflect the proportion of those parents reporting that they or their child had challenges in their child’s mentoring relationship (i.e., 24% of the all parents responding to the survey), who then reported using a given strategy to overcome those challenges. For example, 17% of 24% of all parent survey respondents noted that they had not yet tried to overcome their challenges. * indicates difference between BG and EG is significant at $p < .05$.

Assessments of Relationship Quality

We asked mentors, youth and parents to tell us about their perceptions and experiences of the quality of the mentoring relationship.

Mentor Reports

We asked the mentors about their experiences of several aspects of their relationship with the mentee (see description on page 42). Overall, mentors reported relationships of fairly high quality, and we found very few differences between BG and EG mentors (see Exhibit 55). For example, about two thirds of mentors “agreed” or “strongly agreed” that they felt close to their mentees (i.e., rated their feelings of closeness as 4 or 5 on a 5-point scale). Mentors rated most scales, on average, between a 3 and 4 on a 5-point scale (i.e., between “neither agree nor disagree” and “agree”). The only scale that differed significantly between the two groups was commitment, with EG mentors rating themselves as more committed to continuing the relationship than BG mentors.

Exhibit 55. Measures of Relationship Quality as Reported by Mentors, Youth, and Parents

	BG	EG
Mentor reports		
Closeness	3.73	3.73
Support seeking (scale)	3.56	3.59
Satisfaction (scale)	3.71	3.74
Commitment (scale)	3.99	4.09*
Growth (scale)	3.59	3.65

	BG	EG
Youth reports		
Closeness	3.34	3.37
Youth centered (scale)	3.36	3.38
Growth (scale)	3.11	3.17
Relational health (scale)	3.32	3.36
Criticism (scale)	1.12	1.11
My mentor knows what I’m good at.	3.19	3.31*
My mentor helps me practice and improve the things I’m good at.	3.24	3.30
My mentor challenges me to do my best.	3.30	3.31
I am not getting what I want out of my mentoring relationship.	1.27	1.25
I wish my mentor wouldn’t always try to teach me things.	1.39	1.36
My mentor expects too much from me sometimes.	1.36	1.36
Parent reports		
Parent satisfaction with the relationship (scale)	3.23	3.27
Mentor’s provision of help to the family (scale)	2.32	2.41*
I feel close to my child’s mentor	2.93	3.02*
My child’s mentor asks for my thoughts and views	3.08	3.13
My child feels more equipped to handle problems because my child knows his/her mentor is there	2.88	2.95
My child’s mentor has gone “above and beyond” in addressing my child’s needs.	2.86	2.95
My child’s mentor helped my child get involved in a wide variety of activities.	2.91	2.97

Note: * indicates significant difference between EG and BG at $p < .05$.

Youth Reports

Youth were also asked several sets of questions about their relationships (see section beginning on page 42 for a description). In addition, we asked youth six single-item questions in efforts to understand whether a teaching focus might increase not only the mentor’s understanding of

youth's strengths, but also perhaps the likelihood that youth felt the relationship was too focused on teaching. Youth responded to these sets of questions on a 4-point scale (from "not at all true" to "very true").

Like the mentors, youth rated most scales highly and positively, and in fact, generally higher than the mentors (typically between "mostly true" and "very true"; see Exhibit 55). For example, youth reported feeling fairly close to their mentors with 88% reporting feeling "somewhat" or "very" close to their mentor.

On average, youth in both groups agreed that their mentors challenged them and helped them get better at things they were good at. We also found very low ratings of criticism and questions meant to capture whether the youth was dissatisfied with the focus of the relationship. We found only one difference between reports by EG and BG youth: EG youth were more likely to report that the mentor knew what they were good at.

Parent Reports

We also wanted to capture the parent's feelings about the relationship between their child and the mentor as well as their own relationship with the mentor. Relatively few studies have examined the parent's assessments of mentoring relationship quality and the parent's personal experiences with the mentor. Yet, parental satisfaction with the relationship can play an important role in sustaining the match (e.g., Spencer, 2007).

To capture parent perceptions of relationship quality we asked parents two sets of questions—one on satisfaction with the relationship and another on their perceptions of the mentor's provision of help to the family (see page 45 for description). Parent responses to five additional questions were not strongly associated with their responses to the questions in the two combined scales, so were analyzed separately and are presented in Exhibit 55 as single items.

Parents, in general, reported feeling fairly satisfied with their child's mentoring relationship with both groups on average "agreeing" (i.e., scoring over 3 on a scale from 1 "strongly disagree" to 4 "strongly agree"; see Exhibit 55) that they were satisfied with the quality of their child's relationship. Fewer parents agreed to personally receiving help from the mentor for the broader family, (on average scoring between "disagree" and "agree"), but in this case, EG parents were more likely to report receiving this kind of assistance from the mentor. EG parents were also more likely to report "feeling close" to their child's mentor, perhaps reflecting the greater involvement of the mentor with the parent and broader family.

Chapter 9. Results from Outcome Analyses

In this chapter we present the results from the outcome analyses. The analyses presented in this section were designed to answer Research Question 4. The overarching question is whether the enhancements had an impact on match and youth outcomes. In the first section, we describe the intent-to-treat analyses used to address whether youth who received enhanced mentoring show more positive outcomes, in contrast to those who did not. Following this section, we present results from moderator analyses that test whether the impacts from the enhancements were moderated by youth, mentor, match, and/or program characteristics. Finally, we discuss the results from structural equation models that were designed to identify the paths through which the enhancements had an impact on youth outcomes.

Did the Enhancements Have an Impact on Match and Youth Outcomes?

As described in the analysis plan, the impact of the MEDP intervention enhancements on each youth outcome variable was evaluated using an intent-to-treat approach in which the mean value for all EG cases was compared to the mean value for all BG cases.⁴⁵ The exhibits below present the coefficients and standard errors for this contrast between the treatment (EG) and control (BG) conditions, accompanied by indicators for the tests of statistical significance.⁴⁶ Unless otherwise noted, these results are from mixed-effects generalized linear models. All values were derived from models controlling for baseline assessments of the outcome variable as well as the standard control variables that adjusted for demographics and baseline differences (as listed in Exhibit 8). The models also accounted for the program-level (i.e., L2) clustering of participants.

The effects of the MEDP intervention enhancements on preventing or reducing negative youth outcomes were evaluated using eleven measured variables representing involvement in delinquency, juvenile justice involvement, problem behaviors, and misbehavior in school. As indicated in Exhibit 56, no statistically significant differences between EG and BG youth were detected for any of these distal outcomes. In general, the differences between groups were negligible and were mixed in the direction of the effect—sometimes favoring those in EG and sometimes those in BG.

⁴⁵ For the analyses reported in this chapter, only 27 of 30 programs are included in the analyses. Three programs (one each in Collaboratives A, E, and H) were group mentoring programs and they did not collect data from parents. Several outcome measures and control variables come from the parent surveys, so these analyses will only include those programs providing 1:1 mentoring. We will conduct separate analyses for group mentoring matches—they are not reported in this report.

⁴⁶ To control the false discovery rate, we calculated critical values using the BH procedure. These critical values are presented in the fifth column of each table in this section. A coefficient is considered statistically significant if the p -value is less than the BH critical value presented.

Exhibit 56. Results from Multilevel Models: Distal Youth Outcomes, Part 1

	Coefficient	Std. Err.	p value	BH
Involvement in delinquency				
Stopped by police or arrested	-0.005	0.012	0.70	0.030
Person offenses—onset	0.005	0.014	0.71	0.040
Person offenses—frequency	0.003	0.023	0.91	0.050
Property offenses—onset	-0.008	0.017	0.65	0.020
Property offenses—frequency	0.013	0.023	0.57	0.010
Juvenile justice involvement				
Referral to juvenile court	0.718 †	0.345	0.49	0.100
Problem behaviors				
Conduct problems	-0.022	0.031	0.48	0.017
Substance use	0.009	0.018	0.60	0.033
Negative peers	-0.001	0.015	0.96	0.050
Misbehavior in school				
In- or out-of-school suspension	-0.006	0.022	0.79	0.050
Skipping class/school	0.029	0.017	0.09	0.025

† Odds ratio from mixed-effects logistic regression models

The analysis of MEDP intervention effects on distal youth outcomes also focused on ten variables from the youth surveys reflecting the domains of social competence, academic performance, emotional well-being, self-worth, and social support. As reported in Exhibit 57, no statistically significant differences between the intervention and control groups were detected for any of these variables.

Exhibit 57. Results from Multilevel Models: Distal Youth Outcomes, Part 2

	Coefficient	Std. Err.	p value	BH
Social competence				
Prosocial behavior †	-0.032	0.041	0.43	0.025

	Coefficient	Std. Err.	p value	BH
Conflict management †	-0.007	0.018	0.69	0.050
Academic performance				
Self-reported grades	0.058	0.047	0.21	0.100
Emotional well-being				
Depressive symptoms	0.009	0.014	0.52	0.038
Positive affect †	0.001	0.017	0.96	0.050
Negative affect	0.007	0.014	0.48	0.025
Emotional symptoms	0.029	0.036	0.42	0.013
Self-worth				
Self-worth †	0.008	0.014	0.60	0.100
Social support				
Positive parent relationship †	0.007	0.016	0.66	0.050
Peer problems	-0.021	0.039	0.60	0.025

† variable was transformed by reverse coding and then taking the natural logarithm.

Based on the MEDP theory of change, we also examined whether the intervention had an impact on a set of intermediate outcomes (see Exhibit 58). These outcomes were conceptualized as intervening, or mediating variables, to represent processes that may link what happens in the mentoring relationship with the ultimate positive and negative outcomes analyzed above. Ten variables were assessed to reflect intermediate outcomes in the areas of increased knowledge/access to community resources, connections to significant adults, social emotional learning, community engagement, and development of interests and talents. These analyses found no statistically significant differences between the EG and BG youth.

Exhibit 58. Results from Multilevel Models: Intermediate Outcomes

	Coefficient	Std. Err.	p value	BH
Increased knowledge about, and access to, community resources				

	Coefficient	Std. Err.	p value	BH
Youth now receiving needed services	-0.002	0.023	0.93	0.050
Parent has learned where to get services	0.017	0.026	0.50	0.025
Connections to significant adults				
Special adult	-0.001	0.020	0.97	0.100
Social-emotional learning				
Problem solving	0.010	0.031	0.76	0.050
Help seeking	-0.009	0.029	0.76	0.033
Future orientation †	-0.020	0.017	0.25	0.017
Community engagement				
Involvement in sports/clubs/arts	-0.032	0.090	0.72	0.033
Involvement in career preparation	0.010	0.031	0.76	0.050
Community service	0.039	0.038	0.31	0.017
Development of interests or talents				
Mentor helped develop interests or talents	-0.002	0.024	0.94	0.100

† variable was transformed by reverse coding and then taking the natural logarithm.

