

Children with Incarcerated Parents



Children with Incarcerated Parents: A Quantitative Evaluation of Mentoring and Home-Based Counseling and Case Management Services

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About the Children with Incarcerated Parents Initiative

Since fiscal year 2008, Central Connecticut State University's Institute for Municipal & Regional Policy has been receiving annual funding from the Connecticut General Assembly to administer competitive grants for providing positive interventions for atrisk youth whose parent(s) and/or family members have been incarcerated. The goal is to use the various data and knowledge gained to inform intervention and public policy development.



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About the Institute for Municipal and Regional Policy

The Institute for Municipal and Regional Policy (IMRP) is a non-partisan, University-based organization dedicated to enriching the quality of local, state and national public policy. The IMRP tackles critical and often under addressed urban issues with the intent of ensuring broad based participation in the development and implementation of meaningful, just and lasting policy reform. In doing so, the IMRP bridges the divide between academia, policymakers, practitioners and the community.



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Executive Summary

Introduction

There is evidence that parental incarceration has negative effects on children (e.g., on mental health and behavior; Murray, Farrington, & Sekol, 2012). In particular, there has been a concern about "intergenerational incarceration," or a high likelihood that children with incarcerated parents (CIP) will themselves become justice-involved. The incarceration of a parent brings unique stressors to children including insecure/disrupted attachment with the incarcerated parent, the stigma faced by the child and family, and corresponding lack of social support. The Connecticut General Assembly has provided funding to address needs of children with an incarcerated parent. The funding is administered and effectiveness of services evaluated by Central Connecticut State University's Institute for Municipal and Regional Policy (IMRP). The IMRP, using a competitive RFP process, funded services beginning in 2008, by two providers. This report describes a quantitative evaluation of CIPs' well being while receiving services for up to 13 months. The time period of services evaluated was from January 2008 to July 2010.

About the Services: Mentoring and Home-Based Case Management/Counseling

The present evaluation study assessed the effects on children with an incarcerated parent of two types of services. The first type of service was one-on-one mentoring, and the second type was home-based counseling and case management.

Mentoring. Existing evaluation work on mentoring for CIP has shown mixed results. ICF International (2011) found some evidence that mentoring improved CIPs' well being, but Herrera, DuBois, and Grossman (2013) found that while mentoring had benefits for "higher-risk youth" with a variety of risk factors, those positive findings did not hold for CIP. The findings presented in this report can be interpreted as adding to the existing evidence base on mentoring for CIP.

Mentoring services funded by the IMRP were provided to children aged 5 to 18 in the Hartford, Bridgeport, and southeastern Connecticut areas by Nutmeg Big Brothers Big Sisters (BBBS), in partnership with Big Brothers Big Sisters of Southwestern Connecticut and Big Brothers Big Sisters of Southeastern Connecticut. Services were provided through BBBS' Coalition of Mentoring Excellence (COMET) program, based on the Amachi model (Goode & Smith, 2005). Matches were almost all community-based; only a few were school-based.

It is important to note that in October 2013 (during the preparation of this report), BBBS stated to the IMRP that its mentoring model had undergone changes consistent with a shift in mentoring practice toward providing more supports for youths along with the mentor. Therefore, while the findings of this report apply to the services for which the IMRP contracted, they do not necessarily apply to services that BBBS currently provides.

Home-based case management and counseling. We are not aware of existing evaluation work regarding home-based case management and counseling services for CIP; to our knowledge this report provides the first such data. Families in Crisis (FIC) provided the "Tomorrow's Children" program, funded by the IMRP, to CIP aged 0 to 18 in the Hartford area

(only children aged 5 and up participated in the evaluation). The program involved assessing children's and families' needs and then developing and implementing a care plan. Children received strength-based counseling, in which all case managers have been educated, and case management. Other services could include, as appropriate, providing transportation to visit the incarcerated parent and parent education and support.

