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Understanding the Role of Parent Engagement to  
Enhance Mentoring Outcomes:  
Final Evaluation Report

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# Understanding the Role of Parent Engagement to Enhance Mentoring Outcomes:

## Final Evaluation Report

### EXECUTIVE SUMMARY

This report provides an evaluation of the impact of a parent mentoring intervention on mentoring relationships and youth outcomes in a youth services agency. The program and research design and the evaluation resulted from a partnership between the Center for Human Services Research (CHSR) and Big Brothers' Big Sisters' Capital Region (BBBSCR).

### Background

While mentoring is a widespread and successful intervention for youth-at-risk the impact of mentoring on youth outcomes appears to be modest (Dubois, Portillo, Rhodes, Silverthorn & Valentine, 2011). Ways to refine and strengthen mentoring are of great interest. One potential approach is parent engagement which has been shown to play a meaningful role in improving youth outcomes (Epstein, Joyce & Sanders, 2000; Higginbotham, MacArther, & Dart, 2010; St. Pierre & Kaltreider, 1997); as well minority low-income parents face a unique set of structural and psychological obstacles to being engaged (Chang, Park, Singh & Sung, 2009; Diamond & Gomez, 2004; Patel & Stevens, 2010; Payne, 2006; Van Velsor & Orozco, 2007).

### Methods

The Parent Engagement Model (PEM) was designed to engage parents in mentoring as well as to increase mentor's cultural understanding of families served by the program. The model consisted of six components: 1) parent orientation, 2) a parent handbook, 3) Energizing the Connection (ETC) mentor training, 4) match support on enhanced topics, 5) monthly post cards for each topic, and 6) biannual family events. It was evaluated using a quasi-experimental design with a waitlist control group. Recruitment took place from over a year resulting in 125 study matches made up of youth and mentors; parents were also include as study participants. Qualitative and quantitative data were collected including BBBS intake data and surveys, a standardized youth outcome instrument (the Child Behavior Checklist (CBCL)), and project-developed instruments.

## Findings

No significant improvements in youth outcomes were detected in quantitative analysis, although there were a number of findings related to the study process. Many challenges were faced in the process related to sample size, program implementation, and staffing. Both the voluntary mentor ETC and the biannual family events were not viable as implemented for this study. Other qualitative findings related to the role of socioeconomic cultural divide.

## Recommendations

General recommendations include ongoing communication with parents and mentors, considering new ways to reach out to and communication information to parents and mentors, taking steps to decrease staff turnover, avoiding implementation pitfalls such as scheduling burden on participants, and broadening the intervention to include efforts to increase socioeconomic cultural understanding among parents, program staff, and researchers.

## Conclusions

During this implementation of the PEM, we are unable to identify any differences in youth outcomes. Some components of the intervention, such as the parent orientation, were successful while other components, like the ETC, were not. Considering feedback from participants could help in designing approaches to better engage parents and future research on the role of socioeconomic cultural differences could help determine the value and nature of incorporating this content into the program for parents as well as mentors and staff.

## INTRODUCTION

The prevalence of single parent households, children living in poverty and low graduation rates portends a challenging future for youth in America. These risk factors increase the chance of involvement in juvenile justice system and other negative outcomes for youth. One such example is the Capital Region of New York State with 35% of children under the age of 18 living in single parent households (U.S. Census Bureau, 2012 American Community Survey), one in every seven children living in poverty (U.S. Census Bureau, 2012 American Community Survey) and a 52.3% graduation rate in one of the region's largest school districts, Albany City Schools (NYSED Information and Reporting Services, 2012). Identifying meaningful ways to minimize these risks and ameliorate some of their impacts on youth is crucial.

Mentoring, an established intervention for at-risk youth, has been linked to positive youth outcomes (Dubois, Holloway, Valetine & Cooper, 2002; Jekielek, Moore & Hair, 2002; Keating, Tomishima, Foster & Allesandri, 2002; Herrera et al, 2007; Rhodes, 2008). Mentoring approaches vary in structure and design. Some programs focus on mentoring in the community while others are school-based. Many programs are structured around adults mentoring children while others consist of peer-to-peer mentors. The effects of mentoring are increased by the duration of the relationship and have been shown to have a positive impact if matches are together for at least 12 months (Grossman & Rhodes, 2002). The quality of the mentoring relationship and the frequency of contact can also play a role in improving benefits for youth (Dubois, Neville, Parra & Pugh-Lilly, 2002; Para, Dubois, Neville, Pugh-Lilly & Povinelli, 2002). Yet, the findings of the effects of mentoring are mixed -- a meta-analysis of 55 evaluations found that the benefits are modest or small for the average youth (Dubois, Holloway et al., 2002). A subsequent meta-analysis of 73 evaluations showed that while mentoring programs do improve outcomes across behavioral, social, emotional and academic domains, these gains continue to be modest (Dubois, Portillo, et al., 2011). Recommendations from the 2011 meta-analysis include the need for ongoing refinement and strengthening of mentoring programs.

Parent engagement is seen as a critical element in many intervention programs to improve outcomes for at-risk youth (Epstein et al., 2000; Higginbotham et al., 2010; St. Pierre & Kaltreider, 1997). Many studies of parent engagement have been in the field of education and the outcomes tend to be related to academics (Fan & Chen, 2001; Jeynes, 2005; Jeynes, 2007). Some studies extend beyond education, for example parent engagement with child welfare services (Gerring, Kemp & Marcenko, 2008) and mentoring (Higginbotham, MacArthur & Dart, 2010; Spencer, Basualdo-Delmonico, & Lewis, 2011).