Based on the MEDP theory of change, we also examined whether the intervention had an impact on a set of proximal outcomes (see Exhibit 59). These proximal outcomes were indicators of the nature and quality of the mentoring relationship. Thirteen variables were assessed to reflect the orientation of mentoring relationship activities, mentor perspectives of relationship quality, youth perspectives of relationship quality, tension in the relationship, and match length. These analyses revealed no statistically significant differences between the EG and BG youth for any aspects of the mentoring relationship.

Exhibit 59. Results from Multilevel Models: Proximal Outcomes

	Coefficient	Std. Err.	p value	BH
Mentoring relationship orientation				
Growth focus †	-0.031	0.021	0.14	0.017

	Coefficient	Std. Err.	p value	BH
Support-seeking	-0.002	0.017	0.93	0.050
Youth centered †	-0.013	0.020	0.51	0.033
Relationship quality (mentor report)				
Commitment †	0.045	0.039	0.24	0.017
Satisfaction †	-0.003	0.020	0.87	0.033
Mentor assessment of closeness				
Relationship quality (youth report)				
Youth assessment of closeness	-0.003	0.020	0.87	0.050
Mentor as special adult	0.021	0.025	0.41	0.033
Relational Health Index †	-0.019	0.020	0.36	0.017
Relationship tension				
Criticism	-0.001	0.011	0.94	0.033
Conflict	-0.009	0.013	0.49	0.017
Pressure	0.002	0.019	0.94	0.050
Match length				
Match length	0.037	0.036	0.30	0.100

† variable was transformed by reverse coding and then taking natural logarithm.

Were the Impacts Moderated by Youth, Mentor, Match, or Program Characteristics?

Based on the theory of change, we explored whether the effects of the treatment on the outcomes was conditional on a series of potential moderators, as described on page 18. We hypothesized that several sets of variables could affect how the impact of the treatment on the outcomes, that is, whether and how youth ultimately benefit from program involvement. For this phase of the analysis we replicated each of the analyses presented in Exhibits 56-59, testing for interaction effects between each of the potential moderators and the treatment condition.

If results indicated a significant interaction effect, then we conducted a supplemental set of analyses in which we recreated the original multilevel analyses for each level of the moderator to determine whether we would find significant treatment effects for one level of the moderator and not for the other level(s) of the moderator variable. Finally, where significant interaction effects are detected and significant treatment effects at one level of the moderator, we provide a set of graphs that illustrate the direction of the moderator and treatment effects.

In Exhibit 60, we present a summary of the findings from the moderator analyses. In the first column we indicate the moderator variable and provide some details on how the variable is coded. In the second column of the table, outcome variables are listed if there is a significant interaction effect between the treatment condition and moderator variable in the multilevel analyses for that outcome variable. Finally, in the third column we provide details on any significant effects when limiting the sample for the level of moderator variable shown.

Exhibit 60. Summary of Results from Moderator Analyses

Moderator Variable	Significant Interactions with Treatment Condition	Significant Effects at Moderator Levels
Youth Characteristics		
Gender (Female=1)	Referral to juvenile court	N/A
Race/Ethnicity (African-American=1)	Future orientation	Future orientation (African-American=1)
Race (White=1)	Future orientation; Match length	Future orientation (White=0 and White=1); Match length (White=0)
Age (13 and Older=1)	N/A	N/A
Environmental Risk (Above Median=1)	Support-seeking; Match length	Match length (Environmental Risk=1)
Individual Risk (Above Median=1)	Skipping class/school; Prosocial behavior; Support-seeking	Support-seeking (Individual Risk=1)
Mentor Characteristics		
Growth Mindset at Baseline (Above Median=1)	Stopped by police or arrested	N/A

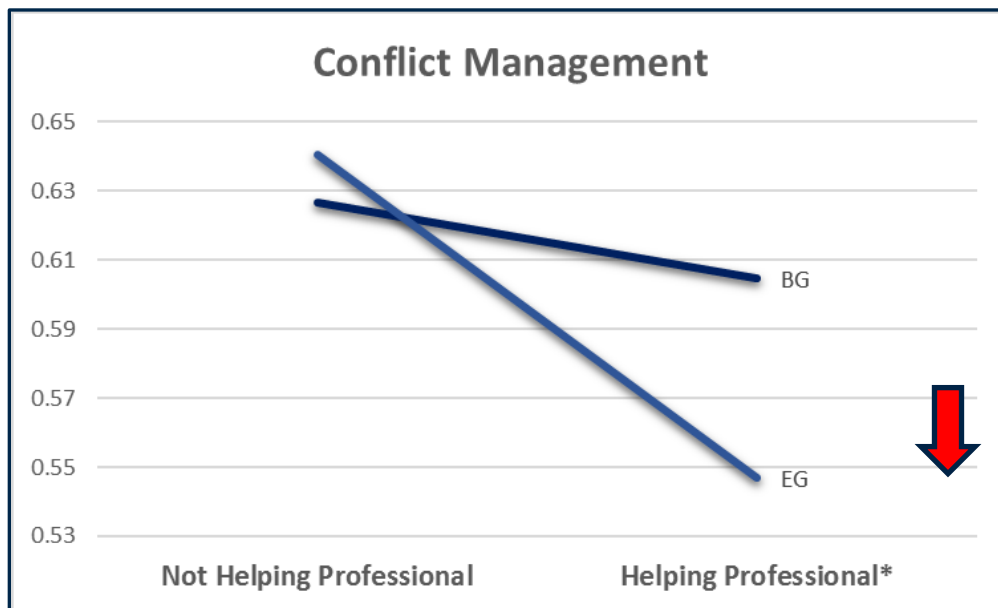
Moderator Variable	Significant Interactions with Treatment Condition	Significant Effects at Moderator Levels
College Student (Yes=1)	N/A	N/A
Work in Helping Profession (Yes=1)	Conduct problems; Conflict management; Positive affect; Emotional symptoms; Problem solving; Help seeking; Support-seeking	Conduct problems (HP=1); Conflict management (HP=1); Positive affect (HP=1); Emotional symptoms (HP=0); Problem solving (HP=1); Help seeking (HP=1)
Match Characteristics		
Mentor and Youth Same Race (Yes=1)	Conduct problems; Future orientation; Commitment; Mentor as special adult	Conduct problems (Same Race=1); Future orientation (Same Race=0); Commitment (Same Race=1); Mentor as special adult (Same Race=1)
Matching on Interests (Yes=1)	N/A	N/A
Matching on Youth Needs and Mentor Skills (Yes=1)	Person offenses—frequency; Help seeking;	N/A
Program Characteristics		
BBBS Agency (Yes=1)	Emotional symptoms; Community service; Match length	Emotional symptoms (BBBS=0); Community service (BBBS=1); Match length (BBBS=0)
Extent of Implementation of MEDP Model (Full=1)	Community service; Match length	Community service (Full Implementation=1); Match length (Full Implementation=0)
How Different is EG from BG (5 or more Enhancements=1)	Emotional symptoms; Community service	Community service (How Different=1)

Moderator Variable	Significant Interactions with Treatment Condition	Significant Effects at Moderator Levels
Preliminary Ratings of Program Capacity (Low=1; Medium=2; High=3)	Involvement in career preparation; Community service;	Community service (Preliminary Rating=3)

The number of significant results presented in Exhibit 59, relative to the number of moderator tests conducted, is a reason for caution in interpreting these findings. Each moderator variable was tested in 44 different analyses, so we focus in this discussion on some patterns that emerged across all the results identified in this table. If we consider these analyses to be exploratory, they provide a foundation for the consideration of implications for future analyses with the full data set and for future research.

One of the strongest patterns we found involved whether the mentor had a background as a helping professional. We provide a graphical representation of one particular test in Exhibit 61. For those mentors with no background as a helping professional, we did not find differences between BG and EG youth in reports on conflict management. In contrast, among the mentors with a background as a helping professional, the youth working with an EG mentor had significantly better scores on conflict management. In addition, we found that among EG mentors, those with a background as a helping professional had mentees that reported better outcomes on conflict management than was the case for those youth working with mentors with no background as a helping professional. Among the BG mentors, youth reports on conflict management did not vary based on whether the mentors had a background as a helping professional.

Exhibit 61. Graphical Presentation of Interaction between Treatment Condition and Mentor Background as Helping Professional on Youth Report of Conflict Management



Note: The red arrow on the right-hand side of the graph indicates the direction for better outcomes on conflict management. * indicates the level of moderator variable where there is significant difference between EG and BG.

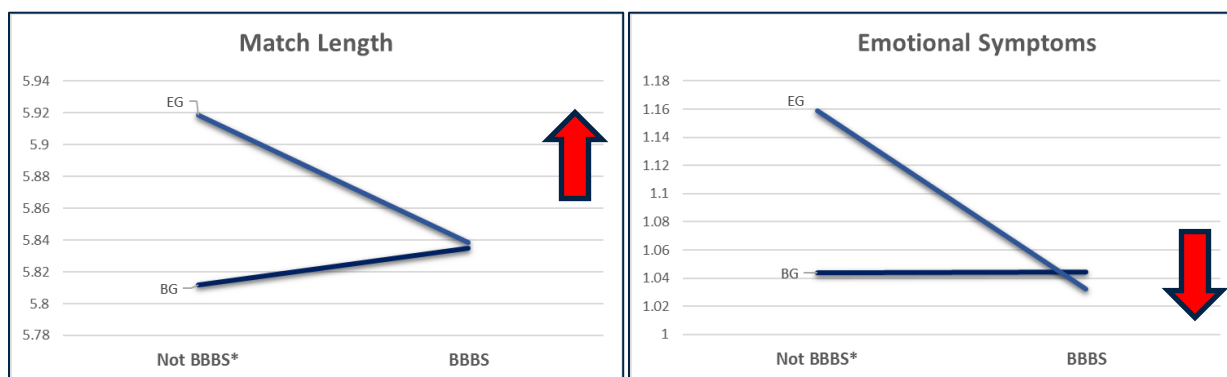
This same pattern of results, showing the moderator effects of a mentor background as a helping professional, was found for several outcomes: positive affect, emotional symptoms, help seeking, problem solving, and conduct problems.