About The Evaluation

- Families of eligible children receiving services from BBBS or FIC were asked to participate in the evaluation by the provider's case worker.
- Consenting families provided information at intake, and at seven and thirteen months after intake (parent ratings are the main focus of the report).
- Sixty-five BBBS youths and 38 FIC youths had complete data through 13 months, and
 this is the group included in the report. Attrition from intake to 13 months was
 substantial and our findings apply to CIP who completed the study (we cannot say what
 results would be found for other CIP). In some analyses the BBBS and FIC youths were
 compared to see if they provided comparable benefits; there were no randomly
 assigned control groups.+
- Survey instruments included measures of:
 - Problem severity (e.g., getting into fights and feeling anxious and fearful) on which lower scores are better;
 - Functioning (e.g., getting along with friends and feeling good about oneself) on which higher scores are better; and
 - o Strengths (e.g., interpersonal, family, school) on which higher scores are better.

Key Findings

- BBBS children showed no evidence of positive changes (either decrease in Ohio Scales Problem Severity or increase in Functioning or Strengths) from intake to 7 or 13 months. There was a significant decline in Strength scores from intake to 7 months; the decline was maintained at 13 months. The reason for the decline is unclear, but we do not conclude that services were harmful to the youths. There was no evidence of any positive change for different age or gender groups.
- FIC children showed a statistically significant decrease in Problem Severity and significant increases in Functioning and Strength scores from intake to 7 months. The changes were maintained from 7 to 13 months except for Problem Severity, which increased significantly to approximately intake level. (It is important to note that a preliminary look at data collected after July 2010 showed that this increase was no longer present.) There was no evidence that the size of any changes depended on age or gender.
- Direct comparisons between providers showed that at intake, FIC children had higher Problem Severity and lower Functioning than BBBS children; but with the significant changes for FIC children, the differences between BBBS and FIC children were gone by 7

months. There was no significant difference between providers on the Strengths at intake but FIC children scored significantly higher than BBBS children at 7 and 13 months.

- A possible (partial) explanation for the positive changes in FIC scores relative to BBBS scores is regression to the mean (a tendency for extreme scores/groups to become more moderate over time) in combination with differences between providers at intake. The pre-existing (intake) differences are clear. Regression to the mean would predict that the more extreme group (e.g., the low Functioning and Strength scores for FIC) would tend to converge with the less extreme group (BBBS) at 7 months.
- O However, we do not believe that regression to the mean provides an adequate explanation for our findings. Data on the Ohio Scales shown later in Figure 2 (Functioning scores) are consistent with the converging pattern, but results for the BERS Strength scores (shown later in Figure 3) are clearly inconsistent with regression to the mean. For the BERS total strength scores, means did not merely converge at 7 months; instead, FIC children surpassed the BBBS children with significantly higher strength scores at 7 months, a pattern that persisted at 13 months. We cannot rule out all possible alternative explanations, and we believe that regression to the mean may have played some role, but our findings are consistent with the idea that FIC's services had positive effects on CIPs' well being.
- For BBBS, an exploratory follow-up analysis showed some evidence that youths forming
 a closer relationship bond with mentors may have benefited from the mentoring
 services (but this finding only held for Strength scores and not for Problem Severity or
 Functioning).

Conclusions and Implications

The evaluation findings have several preliminary policy implications, which need to be considered in light of this evaluation's limitations (see below; e.g., small samples, lack of control groups, attrition from intake to 13 months).

- One implication of our findings is that there is not support for investing resources in the mentoring services we evaluated for children with incarcerated parents. It is important to note that other mentoring models exist (Garringer, 2011), and that the overall literature on effectiveness of mentoring for CIP is mixed (Herrera et al., 2013; ICF International, 2011). Mentoring may be worth exploring for CIP, but it may be most worthwhile when (a) combined with other supports for CIP, (b) designed specifically for CIP, considering the likely challenges and stressors of parental incarceration (e.g., disrupted attachment; stigma and shame of incarceration; loyalty conflict), and (c) involve training for mentors in how to best support CIP and their families.
- A second implication is that it appears valuable to put resources into comprehensive home-based case management and counseling services for CIP. This type of service showed positive results in our evaluation and should receive more attention.