Literature discusses the role of race, ethnicity and socio-economic status on parent engagement (Chang et al., 2009; Diamond & Gomez, 2004; Patel & Stevens, 2010; Payne, 2006; Van Velsor & Orozco, 2007) indicating that minority low-income parents face a unique set of structural and psychological obstacles to being engaged.

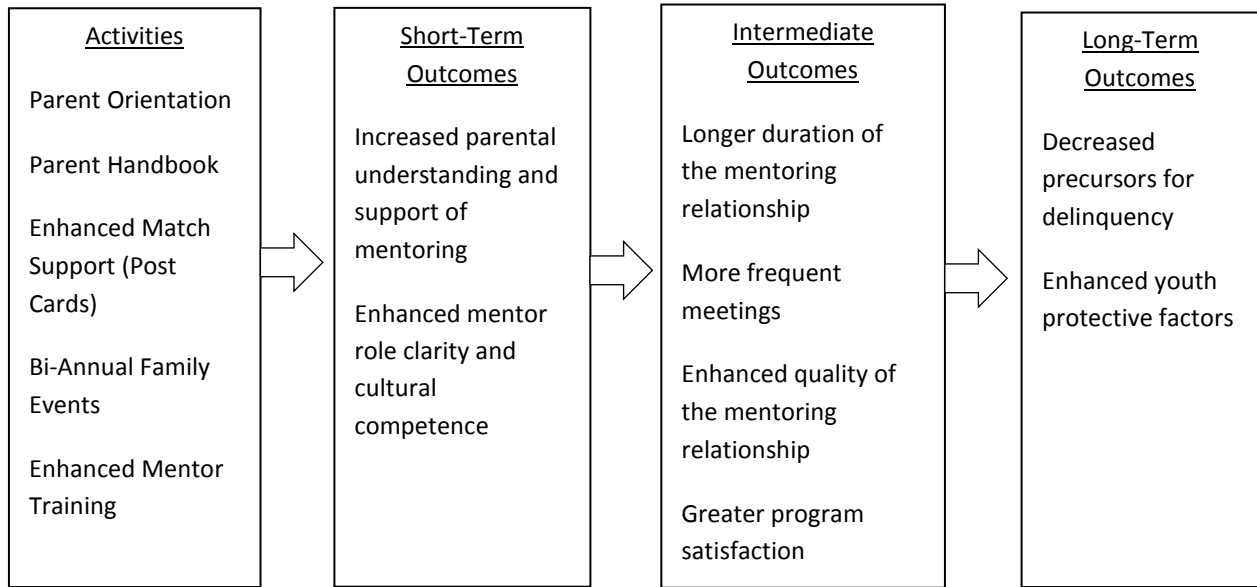
Big Brothers Big Sisters Capital Region (BBBSCR) is a local mentoring organization serving families residing in four counties in the capital region of upstate New York. The program has been in existence for over 20 years and is affiliated with the nation's oldest, largest and most successful youth mentoring organization, Big Brothers Big Sisters of America. Surveys conducted in 2010 by BBBSCR of parents and mentors provided feedback from parents indicating a need to be better informed about the program, procedures, and policies of the organization. Feedback from mentors also indicated a need to improve communication with parents. In addition, the program staff/administration perceived that many match closures were related to parents' unrealistic expectation of both the program and the mentor.

The parent engagement model (PEM) that is the focus of this evaluation was based on the need to refine and strengthen programs to better understand mechanisms that contribute to meaningful positive outcomes for youth. Development of the model was based on feedback from the local program, parents, and mentors, as well as literature that suggests parent engagement plays a key role in youth outcomes.

The model itself was developed in conjunction with the BBBSCR program staff and resulted in six components: 1) parent orientation, 2) a parent handbook, 3) Energizing the Connection (ETC) mentor training, 4) match support on enhanced topics, 5) monthly post cards for each topic, and 6) biannual family events. Each component is described in more detail in the final progress report.

The BBBSCR and CHSR partnership included the development and evaluation of a new model for mentoring activities designed to ultimately impact of the PEM on youth outcomes. There were two study hypotheses, one building upon the other. The first hypothesis was that increased parent understanding and support of mentoring would lead to improved quality, intensity, and duration of the mentoring relationship. The second hypothesis was that longer lasting mentoring relationships characterized by a close positive relationship and more frequent contacts between mentor and mentee would lead to more positive youth outcomes. The following logic model lays out the paths from implementing the model activities to the various short, intermediate, and long-term outcomes.

Figure 1: Parent Engagement Logic Model



With the central aim of examining the impact of PEM on the effectiveness of BBBSCR mentoring relationships and then youth outcomes, there were three overarching goals established. The first goal was to evaluate if the PEM increased parental and mentor knowledge about and support of mentoring. The second goal was to assess the effects of the PEM on strengthening and lengthening the mentoring relationship. And third goal was to evaluate the impact of the PEM on reducing precursors of delinquency.

## METHODS

### Design

The study design was developed considering programmatic feasibility and study rigor, resulting in a quasi-experimental design with a naturally occurring treatment-as-usual (TAU) group and a group of participants who received the enhanced mentoring intervention (PEM). There were several factors in this decision including the anticipated rate of matching over the enrollment period to build the sample, sufficient power to detect statistically significant differences, and the program's existing waitlist of families. These factors determined a desired sample size of 200. Matches were made up of mentors and youth; newly enrolled youth and mentors were placed in the treatment or PEM group and all youth from the wait list were placed in the TAU group. Additionally, a programmatic decision was made prior

to the start of the grant to offer the parent orientation to all new families interested in enrolling in the BBBSR program, precluding any new matches from being eligible for the TAU group.