One of the moderator variables we tested was the extent to which the collaborative implemented their planned enhanced practices. It appears that full implementation was more likely for those collaborations among seasoned mentoring programs. These collaboratives were primarily those comprised of BBBS agencies. Three findings, two of which are presented in Exhibit 62, emerged from the tests of the moderators on the extent of implementation of the enhancements and whether the agencies were BBBS:

- Community service was a strategic focus of the enhanced practices in two BBBS-only collaboratives, and the finding that involvement in community service was more likely for youth working with EG mentors in BBBS agencies (and those ranking high on extent of implementation and how different the enhanced practices were from the BG model) suggests that when programs emphasized the achievement of particular outcomes, they often were able to accomplish those objectives.

- We found that the collaboratives that achieved full implementation were also likely to have similar outcomes for BG and EG mentors, suggesting that their programs were already resulting in positive outcomes for youth prior to MEDP. In contrast, when the collaboratives were less adept at implementing the full set of enhanced practices, then the EG mentors appeared to have better outcomes than the BG mentors (e.g., match length).
- Results also suggest that delivering the full set of enhanced practices may be important to ensure that the EG mentors do not contribute to negative outcomes for their mentees (e.g., emotional symptoms).

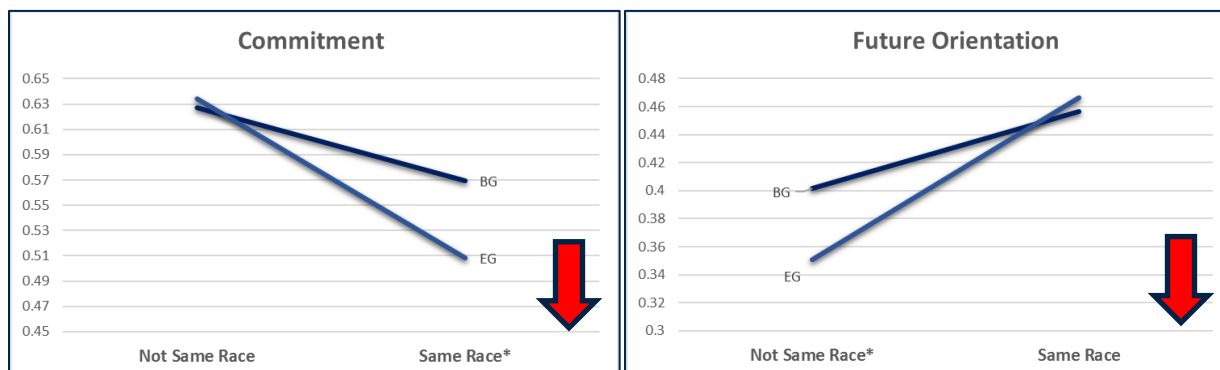
Exhibit 62. Graphical Presentations of Interaction between Treatment Condition and Type of Agency on Match Length and Emotional Symptoms



Note: The red arrow on the right-hand side of the graph indicates the direction for better outcomes on each outcome. * indicates the level of moderator variable where there is significant difference between EG and BG.

Another moderator variable that had multiple significant interactions with the treatment condition was whether the mentor and mentee were of the same race and/or ethnicity. We found that where the mentor and mentee were matched on race/ethnicity, the youth were more likely to identify their mentors as special adults. This was true for youth working with BG and EG mentors, with a significantly greater likelihood for those with EG mentors. We also found that in contrast to matches where the mentor and mentee were of different race or ethnicity, in the same-race matches, the youth working with EG mentors had significantly lower levels of conduct problems than those working with BG mentors. Similarly, among mentors in same-race matches, the EG mentors reported higher levels of commitment than BG mentors. These results are shown in Exhibit 63.

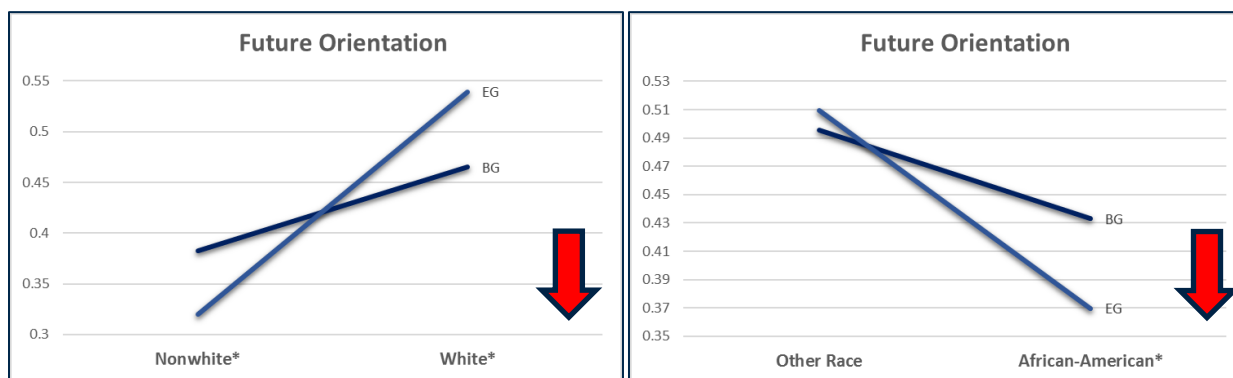
Exhibit 63. Graphical Presentations of Interaction between Treatment Condition and Whether Mentor and Mentee Had Same Race on Mentor Commitment and Youth Future Orientation



Note: The red arrow on the right-hand side of the graph indicates the direction for better outcomes on each outcome. * indicates the level of moderator variable where there is significant difference between EG and BG.

Finally, as shown in Exhibit 63, we found a pattern of significant moderator effects for the outcome future orientation. Results suggested that youth reported higher levels of future orientation when paired with a mentor, particularly an EG mentor, of another race or ethnicity. We also found higher levels of future orientation among nonwhite youth working with EG mentors. Among African-American youth, those working with EG mentors reported significantly higher levels of future orientation than those working with BG mentors. These results are presented in Exhibit 64.

Exhibit 64. Graphical Presentations of Interaction between Treatment Condition and Youth Race on Youth Report of Future Orientation



Note: The red arrow on the right-hand side of the graph indicates the direction for better outcomes on each outcome. * indicates the level of moderator variable where there is significant difference between EG and BG.

What Were the Paths through Which the Enhancements Had an Impact on Match and Youth Outcomes?

Did exposure to the enhanced program practices lead to changes in the way the mentors carried out their roles, and ultimately shape the impact of their behaviors on relationship and youth outcomes? From the implementation analysis, we saw that programs did a reasonably good job of carrying out their plans for the programmatic enhancements. Yet, based on reports from the mentors, we found that EG mentors did not always receive the programmatic enhancements, which could have affected the extent to which they engaged in teaching and advocacy in their mentoring relationships, and ultimately the extent to which youth benefited.

This phase of the outcome analyses moves away from the intent-to-treat approach used in the first two sections of this chapter (i.e., our analyses left the Enhanced and BAU groups intact regardless of mentor and youth experiences) to examine whether actual *exposure* to teaching- and advocacy-related practices affected mentor behavior and youth benefits. To address this question, we used structural equation model analyses to test the paths outlined in the MEDP theory of change, as described in Chapter 4.

Effects of the Enhancements on Mentor Behaviors and on Proximal, Intermediate, and Distal Outcomes

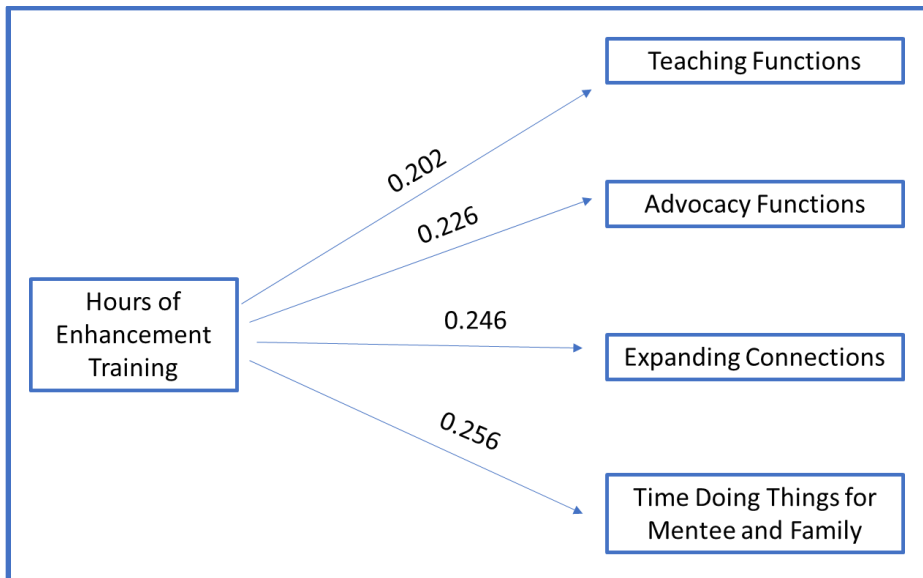
In the analyses that follow, we examine how indicators of exposure to certain aspects of the enhancements (e.g., training, match support) were related to changes in mentor behavior and to the proximal, intermediate, and negative and positive youth outcomes, as hypothesized by the MEDP theory of change. We begin this section by considering each of four key measures of enhanced practices, in turn—that is, each measure was tested in an analysis that did not include any other enhanced practices. Once we established the direct and indirect effects of a given practice on the subsequent stages in the overall model (see Exhibit 7), then we tested a model with all the variables included in a set of structural equation models. In the full path model, we focused on the direct effects of the treatment condition (EG versus BG) on exposure to the enhanced programmatic practices and the indirect effects of treatment condition on the mentor practices and all the outcomes (i.e., proximal, intermediate, and distal).

The Effect of the Number of Training Hours

The number of hours of enhancement training was a significant predictor for all the mentor practice variables examined in this study, as shown in Exhibit 65. As the length of time that they spent in enhancement training increased, the mentors were significantly more likely to report incorporating teaching and advocacy functions into their roles. They were also more likely to

report a focus on expanding connections for the youth. Finally, as mentors increased the amount of time they spent in the enhancement trainings, they reported increased amounts of time doing things for the mentee and the mentee’s family when the mentor was not with the mentee.⁴⁷

Exhibit 65. Direct Effects of Hours of Enhancement Training on Mentor Practices



Based on the theory of change, we would expect participation of the mentors in enhanced training to change their mentoring practices, which would in turn affect proximal, intermediate, and distal youth outcomes.⁴⁸ Thus, the effect of training on youth outcomes may operate indirectly through changes in mentoring practice. Exhibit 66 shows the indirect effects of the number of hours of training completed. Participation in the enhanced training had statistically significant indirect effects on all but one of the outcomes for the mentored youth, although in general these effects were quite small. As we would expect, the size of the indirect effects decreases as the number of indirect paths increases (i.e., moving from proximal to intermediate to youth outcomes). That is, the indirect effects of the enhanced training were greatest for the

⁴⁷ For each diagram presented in this section, statistically significant effects are shown in terms of the path and standardized coefficient in the associated figure.