- Consideration should be given to the best way to "scale up" services to reach a large number of CIP. One possibility is to use existing networks of service providers, provided there is adequate training in CIP-specific knowledge and interventions.
- We also recommend that other interventions be examined, and attempts to reach a broader segment of Connecticut's CIP population be made. We note in our report that our conclusions are limited by the recruitment methods of the service providers.

Peer Review Process

Before releasing this report, the Institute for Municipal and Regional Policy (IMRP) sought a peer review for an independent assessment of (a) the strengths and weaknesses of the evaluation study and (b) the validity of the conclusions and recommendations. Jane Siegel, Ph.D., served as the coordinator for the review (similar to an editor in the journal peer review process, except that she had input, but did not have control over the final product) and was not compensated for her work. Dr. Siegel holds a Ph.D. in Criminology from the University of Pennsylvania and is an associate professor of Criminal Justice and Chair of the Department of Sociology, Anthropology and Criminal Justice at Rutgers University-Camden. She is an Associate of the Center for Children and Childhood Studies. She has published numerous articles in peer-reviewed journals, recently (in 2011) published a book titled *Disrupted Childhoods: Children of Women in Prison*, and served as Associate Editor of the *Journal of Offender Rehabilitation*.

Dr. Siegel chose and recruited a panel of three knowledgeable reviewers whose identities were unknown to IMRP. IMRP provided a list of potential reviewers to Dr. Siegel but she was free to use her professional judgment in choosing the panel (whether from IMRP's list or not). IMRP's only request was that the review panel include at least one reviewer with expertise in quantitative research and at least one with expertise in working directly with children with incarcerated parents. Reviewers were asked to provide one or two pages of comments on strengths and weaknesses of the research and on what conclusions and policy recommendations were warranted. They were also asked to make constructive comments to improve the report. Reviewers were not compensated.

Once Dr. Siegel received the three reviews she provided them (anonymously) to IMRP. Dr. Siegel also wrote a summary of the reviews, identifying important themes. Themes included suggestions for expanding our review of the literature on effects of parental incarceration, and discussing limitations of our own evaluation study. We revised the report following the peer review, and we thank Dr. Siegel and the three anonymous reviewers for their helpful input.

Children with Incarcerated Parents: A Quantitative Evaluation of Mentoring and Home-Based Case Management Services

Prison populations have risen rapidly since 1980 in the United States and in 2010 there were over 1.5 million adults in prison and over 760,000 in jail (Glaze, 2011). An important issue is the effects of incarceration on minor children - Glaze and Maruschak (2008) estimated that in 2007, over 800,000 of the 1.5+ million prisoners had children under age 18. There is considerable empirical evidence that a parent's incarceration can have negative effects on a child. Research on children with incarcerated parents (CIP) has shown an increased risk for incarceration (Huebner & Gustafson, 2007) and psychopathology (Murray & Murray, 2010). Murray, Farrington, and Sekol (2012) meta-analyzed the literature and concluded that parental incarceration is associated with increased risk of antisocial behavior (e.g., drug use; criminal behavior). They also found some evidence of an association with mental health problems. It is important to keep in mind that families affected by incarceration also tend to experience other negative factors such as poverty, and the existing research does not untangle the effects of parental incarceration versus other factors. It also does not establish through what mechanism(s) parental incarceration may exert an influence on children.

One theoretical mechanism through which parental incarceration might lead to negative effects is insecure attachment (Murray & Murray, 2010). The process of arrest, court appearances, and incarceration can be extremely anxiety provoking and can lead to the absence of a parent. During incarceration, children experience an extended separation from their parent with very limited access to meaningful interaction. Further, children are not always told that the absent parent is incarcerated, which can be confusing, cause additional anxiety and fear, and can be harmful to attachment security. Attachment security can also be harmed by the stigma that attaches to having an incarcerated parent. According to Murray and Murray (2010), stigma may harm attachment because it can reduce open communication within the family, lead to the child having a negative representation of the incarcerated parent, and/or reduce social support to the family. The insecure attachment may then lead to internalizing and/or antisocial behavior (which may include criminal behavior).