We received approval from the University at Albany Institutional Review Board for the PEM study in late November, 2011 and then began to recruit parents, mentors, and youth. Recruitment of individual participants went as planned yet making matches to fill the sample took longer than expected. While over time the rate of matching did increase, it never reached the projected rate of 25 matches per month. The original optimistic projection was based on previous rates of matching and potential new staffing for the project. As was discussed in more detail in the progress report, two ideas were implemented to increase the sample when the slower rate of matching became clear: we extended the study enrollment time by four months and we extended the study to include a related program, the site-based program. At the end of the recruitment period in November, 2012 the final study sample included 125 matches, with 63 matches in the PEM group and 62 in the TAU group. The breakdown by program was 97 in the community-based program and 28 in the site-based program.

#### Instruments

A number of instruments were used to collect both qualitative and quantitative data. The quantitative instruments to gather potential outcome measures, including existing BBBS instruments, project developed instruments, a standardized instrument to measure behavior problems and competencies (CBCL; Achenbach & Rescorla, 2001), and school data. BBBS intake forms provided background characteristics for parents, mentors and youth. The Strength of Relationship Survey (SoR), also a BBBS instrument, was used to capture the quality of the mentoring relationship; both the youth and the mentor completed a version of the survey. The Youth Outcomes Survey (YOS) and the Parent Outcome Evaluation (POE) were BBBS instruments used to measure youth outcomes. Table 1 below links the constructs and goals to the measures, and provides more details about when and to whom the instruments were administered.

Table 1: Overview of Measures

CONSTRUCT	MEASURES		
	Baseline	Pre/Post	12 months
<b>Goal 1. Knowledge &amp; Attitudes</b>			
Understanding & support of mentoring		P	Questionnaire /Telephone interview
Understanding of culture & family interactions		M	Questionnaire / Telephone interview
Program satisfaction & reactions			M, P Telephone interview
<b>Goal #2. Mentor Mentee Relationship</b>			
Length of relationship			Y, M (B) AIM database
Consistency of contacts Y, M			Y, M (B) AIM database
Quality of mentoring relationship (Youth coping, lack of disappointment, safety, importance, & closeness. Mentor connectedness, lack of frustration, confidence, closeness, & decision making)			Y, M (B) Strength of Relationship (youth) (B) Strength of Relationship (mentor)
<b>Goal #3. Precursors to Delinquency (Risk &amp; Protective Factors)</b>			
Syndrome Profiles, the DSM-Oriented Scales, & the '2007 scales' from the Multicultural Supplement	P		P Child Behavior Checklist for 6-18
Academic competence, social, acceptance, truancy, parental trust, misconduct, attitude toward substance abuse	Y, P		Y, P (B) Youth Outcomes Survey/Program Outcomes Evaluation
Academic performance	S		S GPA & Absences
<b>Contextual &amp; Youth Risk Factors</b>			
Family & youth demographics	Y, P		(B) Youth Enrollment Questionnaire & Parent/Youth Interview
Youth psychosocial characteristics			
Mentor demographics	M		(B) Mentor Pre-Enrollment Form, Mentor Questionnaire, & Mentor In- Person Interview

B=BBBSCR Measures; P= Parent self-report; C=Youth self-report; M=Mentor self- ratings, S=School Reports

A set of pre- and post-test instruments made of mostly quantitative data were developed specifically for the project by the research team and were used to measure changes in knowledge, perceptions, and expectation before and after the parent orientation and the enhanced mentor training. Participants were given the opportunity to ask questions and facilitators were trained to use the post-test results as



a chance to continue to educate; if a pattern of incorrect responses was noticed the trainer could review and discuss the content with the entire group as a means of clarification.

Telephone interviews for mentors and parents collected were also developed to collect qualitative data to better understand the mentoring relationship and experience, the impact of mentoring, and program satisfaction. Telephone interviews took place at the 1 year follow-up point for each match. Two pieces of school data were collected, attendance and grade point average; BBBSCR collected parent release forms for school data for each youth in the study. Because we were interested in the impact of the intervention, we collected data at the point closest to baseline and then a year later at the same point in time. For example if the match was made in Sept, Oct or Nov of 2012 then the baseline data would be the 1<sup>st</sup> quarter grades and attendance for 2012.

### Sample

The final sample consisted of 125 matches and each match consisted of a unit of three individuals, a youth, a mentor, and the youth's primary parent or guardian. The characteristics of parents, mentors, and youth were consistent with the expected characteristics as described by the program. Table 2 below provides a snapshot of parent, mentor, and youth background characteristics. Most of the parents (parent or guardian who completed the intake and enrollment paperwork) were female (95%), with a median of 36 years of age. The age range was from 23 to 81 years of age, with most parents being either between 26 and 35 years of age (45%) or between 36 and 55 years of age (45%). Most of the households were single parent (68%) and fewer than half reported being employed (46%). Household income levels were generally low, with over three-fourths earning below \$30,000 annually. The majority of parents identified as either Black or African American (46%) or White (40%).