⁴⁸ Note that for the path models, we are using only a subset of the proximal, intermediate, and distal outcomes used in the multilevel models described earlier in this chapter. We selected one variable from each family to include in the path analyses. For instance, the family of proximal outcomes “Mentoring Relationship Orientation” has three outcomes: Growth Focus, Support Seeking, and Youth-Centered (see Exhibit 58). For the path analyses, we have selected Growth Focus. The choice of which variable to select from each family was based on the measurement properties of the variables.

proximal outcomes and declined moving from the proximal to the intermediate to the negative and positive youth outcomes.

Exhibit 66. Indirect Effects of Hours of Enhancement Training

Outcome	Indirect Effect
Proximal Outcomes	
Growth Focus	0.072 ***
Commitment	0.157 ***
Mentor as Special Adult	0.056 ***
Pressure	0.025 **
Match Dosage	0.052 ***
Intermediate Outcomes	
Youth Now Receiving Needed Services	0.025 ***
Special Adult	0.032 ***
Problem Solving	0.013 **
Community Service	0.016 ***
Mentor Helped Develop Interests or Talents	0.046 ***
Distal Youth Outcomes	
Person Offenses: Onset	-0.003 *
Conduct Problems (Parent Report)	-0.003 **
In- or Out-of-School Suspension	-0.005 ***
Conflict Management	0.014 ***
Self-Reported Grades	-0.001
Depressive Symptoms	-0.006 ***
Self-Worth	0.009 ***
Positive Parent Relationship	0.011 ***

Note: * p < 0.10, ** p < 0.05, *** p < 0.01. Values reported in the table are standardized coefficients.

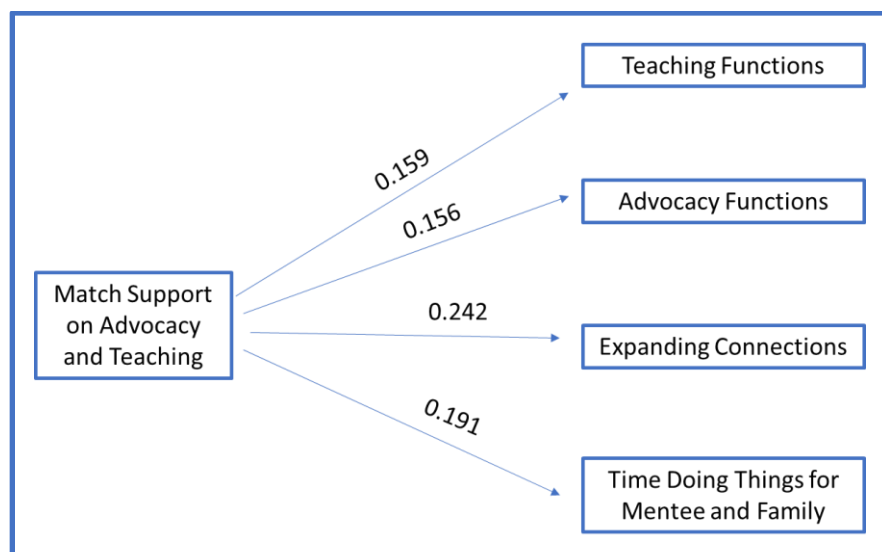
As shown in Exhibit 66, the indirect effects were consistent with the direction of the effects, as proposed in the theory of change. There were positive effects on such aspects of relationship quality as growth focus, commitment, and the length of the match. Participation in enhanced training also was associated with mentees indicating their mentor was a special adult. Interestingly, the youth were more likely to report feeling pressure from their mentors as mentors spent more time in enhancement trainings. The indirect effects of participation in enhancement trainings on the intermediate outcomes and the distal youth outcomes also were in the direction hypothesized in the theory of change.

Negative effects, as shown in Exhibit 66, are indicative of a lower likelihood of the outcome. Thus, the mentors who participated in more enhancement trainings mentored youth who reported being less likely at follow-up to engage in violent offending, be suspended from school, and to experience depressive symptoms, relative to those youth whose mentors engaged in these activities less frequently. Their parents were also less likely to report conduct problems. The only outcome for which there was no significant indirect effect of participation in enhancement trainings was the youth's self-report of their academic performance.

The Effect of Match Support on Advocacy and Teaching Role

As shown in Exhibit 67, when mentors reported that program staff talked to them during their regular support meetings about taking on teaching and/or advocacy roles, they were more likely to report incorporating teaching and advocacy functions into their role. They also reported focusing on the advocacy and teaching functions in their meetings and discussions with their mentees, and spent more time doing things on behalf of their mentee and the family of the mentee.

Exhibit 67. Direct Effects of Match Support on Advocacy and Teaching Role on Mentor Behaviors



As we found for the training enhancements, there were also statistically significant indirect effects for the enhanced match support on nearly all the outcomes. Again, the path analyses show that the effects of the enhanced practices on the array of the youth outcomes indirectly occur through the effects of the match support enhancements on the behaviors of the mentors. These indirect effects are presented in Exhibit 68.

Exhibit 68. Indirect Effects of Match Support on Advocacy and Teaching Role

Outcome	Indirect Effect
Proximal Outcomes	
Growth Focus	0.066 ***
Commitment	0.123 ***
Mentor as Special Adult	0.047 ***
Pressure	0.020 **
Match Dosage	0.049 ***
Intermediate Outcomes	

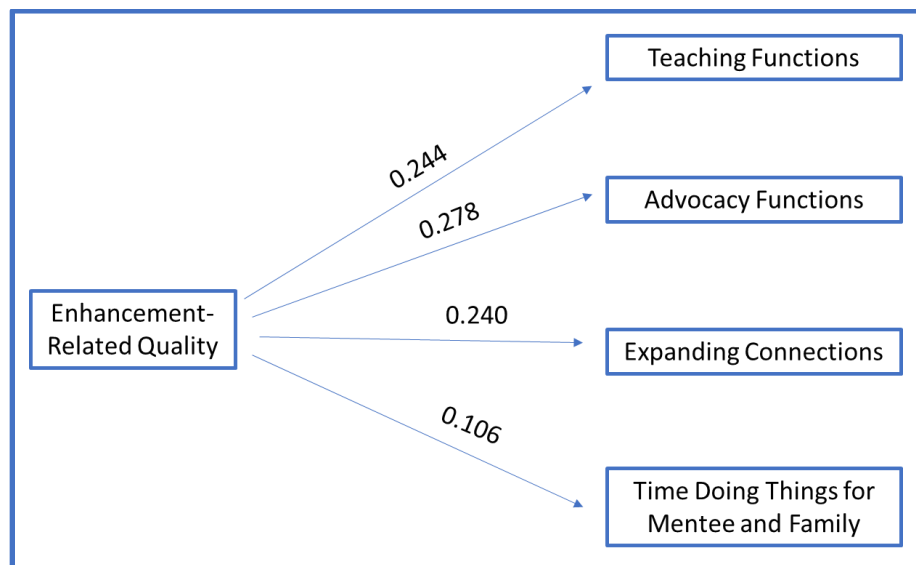
Outcome	Indirect Effect
Youth Now Receiving Needed Services	0.022 ***
Special Adult	0.027 ***
Problem Solving	0.012 ***
Community Service	0.014 ***
Mentor Helped Develop Interests or Talents	0.043 ***
Distal Youth Outcomes	
Person Offenses: Onset	-0.002
Conduct Problems (Parent Report)	-0.003 **
In- or Out-of-School Suspension	-0.004 ***
Conflict Management	0.013 ***
Self-Reported Grades	-0.001
Depressive Symptoms	-0.006 ***
Self-Worth	0.008 ***
Positive Parent Relationship	0.010 ***

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Values reported in the table are standardized coefficients.

The Effect of Match Support around Teaching/Advocacy-Related Functions

When the mentors reported that the program had provided ideas and pointers about how to support the mentee as a teacher/advocate, they were more likely to incorporate the teaching and advocacy functions into their roles. These mentors were also more likely to report focusing on the advocacy and teaching functions in their discussions and meetings with their mentees, and spent more time doing things on behalf of their mentee and the family of the mentee. These results are presented in Exhibit 69.

Exhibit 69. Direct Effects of Match Support around Teaching/Advocacy Functions (Enhancement-Related Quality) on Mentor Behaviors



We found that when mentors got ideas from program staff about how to take on the advocacy/teaching role, they were more likely to take on those roles, and indirectly, to influence the majority of youth outcomes. As shown in Exhibit 70, the indirect effects were consistent with the direction of the effects, as proposed in the theory of change.

Exhibit 70. Indirect Effects of Match Support around Teaching/Advocacy Functions

Outcome	Indirect Effect
Proximal Outcomes	
Growth Focus	0.045 ***
Commitment	0.126 ***
Mentor as Special Adult	0.038 ***
Pressure	0.020 **
Match Dosage	0.040 ***

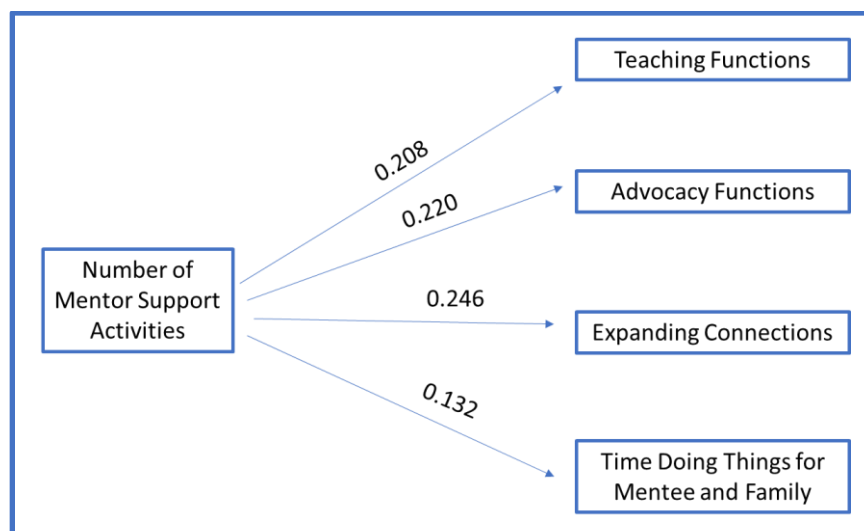
Outcome	Indirect Effect
Intermediate Outcomes	
Youth Now Receiving Needed Services	0.018 ***
Special Adult	0.022 ***
Problem Solving	0.008 *
Community Service	0.010 **
Mentor Helped Develop Interests or Talents	0.029 ***
Distal Youth Outcomes	
Person Offenses: Onset	-0.002 *
Conduct Problems (Parent Report)	-0.002 **
In- or Out-of-School Suspension	-0.003 ***
Conflict Management	0.009 ***
Self-Reported Grades	-0.001
Depressive Symptoms	-0.004 **
Self-Worth	0.006 **
Positive Parent Relationship	0.007 ***

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Values reported in the table are standardized coefficients.