Appropriate interventions would be ones that address attachment security and/or the other challenges faced by families affected by incarceration (e.g., stigma, open communication, social support), e.g., supporting a strong and healthy relationship between the incarcerated parent and the child (when appropriate). We discuss later how two types of services, mentoring and home-based counseling and case management, can potentially address these issues.

The research literature documenting the potential for negative effects underscores the urgency of intervention for CIP. However, there is a shortage of evaluation work informing practice for this population (Murray & Farrington, 2006). The main goal of this report is to address that shortage by providing evidence with implications for intervention with CIP.

Connecticut Criminal Justice Policy

A crude estimate of the number of CIP in Connecticut can be calculated using values from Guerino, Harrison, and Sabol (2011) and Glaze and Maruschak (2008). Guerino et al. (2011) reported that in 2010 there were 19,321 prisoners in Connecticut (under state and

federal jurisdiction). Based on Glaze and Maruschak's (2008) estimates of the number of prisoners and minor children, we calculated estimates that 53.33 percent of prisoners had minor children, and that the mean number of minor children per prisoner was 2.11. Applying these values to the Connecticut prisoner population from 2010 provides an estimate of 21,741 minor children with incarcerated parents in this state.

Policymakers in the State of Connecticut have been reconsidering criminal justice policy since about 2000 with an eye toward investing resources to reduce the prison population while maintaining public safety. One component of Connecticut's strategy has been to address the needs of CIP as a way to reduce future incarceration. In 2008, the Connecticut General Assembly began funding Central Connecticut State University's Institute for Municipal & Regional Policy (IMRP) to administer competitive grants supporting positive interventions for CIP. One important goal of IMRP is to evaluate the effectiveness of services to inform intervention and public policy development.

The purpose of this report is to present quantitative evaluation results based on an analysis of data regarding two types of services - mentoring and home-based case management and counseling, after approximately three years of funding beginning in 2008. The focus is on analysis of change in children's strengths, functioning, and problems from intake into services until 13 months following intake. Our hope was to see increases in children's strengths and functioning, and a decrease in problems up to 13 months after beginning services.

Mentoring Children with Incarcerated Parents

According to DuBois, Portillo, Rhodes, Silverthorn, and Valentine (2011), the trusting and empathic relationship that can develop between a mentor and mentee leads to a number of positive outcomes including social-emotional growth and identity development. More to the point, Rhodes (2002; 2005) argued that a mentor, by providing a positive relationship that is responsive to a youth's needs, could serve as an "alternative or secondary attachment figure" (p. 40). The positive regard that mentors can provide can also improve youths' feelings of selfworth. Further, by reinforcing parents' advice, Rhodes (2002) suggested that mentors can actually improve youth-parent relationships.

There is therefore a theoretical basis for expecting that mentoring can address the attachment issues that may ensue from having an incarcerated parent, as well as improve a mentee's evaluation of self-worth in light of having an incarcerated parent; it may also help in dealing with the strains on the child-community parent relationship. More generally, mentoring may promote youths' development of strengths in terms of social-emotional, cognitive, and identity development (DuBois et al., 2011). Note, however, that DuBois et al. (2011) hypothesized that the benefits of mentoring would depend on factors such as the length of the mentoring relationship and criteria for matching mentors and youth (e.g., interests).

¹It now appears that an important belief motivating federal and state policy toward CIP was incorrect. It has been widely claimed that (a) seven out of ten CIP will become incarcerated and (b) CIP are six times more likely than other youths to become incarcerated. Flynn (2013) documented the erroneous origin of these claims, and Conway and Jones (2013) reviewed existing research showing that, while there is evidence that CIP are somewhat more likely to become justice-involved, the likelihood is not nearly what has been claimed. However, we believe that there are other significant costs associated with parental incarceration (e.g., increased incidence of physical and mental health problems; e.g., Lee, Fang, & Luo, 2013) and that it is critical for public policy to address this issue.