Table 2. Sample Description of Background Characteristics (N=125\*)

	Parent/Guardian		Mentor		Youth		
	Number	Percent	Number	Percent	Number	Percent	
Gender	(N=124)				Gender		
Female	119	95	82	66	Female	77	62
Male	6	5	42	34	Male	48	38
Age	(N=111)		(N=124)		Age		
Median	36 years		26 years		Median	10 years	
18 to 25 yrs.	4	4	62	50	6 to 8 yrs.	31	25
26 to 35 yrs.	50	45	36	29	9 to 11 yrs.	53	42
36 to 55 yrs.	50	45	19	15	12 to 14 yrs.	35	28
56 to 81 yrs.	7	6	7	6	15 to 16 yrs.	6	5
Employment	(N=114)		(N=112)		Youth Diagnosis	(N=124)	
Unemployed	48	42	4	4	None	75	61
Employed	52	46	64	57	Medical	16	13
Student	9	8	42	38	Psychological	26	21
Retired	1	1	2	2	Both	7	6
Disability	4	4	-	-			
Household Income	(N=121)				Eligible for Free/ Reduced Lunch		
Under \$10,000	33	27			Yes	106	85
\$10,000 – \$19,999	32	27	Missing	N/A	No	19	15
\$20,000 – \$29,999	30	25					
\$30,000 – \$39,999	12	10					
\$40,000 and up	14	12					
Ethnicity	(N=81)		(N=124)		Ethnicity		
White	32	40	85	69	White	36	29
Black	37	46	29	23	Black	59	47
Multi-racial	5	6	2	2	Multi-racial	25	20
Hispanic	5	6	2	2	Hispanic	1	1
Other	2	3	6	5	Other	4	3

\* Unless otherwise noted in the table

Most of the mentors were female (66%) and their median age was 26. The youngest mentor was 18 years of age and the oldest 62. The majority of mentors (50%) were between 18 to 25 years of age; this was most likely a result of the inclusion of the site-based mentoring program which is comprised solely of college-age mentors. Most mentors were either employed (57%) or students (38%). The majority of mentors identified as White (69%), with 23% Black or African American. About a third of the mentors had had some previous volunteer experience with youth and few (7%) had previous experience as a BBBS volunteer.

The youth in the study were primarily female (62%), which was attributed to available mentors being female and age/gender match requirements; many males are waiting for a match. Their median age was 10 with the youngest being 6 and the oldest being 15. The majority of youth (85%) were eligible for free or reduced school lunch and about 40% had a clinical diagnosis either medical, psychological, or both. Most of the youth were identified by their parent as being Black or African American (47%), followed by White (29%), and multi-racial (20%).

## Analysis

This section describes the steps taken to analyze the qualitative and quantitative data that was collected as part of this study. The decision to include both types of data was based on an interest in understanding the impact of the intervention through the lens of specific youth outcomes measured as well as to gain insight and understanding into the parents' and mentors' experiences.

Qualitative data analysis of parent and mentor interview responses included many steps. First, all responses were reviewed by either one of two raters and then thematic categories for each response were developed. Categories were reviewed and checked by the other rater for confirmation. Discrepancies were resolved. Additionally, advisory committee members reviewed selected responses and provided feedback on thematic categories. An example of categories for the question regarding parents' experience with the program included 'benefit to the parent,' 'benefit to the youth,' 'positive match,' 'negative match,' and 'opportunities provided to youth,' as well as categories representing program-specific positive/negative views, and overall positive/negative/neutral views of the program. Subsequently, each category was coded as '1' or '0' for each participant, indicating the fit of each participant's response with the category. Overall frequencies were calculated for each category to yield the total number of participants who identified with each theme.

Quantitative analysis techniques were used to assess the impact of the PEM on youth and mentor outcomes. Because the quasi-experimental naturally occurring waitlist design does not necessarily eliminate bias in the same manner as a true random assignment design, we used propensity score weighing to compensate for any group differences that might be revealed. First, bivariate statistical tests, independent sample t-test, and chi-square tests were run on all of the demographic variables to determine whether there were any group differences. Nine background variables came up as statistically significant (Table 3); some of them represent the same or similar constructs for example youth age and youth age in quartiles. Additionally, we ran independent sample t-tests on the baseline

CBCL scales to see if the scores differed based on groups. The following four scores showed significant differences at baseline: DSM Affective Problem, Anxious Depressed, Withdrawn Depressed, and Internal Syndrome. For the characteristics and scores that differed between the treatment and control (treatment-as-usual) groups, we used a probit model PSA weighting function in Stata to develop inverse probability weights for each individual in the sample. The score measures the likelihood of being in one group rather than the other and allows us to control for systematic differences associated with group assignment when analyzing the outcome data.

Table 3: Demographic differences between groups

Variable	Chi – Square	T-Test
Income Quartiles	X	N/A
Parent employment status	X	N/A
Parent Age Quartiles	X	N/A
Youth Age Quartiles	X	N/A
Parent Income Assistance	X	X
Youth Age	N/A	X
Single Parent household	X	X
Eligible for free/reduced lunch	X	X
Child in Therapy	X	X

X= $p \leq .05$

The demographic and baseline CBCL variables identified as significantly different at baseline were tested in a process to determine which would be best to include in the creation of a propensity score.

Diagnostic tests were then run on the score to determine the best model based on which variables to include. Due to the small size of the sample, the score was bound to four groups. The score was then tested for balance and overlap. Based on all of this our final propensity scores were based on the following six variables: 1) parent employment, 2) youth age, 3) free/reduced lunch, 4) child in therapy, 5) baseline CBCL Internal syndrome score, and 6) baseline CBCL DSM affective problem.

Regression models were used for testing group differences on outcome measures (goal two and goal three) that included control for the possible effects of sample characteristics on both group assignment and outcome, the regressions were double robust in that they were weighted by the propensity score and that they included as independent variables the six previously identified variables used in the calculation of the score. Additionally, because we were interested in potential treatment effects, the regression models analyses also included the following six variables:

1. Half program dose, representing participants who received at least half of the basic program dosage

2. Treatment errors, representing any TAU participants that received some part of the treatment in error
3. Attendance at prior parent orientation, representing any parent participant that attended the parent orientation prior to the start of the study and therefore the revisions to the parent orientation
4. Received ETC or biannual family event, representing any parent, child or mentor who attended the biannual family event or any mentor who attended the ETC training
5. Family effect, representing any families that had multiple children in the study
6. Program, representing whether the match was in the community based program or the site based program

Inclusion of treatment effect variables allowed us to assess whether or not factors such as dosage or individual program practices had an impact on participant outcomes that might be separate or in addition to general program enrollment.