The Effect of Participation in Mentor Support Activities

Some of the MEDP Collaboratives designed special activities geared at additional support for the EG mentors. This strategy, where it was in place, appears to have made a difference. The number of such activities that the mentors participated in was directly related in significant positive ways to the incorporation of advocacy and teaching functions by those mentors, as shown in Exhibit 71.

Exhibit 71. Direct Effects of Mentor Support Activities on Mentor Behaviors



Participation in program-sponsored activities designed to increase support for mentors, which often created opportunities for EG mentors to interact with other EG mentors, was found to have statistically significant indirect effects on almost all the outcomes. As was true for the other enhanced practices, the effects on the youth outcomes were consistent with the theory of change.

Exhibit 72. Indirect Effects of Number of Mentor Support Activities

Outcome	Indirect Effect
Proximal Outcomes	
Growth Focus	0.063 ***
Commitment	0.167 ***
Mentor as Special Adult	0.050 ***
Pressure	0.032 ***
Match Dosage	0.055 ***
Intermediate Outcomes	

Outcome	Indirect Effect
Youth Now Receiving Needed Services	0.024 ***
Special Adult	0.029 ***
Problem Solving	0.011 **
Community Service	0.014 **
Mentor Helped Develop Interests or Talents	0.041 ***
Distal Youth Outcomes	
Person Offenses: Onset	-0.002 *
Conduct Problems (Parent Report)	-0.003 **
In- or Out-of-School Suspension	-0.005 ***
Conflict Management	0.012 ***
Self-Reported Grades	-0.001
Depressive Symptoms	-0.006 **
Self-Worth	0.008 **
Positive Parent Relationship	0.010 ***

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Values reported in the table are standardized coefficients.

A pattern that emerges across these analyses is that among the outcomes we examined in the path models, all but two were consistently influenced by the programmatic enhancements. Youth reports of their academic performance were not associated with differences in mentors' exposure to the program practices. In addition, the likelihood that the youth engaged in violent behaviors (i.e., person offenses) for the first time was not related to whether program staff asked the mentor to take on an advocacy/teaching role.

The Link between Mentor Behaviors, Proximal Outcomes, and Intermediate and Negative and Positive Youth Outcomes

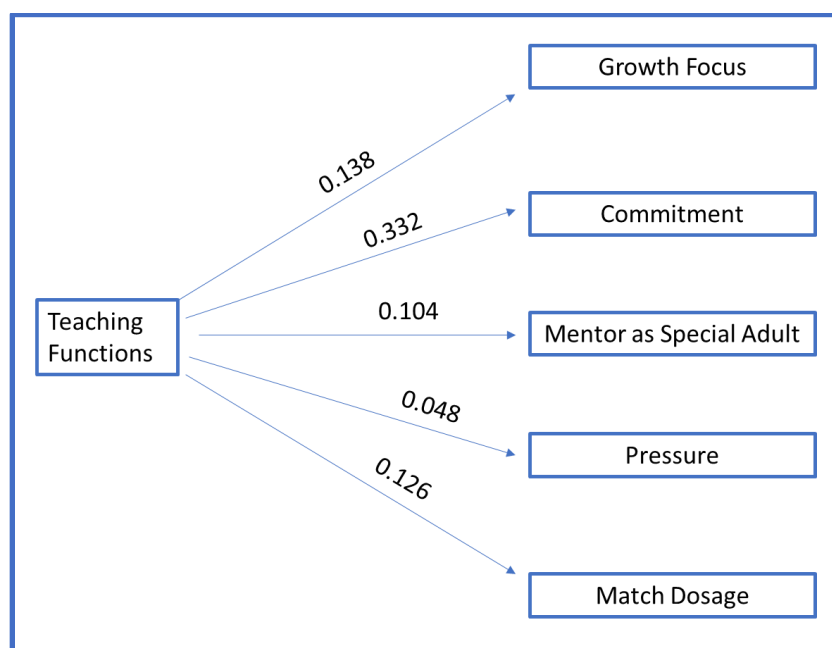
The path analyses above support our hypotheses that when mentors experienced each of the enhanced programmatic practices, they were more likely to incorporate each of the intended mentor behaviors into their role. In the next set of analyses, we examined the direct effects of each of the mentor behaviors on a set of five different proximal outcomes. In examining the

effects of the practices around the advocacy and teaching functions, we considered three different types of mentor behavior. First, we examined two measures of the extent to which the mentor incorporated strategies that we considered to be examples of teaching or advocacy functions. Second, we included a measure of how much time the mentors spent doing things for their mentees (and/or the mentee’s families) when they were not with the mentee. Finally, we examined how often the focus was on advocacy and teaching when the mentor and mentee interacted.

The Effect of Teaching Functions

As shown in Exhibit 73, our analyses supported the MEDP theory of change suggesting that the incorporation of teaching and advocacy functions into the mentor’s behavior has a direct positive effect on each of the proximal outcomes. This includes the dosage of mentoring (i.e., length of the match up to the point of follow up), whether the youth rated the relationship as focusing on growth, whether the mentor reported higher scores on measures of commitment to the relationship, and whether the youth indicated the mentor was considered a special adult. There was also a modest positive effect on whether the youth felt pressured by the mentor—that is, when mentors were more successful in incorporating the teaching functions into their role, their mentees were more likely to experience feeling pressured by their mentors.

Exhibit 73. Direct Effects of Teaching Functions on Proximal Outcomes



Based on the theory of change, we would expect mentoring practices to affect youth proximal outcomes, which in turn would affect intermediate as well as more distal youth outcomes. Using the path analyses, we tested for indirect effects of the incorporation of the teaching functions on those later outcomes. The indirect effects, which are based on the intervening proximal outcomes, are presented in Exhibit 74. Results indicate that the adoption of teaching functions by the mentors is indirectly related to more positive outcomes on nearly all the intermediate and distal youth outcomes, although these effects are quite small.

Exhibit 74. Indirect Effects of Teaching Functions

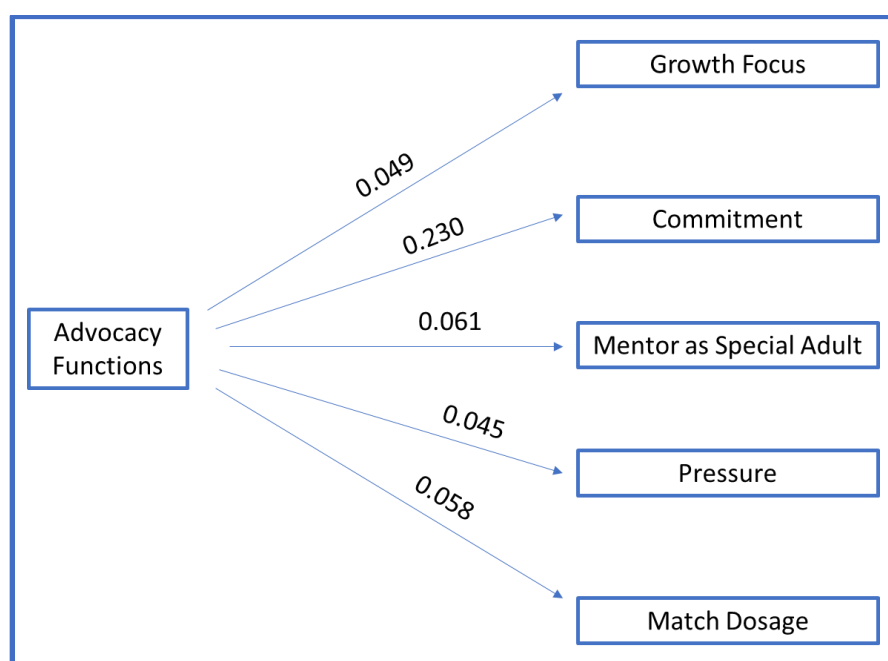
Outcome	Indirect Effect
Intermediate Outcomes	
Youth Now Receiving Needed Services	0.050 ***
Special Adult	0.061 ***
Problem Solving	0.027 **
Community Service	0.032 ***
Mentor Helped Develop Interests or Talents	0.089 ***
Distal Youth Outcomes	
Person Offenses: Onset	-0.005 *
Conduct Problems (Parent Report)	-0.007 **
In- or Out-of-School Suspension	-0.010 ***
Conflict Management	0.028 ***
Self-Reported Grades	-0.002
Depressive Symptoms	-0.012 ***
Self-Worth	0.019 ***
Positive Parent Relationship	0.021 ***

Note: * p < 0.10, ** p < 0.05, *** p < 0.01. Values reported in the table are standardized coefficients.

The Effect of Advocacy Functions

In the last section, each of the four enhanced programmatic approaches were also shown to have significant direct effects on whether the mentors incorporated advocacy functions into their roles. And we find, as shown in Exhibit 75, that the incorporation of advocacy functions has a direct positive effect on each of the proximal outcomes. The results are similar to, but smaller in size than, the direct effects of the incorporation of teaching functions into the mentor role.

Exhibit 75. Direct Effects of Advocacy Functions on Proximal Outcomes



As with the teaching functions, we expected the incorporation of the advocacy functions to affect youth proximal outcomes, which in turn would affect intermediate and negative and positive youth outcomes. Thus, we also tested for indirect effects of the incorporation of the advocacy functions on those later outcomes. The indirect effects, which are based on the intervening proximal outcomes, are presented in Exhibit 76. We found fewer significant indirect effects from the advocacy (as opposed to teaching) functions on both intermediate and positive youth outcomes. Namely, we found statistically significant indirect effects on four of five intermediate outcomes and four of eight distal youth outcomes.