## FINDINGS

In order to evaluate the impact of PEM on the effectiveness of BBBSCR mentoring relationships and then youth outcomes, there were three overarching goals to be examined in the analysis. Evaluating whether the PEM increased parental and mentor knowledge about and support of mentoring was the first goal. Assess the effects of the PEM on strengthening the mentoring relationship was the second goal. And evaluating the impact of the PEM on reducing precursors of delinquency was the third goal. The findings related to each of these goals will be described below.

### Goal One

The first goal was made up of three objectives: 1) increasing knowledge and changing attitudes in both parents and mentors; 2) increasing mentor's understanding of culture and family interactions and 3) increasing program satisfaction in both parents and mentors.

Increasing knowledge and changing attitudes was designed to be assessed using three instruments: the parent orientation pre and post-test, the mentor ETC pre and post-test, and the parent and mentor follow up interviews.

As shown in Table 4, the results on the parent orientation pre/post test data indicate that knowledge increased overall, with 10 items significantly changed in the direction expected from pre to post test.

One item, the statement “parent doesn’t contribute ideas for outing,” was significant in the wrong direction. After review and discussion with staff and the advisory committee, it was determined that this was both a training error and an instrument error.

Table 4: Parent Orientation Pre/Post Test Results (N=78<sup>1</sup>)

Please read each statement below and check the box that best matches the Big Brothers Big Sisters’ expectations.	Pre %	Post %	% Change
Parents should or parents should NOT:	Correct	Correct	
Cancel an outing if my child misbehaved (Not)	47.4	97.4	50.0**
Send siblings on outings with BIG (Not)	68.8	82.1	13.3*
Contribute money toward outings if able (Should)	89.6	98.7	9.1*
Schedule overnights with BIG before one year (Not)	88.0	96.1	8.1*
Make sure child participates in call night and scheduled outings (should)	87.8	98.7	10.9*
Expect an instant connection between my child and BIG (Not)	79.2	91.0	11.8**
Do you think the following statements are true or false?	Pre %	Post %	% Change
True or False	Correct	Correct	
Maintaining regular contact with match support staff is required in order to remain in the program. (True)	89.6	96.2	6.6
The only important relationship in mentoring is between the BIG and the child. (False)	93.4	87.2	-6.2
Parents can decide that certain topics are off limits for discussion between a BIG and a child. (True)	92.1	94.9	2.8
Parents should not call match support with issues unrelated to the match. (False)	26.7	65.4	38.7**
Please read each statement below and check the box next to items that are <u>significant concerns</u> for Big Brothers Big Sisters	Pre %	Post %	% Change
Significant Concern	Correct	Correct	
Parent and BIG have very different interests. (No)	61.4	57.7	-3.7
Parent is difficult to reach by phone. (Yes)	75.7	94.4	18.7**
Parent doesn’t contribute ideas for outings. (No)	61.4	32.4	-29.0**
Parent cancels an outing because the child didn’t do his/her homework. (Yes)	58.6	90.1	31.5**
Parent changes plans at the last minute. (Yes)	70.4	84.5	14.1*

\*= p< .05; \*\*= p<.01

<sup>1</sup> Percent Correct are based on non-missing, N ranging from 70-78 and Paired sample t-tests are based on valid pairs, N ranging from 58-77

Due to significant limitations to the implementation of the Mentor ETC training, there were very few mentors who attended and therefore even fewer who completed the pre/post-test. The sample size is too small to report any findings (N= 8).

Findings from the parent and mentor follow-up telephone interviews are based on the whole sample; group comparisons are not reported. This decision was made due to the small clusters in response categories. Comparisons results were anecdotal and we were unable to draw any meaningful conclusions from them.

In the follow-up interviews, parents discussed many ways in which mentoring made a difference for the child, some of which seemed to impact the parents themselves or their relationship with their child. One such example is changes in verbal and social skills including the child's increased ability to talk to the parent. Some parents (10) expressed that the experience was also beneficial to them, for example that their child was happy and that it provided a break.

Mentor feedback related to increasing knowledge and changing of attitudes overlapped with their understanding of culture and family interactions. It seemed that much of the knowledge gain mentioned by mentors in the 1 year follow-up interview was specifically related to cultural differences and family interactions. A few mentors (N=7) did indicate that the experience overall was educational, expressing that it was "eye opening" to encounter the circumstances that children were coming from and the challenge of helping families and youth living in disadvantaged households. Of the few mentors that did attend the ETC trainings, they felt that it helped with connection and communication, increased understanding, and provided an opportunity for mentors to meet each other and either vent or share ideas. Parents also provided feedback related to culture, for example some parents indicated that what they liked best about mentoring was that it was educational for the child, providing opportunities for them to "see what else is out there."

Regarding communication with parents, some mentors reported that staying in touch with parents was easy, while others expressed that this was a real challenge. Some mentors indicated that improving communications occurred over time, whether through figuring out the best method (e.g. texting), or by recognizing that it took some time to get comfortable. Related to the preferred method for communicating, parents expressed that email was their top choice (N=35), followed by cell phone (N=29) and then regular mail (N=17). Also a number of mentors (N=13) expressed that one of the things they liked best about the program was related to their own growth and being exposed to new things, for example learning about a new culture and different backgrounds.

Parent's expressed mostly positive feedback related to program satisfaction. A majority (N=39) mentioned that they were pleased over all, while 12 parents responded with overall neutral comments,

and only 3 parents provided overall negative feedback. Feedback about specific aspects the program was more mixed, with 15 parents mentioning positive things such as staff being responsive and helpful, and 7 parents mentioning specific negative things such as the need for better screening and the program being unreliable.

When asked what about the program worked well, parents noted a good relationship between the child and mentor (N=26), and the opportunities for children to increase activities and get out of the house (N=21). Also of note was that the program offered their child someone to confide in (N=13). When asked about what aspects of the program did not work well, most parents indicated nothing or stated that they did not know (N=54). This was followed by more specific issues related to the mentor such as scheduling problems and unreliability of the mentors' (N=12), miscommunication (N=11), or the mentor leaving (N=11). Few parents (N=7) indicated issues with the program overall.

The results of the parent interview indicated that almost all parents felt that parent orientation was helpful, that the timing was just right, and most parents felt the handbook was useful. The postcards were less well received, although about half the parents still indicated that they were helpful.

When mentors were asked during the mentor interview about their overall experience, they mentioned positive things about the agency (N=12) such as getting the needed support, being organized, and providing good training and advice. Conversely, eight mentors mentioned negative things about the agency such as staff turnover, disorganization, and not being involved enough. Additionally, when asked for suggestions to improve the program 10 mentors commented on staffing problems, such as poor communication, as well as the quality of the staff. Most mentors felt the mentor orientation was positive (N=66), describing it as informative, helpful, convenient, energetic, and an opportunity to meet other mentors. The most helpful aspects of the orientation were reported to be information about general rules and guidelines (N=32) such as expectations and policies and procedures, and knowing what to expect (N=23), such as potential scenarios and family dynamics. Only a few mentioned negative things about the orientation (N=6).

Suggestions to improve the program from mentors primarily described changes related to events and activities (N=16). Some mentors indicated that more activities were needed for younger kids, or kids of all ages. Some mentors suggested a forum to post activities, and others felt more weekend events were needed or better events in general. The parents' most common suggestion to improve the program was related to better screening for the mentor's commitment and long term availability (N=10) such as



coming up with a contract to make sure that mentors know about the time commitment. Other common suggestions were to shorten the wait to be matched time period and needing a larger mentor pool (8), as well as a desire for better communication with the program (8) related to activities, benefits to the child, and the process in general.

## Goal Two

The second goal was to assess the effects of the parent engagement model on strengthening the mentoring experience and involves assessing program impact on three components of the mentoring experience: 1) the length of the mentoring relationship, 2) the consistency of the mentoring relationship, and 3) quality of the mentoring relationship. Progress on the goal was assessed primarily through quantitative analysis of a number of indicator variables using the regression technique described earlier in the Methods section.

The first component of the goal, length of the relationship, was simply assessed by looking for differences in the length of matches. Because data on matches was recorded in several different ways, the analysis considered a number of related measurements including number of months or number of days (with different recording maximums of 12 or 14 months), as well as a simple binary yes/no indicator of whether or not the match remained open for at least a year. Ultimately, there were no significant differences between TAU and PEM group participants (Table 5).

The consistency of contacts was measured by four outcome variables: 1) total number of outings up to 12 months; 2) number of outings per month; 3) total number of hours together; and 4) number of hours per month. As shown in Table 5, no significant group differences were identified.

The quality of the mentoring relationship was assessed from both the youth perspective and the mentor perspective. Each assessment tool (SoR) is made up of the five subscales (listed in Table 1 above). Unfortunately, the SoR was not universally completed, which limited the sample size. As shown in Table 5, no impact on quality of mentoring relationship was identified by the analysis.

Table 5: Group Differences related to Goal Two

Goal Components	Dependent Variables	Coefficient	P-Value	N
Length of the Relationship	Match Length up to 12 Months	0.37	0.5	123
	Match Length up to 14 Months	0.41	0.5	123
	Match Length up to 14 Months based on Last Contact	-0.16	0.8	123
	Match Length in Days up to 12 Months	13.72	0.5	123
	Match at Least One Year (yes/no)	0.29 <sup>a</sup>	0.2	123
Consistency of Contacts	Total Number of Outings	-1.14	0.3	96
	Outings per Month	-0.10	0.3	96
	Total Number Hours	0.83	0.8	96
	Hours per Month	0.36	0.3	96
Quality of the Mentoring Relationship (Youth and Mentor SOR)	Youth Coping	-0.14	0.2	55
	Youth Lack of Disappointment	-0.09	0.4	57
	Youth Safety	-0.12	0.2	61
	Youth Importance	-0.20	0.2	58
	Youth Closeness	-0.20	0.2	58
	Mentor Connectedness	-0.06	0.8	67
	Mentor Lack of Frustration	0.12	0.7	70
	Mentor Confidence	0.00	1.0	66
	Mentor Closeness	-0.41	0.2	69
	Mentor Decision Making	0.24	0.3	69

<sup>a</sup> Odds Ratio

### Goal Three

The third goal of the parent engagement model was to reduce precursors of delinquency. To evaluate the success of the program in contributing to this outcome, we looked at three outcomes that have been theoretically and empirically tied to future delinquent behavior: 1) the CBCL subscales, 2) the Youth Outcome Survey (YOS) subscales, and 3) academic performance. As described previously, a propensity score weighted regression model was used to test for differences between the treatment and TAU groups for each outcome measurement variable.

Three groups of scales from the CBCL subscales were used to assess child behavior: the Syndrome Profiles, the DSM-Oriented Scales, and the '2007 scales' from the Multicultural Supplement.