Exhibit 76. Indirect Effects of Advocacy Functions

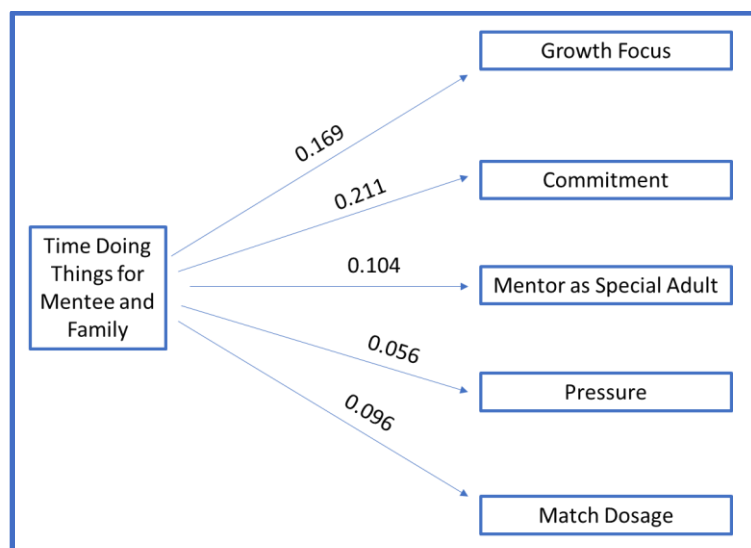
Outcome	Indirect Effect
Intermediate Outcomes	
Youth Now Receiving Needed Services	0.027 ***
Special Adult	0.036 ***
Problem Solving	0.008
Community Service	0.015 *
Mentor Helped Develop Interests or Talents	0.032 *
Distal Youth Outcomes	
Person Offenses: Onset	-0.003 *
Conduct Problems (Parent Report)	-0.003 *
In- or Out-of-School Suspension	-0.004 **
Conflict Management	0.010
Self-Reported Grades	-0.001
Depressive Symptoms	-0.005
Self-Worth	0.007
Positive Parent Relationship	0.009 **

Note: * p < 0.10, ** p < 0.05, *** p < 0.01. Values reported in the table are standardized coefficients.

The Effect of Time Spent Doing Things for Mentee and Family

When mentors reported spending more time doing things on behalf of their mentee and the mentee’s family, we found significant direct effects on each of the five proximal outcomes we examined. These results are presented in Exhibit 77.

Exhibit 77. Direct Effects of Time Spent on Behalf of Mentee on Proximal Outcomes



In addition to these direct effects, the proximal outcomes also served as intervening variables, mediating the effect of spending time doing things on behalf of the mentee on the intermediate and distal youth outcomes. That is, there were also statistically significant indirect effects on each of the intermediate outcomes, two of three negative youth outcomes, and four of five positive youth outcomes, as shown in Exhibit 78.

Exhibit 78. Indirect Effects of Time Spent Doing Things for Mentee or Family

Outcome	Indirect Effect
Intermediate Outcomes	
Youth Now Receiving Needed Services	0.050 ***
Special Adult	0.060 **
Problem Solving	0.036 ***
Community Service	0.033 ***
Mentor Helped Develop Interests or Talents	0.109 ***

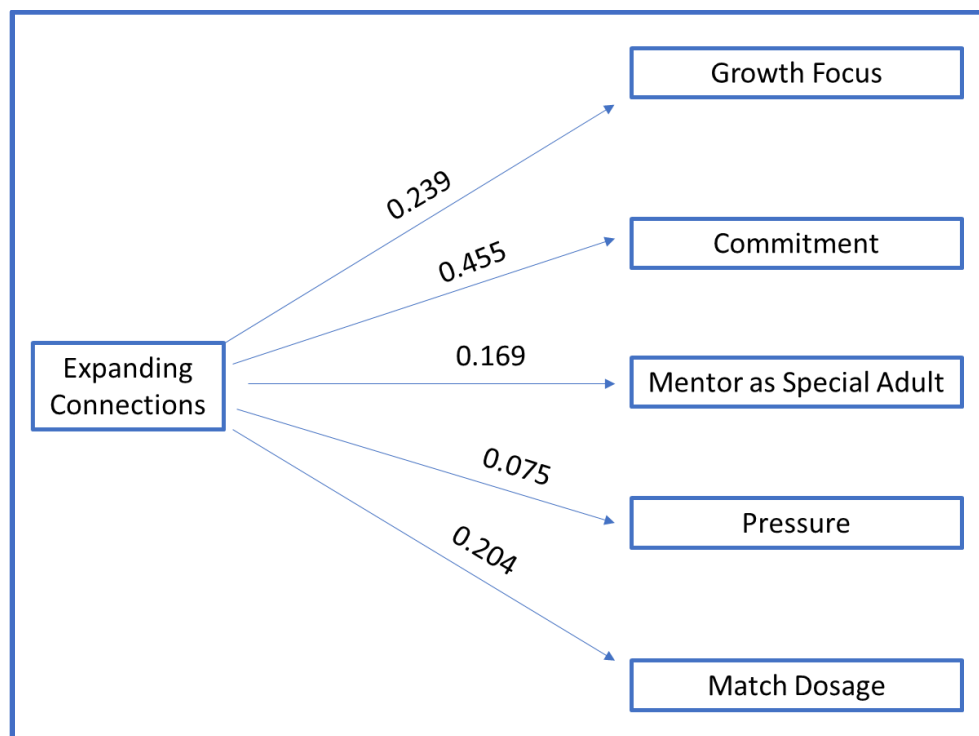
Outcome	Indirect Effect
Distal Youth Outcomes	
Person Offenses: Onset	-0.005
Conduct Problems (Parent Report)	-0.007 **
In- or Out-of-School Suspension	-0.011 ***
Conflict Management	0.034 ***
Self-Reported Grades	-0.002
Depressive Symptoms	-0.015 ***
Self-Worth	0.023 ***
Positive Parent Relationship	0.025 ***

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Values reported in the table are standardized coefficients.

The Effect of a Focus on Expanding Connections

As shown in the Exhibit 79, the greater the focus on expanding connections, the more likely the youth was to characterize the relationship with higher scores on growth focus, the more likely the mentor was to report higher levels of commitment to the relationship, the more likely the youth was to recognize their mentor as a Special Adult, and the greater the dosage of mentoring the youth experienced during the program. The mentees were also more likely to report feeling pressured by these mentors.

Exhibit 79. Direct Effects of Expanding Connections on Proximal Outcomes



When we tested for indirect effects of the focus on expanding connections on the intermediate and youth outcomes, we find that when mentors focused on the advocacy and teaching functions in their meetings and discussions with their mentees, there were statistically significant indirect effects on each of the intermediate outcomes. There were also significant indirect effects on most of the youth outcomes, as shown in Exhibit 80.

Exhibit 80. Indirect Effects of Expanding Connections

Outcome	Indirect Effect
Intermediate Outcomes	
Youth Now Receiving Services Needed	0.082 ***
Special Adult	0.098 ***
Problem Solving	0.043 ***
Community Service	0.052 ***
Mentor Helped Develop Interests or Talents	0.157 ***

Outcome	Indirect Effect
Distal Youth Outcomes	
Person Offenses: Onset	-0.008
Conduct Problems (Parent Report)	-0.011 **
In- or Out-of-School Suspension	-0.016 ***
Conflict Management	0.045 ***
Self-Reported Grades	-0.005
Depressive Symptoms	-0.020 ***
Self-Worth	0.030 ***
Positive Parent Relationship	0.034 ***

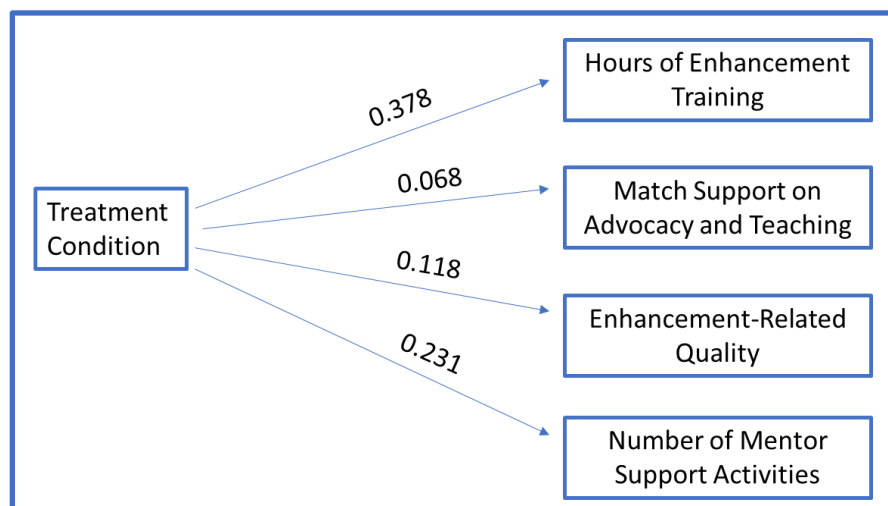
Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Values reported in the table are standardized coefficients.

Treatment Effects in the Fully Mediated Model

The models presented to this point establish that each of four enhanced practices are significant predictors of the mentor behaviors associated with the incorporation of teaching and advocacy functions. Similarly, we showed that each of the four mentor behaviors examined was a significant predictor of the proximal outcomes. Putting this all together in a set of structural equation models, we now consider the impact of the treatment condition on the various paths in the theory of change.

Did assignment to the Enhanced versus BAU group affect the amount of training and quality of supports mentors received? We examined four variables, and we found a positive and statistically significant impact on all four. Thus, we see that the EG mentors were more likely than the BG mentors to receive each the four enhancements tested. As shown in the Exhibit 81, the strongest effects were found in terms of the dosage of two of the enhancements: the hours of enhancement trainings completed and the number of program-sponsored activities in which the mentor participated. Smaller effects were found for those practices reflecting the nature of the one-on-one support program staff provided to each mentor.

Exhibit 81. Direct Effects of the Treatment Condition on Enhanced Program Practices



We also found significant indirect effects of treatment assignment on each of the mentor behaviors, as mediated through the training and enhanced support practices of the programs. Indeed, as shown in Exhibit 76, the treatment condition has statistically significant indirect effects on each of the four behaviors related to the incorporation of advocacy and teaching functions into the mentor’s role. The treatment condition also has statistically significant indirect effects, through the programmatic enhancements and the mentor behaviors, on each of the proximal outcomes, and on each of the intermediate outcomes. Finally, there are statistically significant indirect effects, albeit small, of the treatment condition on most of the negative and positive youth outcomes. Again, the two outcomes for which there are no indirect effects of the treatment condition on the youth outcomes are the likelihood of initiating violent offenses and academic performance.