- The Syndrome Profiles consist of nine constructs plus three combined scores, internal syndrome, external syndrome, and total syndrome.
- The DSM-Oriented Scales were comprised of six constructs
- The 2007 scales from the Multicultural Supplement had three constructs.

Additionally, the CBCL includes a composite score for Academic Mean and for School Scores, which were used as measures of academic performance.

As shown in Table 6, none of the measures were significantly different for the treatment group at a standard 95 percent confidence level. The Attention Deficit and Hyperactivity Problem score and the Oppositional Defiant Problem score do show trends to difference between groups in the expected direction with the treatment or PEM group showing a slightly lower score at follow up than the TAU group (Coefficient = -1.5,  $p = .056$ ; Coefficient = -.83;  $p = .085$  respectively).

The Youth Outcome Survey measures academic competence, social acceptance, educational expectation and self-assessment of academic performance, truancy, misconduct and parental trust; however the analysis was hampered by the relatively small number of completed surveys, ranging from 60 to 63 cases. The small sample is in itself a concern for the analysis but in addition the fact that a propensity score developed using a larger sample is being used in the analysis really indicates the need for caution in interpreting the results. The analysis did show significant differences between groups yet two of them were in the wrong (unexpected) direction. As a result of the small sample size and the inability to control for bias in both group assignment and instrument response, no impact on the mentoring relationship could be identified.

The last part related to goal three was school reported academic performance, which we intended to measure using grade point average and school attendance. Unfortunately, data could not be collected for the entire group and the resulting sample size was even smaller than those mentioned above, with ranges from 30 to 37 cases. As a result, no significant differences were found.

Table 6: Group Differences Related to Goal Three

Goal Components	Dependent Variables	Coefficient	P-Value	N
Youth Outcomes- Follow up CBCL	Syndrome Anxious Depressed Score	.13	0.876	102
	Syndrome Withdrawn Depressed Score	-.08	0.887	103
	Syndrome Somatic Complaints Score	-.06	0.925	101
	Syndrome Social Problems Score	-.60	0.458	103
	Syndrome Thought Problems Score	-.28	0.585	102
	Syndrome Attention Problems Score	-.79	0.361	102
	Syndrome Rule Breaking Behaviors Score	-.72	0.260	101
	Syndrome Aggressive Behavior Score	-1.83	0.263	102
	Syndrome Other Problems Score	-1.16	0.123	101
	Internal Syndrome Score	.14	0.925	100
	External Syndrome Score	-2.45	0.249	100
	Total Syndrome Score	-4.90	0.289	95
	DSM Affective Problems Score	.18	0.666	101
	DSM Anxiety Problems Score	.53	0.342	102
	DSM Somatic Problems Score	.18	0.702	103
	DSM Attention Deficit Hyperactivity Problems Score	-1.5	0.056	100
	DSM Oppositional Defiant Problems Score	-.83	0.085	103
	DSM Conduct Disorder Score	-.24	0.770	102
	SPC Obsessive Compulsive Problems Score	-.21	0.694	101
	SPC Post Traumatic Stress Problems Score	-.35	0.720	102
	SPC Sluggish Cognitive Tempo Score	.13	0.557	103
	Academic Mean	-.06	0.759	103
	School Score	-.23	0.520	103

## DISCUSSION/LIMITATIONS

While the parent engagement model did not result in better youth outcomes for participants in this study, a number of interesting process findings have surfaced. These findings relate to the design of the study, implementation of the model, challenges to and limitations of working with community based organizations, as well as the construct of socioeconomic cultural differences and its impact on the entire project.

The design of this study was intended to address both issues of research rigor and programmatic feasibility. While communication between program and research staff was frequent and of a good quality in the planning and implementation of the project, there was a lack of communication between the time of the grant submission and the receipt of the award. During this period, BBBSCR moved ahead with some aspects of implementation that the research team had intended to be involved with,

resulting in some families receiving part of the treatment prematurely. At first the decision was made to exclude these families from the study, but as time went on and the reality of low enrollment emerged, another decision was made to include these families and instead control for the difference by indicating whether the parent had attended parent orientation prior to the study or not.

Although steps were taken to improve enrollment, the study sample was smaller than projected, which limited our ability to draw meaningful conclusions from much of our data. This was particularly true for the YOS and SoR instruments, which BBBSCR does not collect from closed matches. Prior to reaching the one-year follow-up point nearly 40% of the matches were already closed.

The challenges faced with school data included unexpected hurdles to retrieving existing data from schools and the fact that for many youth, especially those in elementary schools, GPA data did not exist. Once the study was underway there were policy changes in certain school districts regarding the release of school data, so that the release forms collected by BBBSCR were not sufficient to allow us access to the data. A final challenge was that if a youth was no longer enrolled at the reported school and the match had already closed, we did not know what school the child attended. This was due to both the normal promotion from elementary to middle school or from middle school to high school, as well as the fact that some youth in our study lead transient lives and changed schools frequently.

Issues related to implementation are also discussed in more detail in the final progress report. The logic model (see figure 1) from the grant proposal lays out the components of the intervention, each activity, and the expected outcomes over time. Out of the six components that were identified, only four were consistently implemented. Out of the three components that required in-person attendance (parent orientation, mentor ETC, and biannual family events) parent orientation was the only one that was mandatory for program enrollment; the other two were voluntary. A finding from this process was that both the voluntary mentor ETC and the biannual family events were not viable as implemented for this study. Many mentors expressed that time commitment was a challenge and that attending extra events (especially without the child) was difficult. Planning these events presented a challenge as well. For example, the first bi-annual social event was scheduled shortly after one of BBBSCR's well attended annual events, its back to school picnic. This happened again when the ETC was scheduled the day after the Valentines' day party. There were also indications of challenges related to how the invitations were conveyed; a number of treatment group parents reported never being invited to any events.

The issues described above, scheduling and invitations, also speak to some of the challenges in working with community based organizations. A significant issue for implementing the program and the study was staff turnover; during one six-month period the program director, a staff supervisor, and several front-line staff left. Literature on high turnover in service organizations does indicate that it has a negative impact on implementation as well as quality of services (Woltmann et al., 2008). Staff turnover clearly had an impact on the success of the study by creating a need for repeat training of new staff as well as a lack of consistency in communication between research staff and program staff, and between program staff and participants. Additionally, turnover could have led to contamination of both the treatment and the treatment-as-usual groups.

Comments related to staffing problems were present in both parent and mentor telephone interviews. For example when asked about the experience as a parent in the program, one parent reported that there were “a few changes in the people that called for match support calls. That part has been a negative.” One parent talked about never receiving calls from match support when that was the expectation and a mentor expressed that the main problem was a lack of support, stating “I think they had new hires in terms of match support. I didn't feel like I had someone that I could consistently go to talk to about situations that came up.”

The impetus for this project hinged on the need to increase each parent’s understanding and knowledge of mentoring as well as the related goal to increase each mentor’s understanding of culture and family interactions in mentoring. One way to conceptualize these needs is within the context of the socioeconomic cultural divide that exists between people living in middle class society and families living in poverty. In this context the divide is less about the concrete differences such as household income and race, and more about the outlook one has growing up in a particular cultural environment and how that environment shapes and creates a distinct perspective.

As was discussed in the introduction, minority low-income parents do face a different set of obstacles to being engaged (Chang et al., 2009; Diamond & Gomez, 2004; Patel & Stevens, 2010; Payne, 2006; Van Velsor & Orozco, 2007). To that end the parent orientation and mentoring ETC training were developed; much of the content especially in the mentor training was based on theories and exercises from the book, *Bridges Out of Poverty* which lays out the need for an accurate mental model of poverty, middle class and wealth in order to shift existing perspectives (Payne, DeVol, & Smith, 2001). The ETC training was designed for mentors and the assumption was that the program leadership, staff, and researchers would not be included in this transformation process. Yet, there were some indications throughout the

study process that supported the potential value of including all roles. One such example was in the facilitator training practice session for ETC, there were reported moments of enlightenment and a seeming shift in perspective from the few attendees who were program staff. Post-test responses indicated that the four 'attendees' strongly agreed or agreed that they learned new things and that the training would help in improving relationships.

While themes of socioeconomic cultural differences were threaded through the design of the intervention, the extent of cultural bias in the project design had not become apparent till the final stage of the project. The balance of the intervention was more heavily weighted towards parents than mentors with the intervention comprised of five components aimed at parents and only one aimed at mentors, and none of the intervention was specifically aimed at the staff.

## RECOMMENDATIONS

As a result of this study a number of recommendations can be made that may assist with the need for ongoing refinement and strengthening of mentoring programs. General recommendations include continuing and increasing communication with parents and mentors, as well as considering alternate methods of outreach and communication, taking steps to increase staff consistency, and working to develop a more systemic approach to increasing cross cultural understanding.

In general parents placed value on communication with program staff in general and more specifically on sharing of information related to the program, activities, and the match. Continuing the parent orientation is highly recommended, as the analysis showed that the orientation expanded parent knowledge. Continuing and improving ongoing communication with program staff is also highly recommended, as the interviews suggest that the parents appreciate consistent outreach and the ability to have a constant point of contact with the program.

Consider exploring alternate methods of outreach and communication in general and in particular for program events. The postcards were not a success in the study, but there appears to still be a need for more outreach and communication. Using technology may result in better communication; mentors expressed that texting was a useful way of communicating with parents and noted that a forum to post about activities and events would be of interest. Parents indicated that their preferred method of contact was email, followed by cell phone, and then mail. Additionally, to reduce burden on participants some program offerings could be reformatted to, for example, communicate certain information electronically rather than in person.

In an effort to reduce staff turnover, programs might consider examining reasons why staff are leaving and identifying staff characteristics associated with longer retention. It is important to consider what steps could be taken to make the workplace more conducive to creating more consistency in program staffing. Both mentors and parents expressed desire for a constant point of support and contact within the BBBS organization.

In an effort to address and bridge the gap between the distinct perspectives of parents and youth, and the rest of the program, consider the following options: 1) revising the current mandatory mentor orientation to include more about the differences in perspective related to economic and cultural differences; 2) revising the parent orientation to delve deeper into the role of different perspectives, and 3) creating a program staff training on the differences in perspectives. A more comprehensive approach should help all participants develop the skills to cross over that divide and gain a better understanding of what the experiences are like on each side.

A related recommendation to address the socioeconomic cultural divide would be to increase staff and volunteers from within minority populations, especially those who come from low socioeconomic background. While it can be particularly challenging to do so, the emphasis on hiring leadership and staff, as well as recruiting volunteers from a population that already understands the experience of poverty and racial minority status and has been able to cross the bridge to the middle class should increase the success of this type of engagement and education.

## CONCLUSIONS

While we were unable to show any differences in youth outcome based on the PEM in this study, we found that parent orientation, a key mandatory component of the intervention, was well received and increased knowledge. We also found that voluntary attendance at the ETC and the biannual family events were not viable as implemented. Mentors' time constraints and availability were a significant challenge in the program, outside of the added ETC training. Lastly, future research on the role and impact of training on socioeconomic cultural perspective differences could be extremely useful to mentoring programs in determining the best ways to incorporate this content as well as to determine its impact on mentoring relationships and hence youth outcomes.



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