Exhibit 82. Indirect Effects of the Treatment Effect

Outcomes	Std. Coef.
Mentor Behaviors	
Teaching Functions	0.072 ***
Time Spent Doing Things for Mentee or Family	0.088 ***
Focus on Expanding Connections	0.096 ***
Advocacy Functions	0.088 ***

Outcomes	Std. Coef.
Proximal Outcomes	
Growth Focus	0.025 ***
Commitment	0.050 ***
Mentor as Special Adult	0.019 ***
Pressure	0.010 **
Match Dosage	0.019 ***
Intermediate Outcomes	
Youth Now Receiving Needed Services	0.009 ***
Special Adult	0.011 ***
Problem Solving	0.006 ***
Community Service	0.006 ***
Mentor Helped Develop Interests or Talents	0.017 ***
Distal Youth Outcomes	
Person Offenses: Onset	-0.001
Conduct Problems (Parent Report)	-0.001 **
In- or Out-of-School Suspension	-0.002 ***
Conflict Management	0.006 ***
Self-Reported Grades	0.000
Depressive Symptoms	-0.003 ***
Self-Worth	0.004 ***
Positive Parent Relationship	0.005 ***

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Values reported in the table are standardized coefficients.

Chapter 10. Discussion

The MEDP initiative was an opportunity to test an approach to improving the effectiveness of youth mentoring programs. Based on recent findings suggesting that mentoring programs achieve better youth outcomes when their mentors assume a teaching or advocacy role, the initiative enabled 10 collaborative partnerships of mentoring programs to design and implement enhancements to encourage mentors to incorporate teaching and advocacy functions into their work with youth. A rigorous evaluation of implementation processes and youth outcomes investigated how the enhancements were developed and implemented and what effect the enhancements had on youth outcomes compared with standard mentoring services.

Broadly stated, the MEDP evaluation was designed to explore: (1) what enhancements would be developed by different types of collaboratives when given limited guidance; (2) how distinct collaboratives might differ in how they implemented their enhancements; and ultimately (3) whether distinct program backgrounds, unique enhancements, and varied implementation capacities, would yield different patterns of benefits for youth.

While not the first large-scale randomized controlled trial comparing a program enhancement with “mentoring as usual,” MEDP was unique in setting parameters and then giving programs the freedom to design and implement enhanced practices that were strategically focused on improving mentoring. Rather than providing programs with a structured curriculum to implement, the 10 collaboratives were empowered to develop their own approaches to training and ongoing mentor/match support with the intent to encourage mentors to incorporate teaching and advocacy functions into their roles in working with youth. The unique models developed and implemented by each collaborative allowed us to examine an array of approaches.

The ten MEDP collaboratives brought together 30 programs of different sizes, formats, geographic locations, and maturity levels. Six of these collaboratives were composed of Big Brothers Big Sisters agencies, one was a collaborative of 4-H Youth programs also associated with a national organization sponsored by the U.S. Department of Agriculture Cooperative Extension Service, and the other three were collaboratives of different types of youth programs. Even the participating BBBS programs varied in size, format, program maturity, and geographic locations. The diversity in the characteristics of the programs and in the particular enhancement approaches of the collaboratives contributed to implementation, methodological and analytical challenges that had implications for our design, our findings, and lessons learned

for practice, research, and policy. We discuss the key impact and implementation findings and implications below.

Did MEDP Impact Youth Outcomes?

MEDP required a commitment from each of the participating programs to enroll at least 75 youth, resulting in a large sample of more than 2000 matches. A high-quality randomized controlled trial was carried out to assess the effectiveness of the enhanced programmatic strategies. The outcome evaluation focused on whether the enhanced approaches would improve outcomes for participating youth. We examined the effects of the MEDP intervention on 44 youth and match outcomes. **The intent-to-treat analyses found no statistically significant differences (positive or negative) between the EG and BG youth on any of the outcomes included in the theory of change.**

These results are consistent with findings of other recent randomized-controlled trials of mentoring program enhancements (Brezina et al., 2016; DuBois & Keller, 2017; Kaye & Smith, 2014; Peaslee & Teye, 2015). In his recent review of this body of research, DuBois (2018) found that “the most compelling examples of successful efforts to improve program effectiveness have involved relatively extensive periods of formative development and piloting of enhancements prior to testing as well as relatively intensive training and monitoring to ensure acceptable fidelity during trials.” He points to the work of McQuillin and Lyons in their ongoing revision and evaluation of the Brief Instrumental School-Based Mentoring Program as one such example (McQuillin and Lyons, 2016). It may be that further refinement and testing of some of the MEDP enhancements is a fruitful path for future research.

What did we learn about the programmatic enhancements most likely to improve youth outcomes? Consistent with other recent research of mentoring program enhancements, uptake ranged depending on the enhancements—attendance and participation in postmatch trainings, particularly online trainings, continues to be a challenge for programs, and the same is true for mentor support activities and structured match activities—and the site, with some sites having fairly high uptake and others very low. As such, not every mentor who was randomized into the treatment group received the intended enhancements.

While *all* programs expended significant energy to ensure that EG mentors received the enhancements, no site or program enhancement achieved complete uptake. Furthermore, although significantly more EG mentors reported receiving enhanced program practices to support their mentoring role (i.e., teaching/advocacy-focused training, staff support, and interaction with other mentors), a considerable portion of the BG mentors also reported receiving such supports. The overall effects of MEDP in the intent-to-treat analyses might have

been diminished by both the incomplete participation of EG mentors in enhancement activities and the nature of support available to BG mentors.

Although the collaboratives designed the enhancements to *augment* existing strategies around teaching and advocacy, most participating programs likely already encouraged the adoption of teaching and advocacy behaviors by their mentors. In addition, many of the encouraged teaching and advocacy behaviors are common strategies that volunteers might try on their own, even without program guidance. For example, although EG mentors were significantly more likely than BG mentors to report setting goals in their relationship, a majority of mentors in both groups reported setting goals for their mentees. In addition, EG mentors were more likely than BG mentors to agree that their program assisted them in supporting the youth's spark development, but mentors in both conditions were in fairly strong agreement that they knew what their mentee's sparks were and that they had helped them to develop their sparks. Thus, it is likely that youth experienced teaching and advocacy functions in both groups.

The effects on outcomes tested in impact analyses were based on survey data collected at follow-up 12 months after the start of the match. It is possible that after incorporating advocacy and teaching functions into a mentoring relationship with an adolescent in the age range of 11-15, to detect measurable changes may require a longer follow-up window than 12 months. As part of the MEDP evaluation, we also collected follow-up data from parents at 18-months after the start of the match. These data will be analyzed in upcoming analyses but were not included as yet in the analyses presented in this report.

Did Exposure to Enhanced Program Practices Make a Difference?

Those mentors who received a higher dosage of the programmatic enhancements had stronger relationships with their mentees and yielded more positive outcomes in their mentees. When mentors received more enhancements, they were more likely to engage in teaching and advocacy behaviors. When they engaged in these behaviors, their relationships were stronger and longer lasting and, supporting other recent research, when they were stronger and longer lasting, they were also more impactful.

There are several implications of the results from the path analyses.

- The EG mentors were clearly more likely to have received the enhanced practices. This was true for all the various enhancements. And receipt of each enhancement was significantly associated with the mentor behaviors that reflect the incorporation of teaching and advocacy functions into the role of the mentor.

- Once we controlled for the receipt of the programmatic enhancements, we found that, as a group, the EG mentors that did not receive the enhancements were less likely to incorporate the teaching and advocacy functions into their role than the BG mentors. Thus, the findings that the enhancements contributed to the adoption of the teaching and advocacy functions may be confounded with the motivation of those mentors that complied with the program requirements around the enhancements. Yet, these results may also suggest that for those mentors wanting to make a difference, the enhancements may offer a stronger likelihood for potential impact.
- In terms of the mediating paths from the theory of change, the results showed that better outcomes across the various proximal, intermediate, and distal outcomes were more likely through the teaching functions than the advocacy functions. There is not a way from the current analyses to unpack these findings further, but this would be a recommended question for future research and for further examination of these data.
- Among the enhancements, staff support around the teaching and advocacy functions appears to have the greatest influence on shaping the mentor behaviors. This makes sense given that many of the other enhancements involved more event-like interventions that may happen a small number of times. In contrast, ongoing conversations between staff and mentors that are focused on coaching mentors to incorporate the teaching and advocacy functions are more likely to reinforce changes in mentor behaviors.

What Factors Moderate the Impact of Enhanced Practices on Youth Outcomes?

We conducted moderator analyses that we suggest are exploratory and point to a small number of influential factors in each of the four categories we tested: youth characteristics, mentor characteristics, match characteristics, and program characteristics. We found:

- Among the mentors with a background as a helping professional, the youth working with an EG mentor had significantly better results for several outcomes. A number of these outcomes involved skills such as conflict management, help seeking, and problem solving. These results suggest there may be a population of volunteers that are particularly well-suited to translate the enhancements into the target mentor behaviors such that there is a higher likelihood for the desired outcomes for the mentees.
- It appears that when collaboratives include agencies from the same national affiliate organization (e.g., BBBS) that we are perhaps less likely to find that BG mentors result in significantly worse outcomes from the EG mentors. At the same time, we saw

indications that maybe the structure that comes from more seasoned mentoring programs helps to ensure that the enhancements are implemented in such a way as to minimize negative outcomes for the participants.

What Was the Nature of the MEDP Enhancements?

Program implementation matters and youth outcomes should be evaluated within that context. MEDP was an examination of 10 different sets of enhanced program practices to support mentors in incorporating teaching and advocacy functions into their roles. MEDP enabled programs to experiment with new approaches for delivering training, staff support and program activities. On average, collaboratives developed more than four new enhanced practices. Some of the MEDP enhancements were entirely new program elements (e.g., online training, mentor support groups). In some cases, the programs added new structures and supports to deliver these enhancements (e.g., home visits, reduced caseload for staff supporting EG). The collaboratives (and the agencies within the collaboratives) varied in how well they implemented their proposed enhancements. We determined several collaboratives had achieved full implementation of the proposed enhancements—that is, they implemented the proposed enhancements with fidelity to their MEDP model and we found evidence that enhancements were implemented *consistently* at all partnering sites. In contrast, in some individual sites within collaboratives there was only partial implementation of their enhancements or staff diverted from the agreed-on program model or employed additional strategies over time (e.g., sent out additional materials to mentors, delivered trainings remotely rather than in person) in efforts to implement the enhanced practices.

How did the Functionality of the Collaboratives Matter?

We identified three collaborative components that were associated with implementation quality: (a) the importance of leadership across the collaborative; (b) the organizing impact of a shared vision for the planned enhancements; and (c) the capacity of the collaborative to implement the programmatic enhancements consistently and with fidelity. The collaborative approach engaging three or four different agencies that partnered to apply for the OJJDP funding opportunity was a unique feature of MEDP. Consequently, the significance of this “layer” of MEDP cannot be underestimated when considering the diversity of programs with respect to size, format, maturity level, and geographic locations and the impact of such diversity on program outcomes. When partnerships within a collaborative worked well together, often with a strong lead collaborative coordinator, agencies reaped the greatest benefits from the partnership that they would not have achieved on their own, used each other as resources and for support, and increased their own capacities (e.g., tools, materials, staff and

leadership skills). Geographic proximity and a working relationship prior to the study also contributed to stronger collaboration and communication among partnering agencies. There are lessons learned when considering the requirement of a collaborative structure for implementation and evaluation:

- Potential funders of collaborative efforts should consider assessing collaboration readiness to ensure that the partnership will work well. Implementation fidelity and quality suffered when partnering agencies within a collaborative did not communicate regularly, did not use each other as resources to support implementation quality or to overcome implementation challenges (e.g., staff or leadership turnover).
- The role of grantee coordinator cannot be understated when multiple agencies collaborate to implement new practices and approaches.

What Factors Challenged the Implementation of MEDP?

Several take-aways were evident from our implementation analyses:

- Online training for mentors was generally less successful than in-person training. For most programs, it was a challenge to implement the online platform effectively and ensure that the mentors completed the trainings, participated in blogs, and used them as a resource. Consequently, many mentors did not receive the intended online enhancements. Interviews and staff surveys suggested that collaborative sites wanted to continue using the online platform as an existing resource but would not rely on it as the primary tool for mentor training and support.
- When EG mentors reported having attended in-person mentor support groups, they were generally pleased with their experiences and indicated feeling they benefitted from the interactions. Yet, attendance at such events was often rather low. Mentoring programs typically struggle to engage volunteers in such support efforts, and the MEDP programs were no different. Thus, the biggest challenge remains getting the mentors to attend these useful opportunities.
- Similarly, attendance was also a challenge for postmatch enhanced trainings implemented by programs. In fact, this was one of the biggest challenges reported by participating programs.
- We asked mentors to report whether they attended postmatch trainings, and if we treat the reports by the mentors as valid, we are left with the conclusion that participation rates were rather unimpressive. An implication of the MEDP evaluation is that programs must give as much attention to getting mentors to participate in enhanced trainings as they give to the design and staffing of the training.

- Even if we allow for some measurement error in how BG mentors interpreted the questions, it appears that some of the BBBS programs did the best job of providing the training to the EG mentors and not the BG mentors. This reinforces that some organizations were better prepared to structure enhancements such that only a designated set of matches were exposed to them.
- The strength of leadership and commitment to MEDP was not uniform across all agencies, and a few agencies across different collaboratives struggled more than others in this regard. This ultimately had implications for program delivery and data collection activities.

One of the greatest challenges that programs and collaboratives faced involved staffing capacity and consistency:

- Staff support to mentors was greatly improved through MEDP. Surveys and interviews with staff suggested increased skills in providing high-quality support to mentors through their ongoing contact.
- Using the same staff to recruit, orient and support matches was described as an effective staffing structure by some programs. This structure increased rapport between the match and program staff and provided more opportunities for more guidance seeking by the mentor. A challenge, however, across all programs was staff turnover and the communication gaps that occurred during staff transitions.

What Factors Supported the Implementation of MEDP?

When enhancing existing program practices with innovative ideas, program readiness (capacity, commitment, and leadership support) are key components of effective implementation.

- The development of the MEDP enhancements required extensive time and effort before sites were ready to implement their enhanced practices. Organizational capacities (i.e., established program structures, data systems, supportive climate and culture) facilitated MEDP-specific capacities (i.e., staff training and technical support, leadership support, staffing structure to support matches) and helped overcome MEDP challenges (i.e., staff turnover, low mentor participation in enhanced practices).
- Those collaboratives found to fully implement the planned enhancements were those that built the capacity of their staff to carry out the enhanced practices through professional development and targeted training. It was also crucial to have buy-in from all levels of staff: frontline case managers, the site coordinators overseeing their work,

and the agency executives who ultimately made resource allocation decisions at times of scarce resources, staffing, and funding.

- An important lesson for future research is the importance of assessing readiness for implementation and program capacity. Enhancements should ideally build on existing practices—not practices that require “starting from scratch.” For example, if an agency has already developed successful practices around encouraging postmatch training attendance or how to reach mentors for monthly support, then enhancing those already existing practices will be less difficult and perhaps more successful than developing a practice from scratch. An example is the online platforms that were developed to train and support mentors. Agencies that simply added modules to existing online platforms were much more successful than those that tried to create the platform itself rather than simply add content.
- Service learning was implemented in two collaboratives and although only about half or fewer matches participated, those mentors who did reported that their relationship benefitted from this experience. Staff in at least one collaborative reported feeling pleased enough with the outcomes from this requirement that they intended to make it a part of their business-as-usual model going forward.

What Insights Emerged Regarding Sustainability of MEDP Efforts?

During the site visits conducted in the third year of the initiative, we often heard from program staff and administrators that there were enhanced practices that had proven effective and would be sustained as part of their business-as-usual model. Yet, after the initiative ended and there was significant staff transition, we learned that many enhanced practices were no longer in place. Staffing was one of the key factors on which such decisions were based:

- Those sites that reduced staff caseloads to boost match support found this structure to be beneficial in supporting stronger matches and better youth outcomes but indicated that they would not be able to continue this enhancement beyond MEDP without additional resources.
- Some of the more novel enhancements were ultimately deemed impractical to continue over the long-term. For example, one collaborative implemented a visit, at 6 months postmatch, to the mentee’s home with the mentor as part of their enhancements. This practice was not considered sustainable due to scheduling difficulties and the amount of staff time required to implement it.

This AIR evaluation study also provides information on programs costs of implementing the enhanced practices. The analysis demonstrated considerable variability in the per capita cost across collaboratives, particularly with respect to how sites allocated staff time and expenses. Overall differences in per capita costs between the two experimental groups were relatively small, with enhanced mentoring tending to be slightly more expensive. On average, sites devoted more staff time to supervising matches, offering postmatch trainings, and organizing activities and events for EG as opposed to BG matches. Likewise, sites tended to devote more nonstaff resources to the Enhanced condition for staff training and volunteer training.

The experiences of the MEDP collaboratives has largely been encouraging and findings of the evaluation will prove instructive. The emergence of this initiative in 2012 surfaced as considerably more attention began to pivot to employing collaboration as a means of enhancing the impact of investment by philanthropists, foundations, and the business sectors. Current efforts of the Chan Zuckerberg Initiative, the Ballmer Group (which has funded the Youth Advocate Mentoring Program in some communities), and, the Gates Foundation are among those that cut across silos relevant to the critical needs of youth in mentoring programs, e.g., homelessness, education, youth incarceration. It is vital that efforts of the MEDP collaboratives find ways to sustain themselves whether with or without government support. That is a daunting challenge even when resources are more readily available.

How Important Was the Collaboration Among Researchers, Practitioners and OJJDP Staff?

MEDP, as a demonstration project, and the evaluation of MEDP, are examples of successful collaborations between researchers, practitioners, and the funding agency. This partnership among the three groups was key for the success of both the implementation of the enhancements, and for the evaluation of the demonstration project.

The timing of the evaluation and the overall initiative allowed for both a high degree of influence by the research team on the design and implementation of the programmatic enhancements, and also a high degree of influence by the practitioners on the plan for the evaluation. For instance, the evaluability assessments helped the programs be more thoughtful and realistic in the design of the programmatic enhancements. In addition, the evaluability assessments and onsite trainings by the research team at the start of the initiative helped the research team to be more thoughtful and realistic in aspects in the design of the evaluation plan. Finally, OJJDP staff also leveraged the participation of the practitioners and worked closely with the evaluators to ensure the most rigorous evaluation design. The participation of an external consultant to advise the research team and OJJDP staff was instrumental in making sure that the research design maintained the highest level of rigor, even as we explored ways to meet the practitioners where they were.

As has been noted, the partnership between the researchers and the practitioners meant that the study took longer than it would have in the absence of such a collaboration (Sullivan, McPartland, & Fisher, 2013). We believe the collaboration was responsible for three key results in the design and implementation of the programmatic enhancements and in the implementation of the evaluation. First, there was a great deal of attention by the evaluation team on the definition and measurement of the training and ongoing support of mentors around the incorporation of advocacy and teaching functions into their mentoring role. This very likely meant that program staff were encouraged to work together in their collaboratives to develop and deliver the programmatic enhancements they believed were best suited to accomplish the objectives of MEDP. The ongoing communication between the evaluation team, the program leaders at each site, and OJJDP staff kept the attention on this matter until there was reasonable satisfaction that the enhancements were sufficiently different from the business-as-usual strategies, and that programs were going to be intentional about implementing the enhancements as designed. This ongoing collaboration between OJJDP, the researchers, and the practitioners probably resulted in a higher level of accomplishment by the programs of the objectives of the overall initiative.

Second, there was continued attention throughout the project implementation phase on the results of the recruitment efforts of the programs. The research team reported bi-weekly on the progress each collaborative was making towards the goal of making 225-300 matches that were enrolled in the evaluation. As needed, the program officer at OJJDP organized webinars that focused on effective approaches and strategies and facilitated peer-to-peer learning among the program directors. Special outreach to individual sites happened throughout the evaluation period, all of which further encouraged programs to stay focused on reaching their recruitment and enrollment targets. We believe this ongoing attention and support offered to the programs resulted in a higher-than-typical rate of achievement by the programs across the entire study.

Finally, the ongoing communication between the evaluation team and the individual collaboratives (and, by extension, the programs) allowed for the kind of coordinated efforts that resulted in follow-up response rates that exceeded 70% for mentors, youth, and parents. The careful monitoring of progress by the programs regarding the administration of follow-up surveys made it possible for there to be some innovation in the overall approach to capturing surveys when it became clear that the programs were struggling to secure a majority of the surveys. Reallocation of resources for the evaluation provided an opportunity for the use of external staff to supplement, and eventually replace, the efforts of the program staff so that the final response rates were sufficient to ensure that there is still enough statistical power to detect treatment effects in the outcome analyses.

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