There is a recent history of funding mentoring programs for CIP by the U.S. federal government (Social Security Agency, 2011). The rationale for providing mentors is that (a) close one-on-one relationships are important for a child's development, and (b) in the absence of the incarcerated parent, it is assumed that the child will benefit from forming a relationship with an adult other than the child's caregiver (i.e., a mentor).

A large-scale review of mentoring outcome studies by DuBois et al. (2011) has shown modest benefits for children over a developmental spectrum ranging from early childhood to adolescence. We know of two studies assessing the effects of mentoring specifically for CIP. First, ICF International (2011) evaluated the Amachi Texas program using a randomized controlled trial in which youths were randomly assigned to receive a mentor or remain on the waiting list during data collection. Their "main impact study" compared mentored (N = 108) and control (N = 114) groups six months from the match date. Results showed that two out of five "Child-Family/Community Relationship Outcomes" showed significant differences favoring the mentored group: "encouraging and caring parents" and "parental supervision/awareness." Two out of three "Child Well-being Outcomes" showed significant differences, "self-worth/self-esteem" and "sense of future." Of five school-related outcomes, none showed a difference between mentored and control groups.

The second study of which we are aware was conducted by Herrera, DuBois, and Grossman (2013), who conducted an assessment of mentoring for 1,310 "higher-risk youth." The study did not specifically target CIP (though the authors did report some CIP-specific findings); they evaluated seven mentoring programs recruiting youths with a variety of risk factors, e.g., single-parent household or low income. There were experimental (randomized) and quasi-experimental parts of the study; both parts showed some benefits for mentored as compared to non-mentored youths — e.g., fewer depressive symptoms and better school performance.

But when assessing whether results differed for particular subgroups, the authors concluded that positive effects did not hold for children with an incarcerated parent or close family member. Herrera et al. (2013) stated "For each outcome, youth with such a family member (about one quarter of our sample) did *not* seem to benefit from mentoring, whereas significant program benefits were evident for youth who did not have a family member incarcerated. Having an incarcerated *parent* in particular (which was likely the case for many of these youth) may be especially challenging as a context for mentors and programs to make significant inroads with youth..." (pp. 59-60).

In another relevant study, Shlafer, Poehlmann, Coffino, and Hanneman (2009) evaluated a federally funded mentoring program by BBBS, and included 57 children ages 4 to 15 who were matched with mentors. Children and mentors were followed for 6 months from the initial match. While Shlafer et al. measured problem behavior at intake and at 6 months, they did not report whether there was significant improvement - possibly because they only obtained 6-month data for 18 of the original 57 children (the means in Table 1, however, suggest a lack of improvement). One interesting finding was that among the 18 children with 6-month data, those who met with their mentor more frequently showed lower problem scores.

In summary, there is a large body of research showing modest benefits of mentoring in general, but for CIP the evidence is not as supportive (though ICF International, 2011 did find positive effects for some outcomes).

A recent development in mentoring is worth mentioning here. Garringer (2011) described cutting edge developments in mentoring practice that may constitute a paradigm shift. The practices Garringer described involve seeing mentoring as embedded in a larger system that provides supports for system-involved youth. One example involves a model for mentoring foster youth including therapeutic groups and a structured curriculum lead by professionals; mentors are "the 'glue' of the model" (p. 6), providing transportation, reinforcing learned skills, etc. It is important to note that in this model, mentors are highly trained and spend significant time each week discussing mentees with professionals, playing essentially a paraprofessional role. It is not clear how existing research on the effectiveness of mentoring for CIP would apply to this newer type of mentoring model.

Home-Based Case Management and Counseling for Children with Incarcerated Parents

The second type of service for CIP we evaluated was home-based case management and counseling. This type of service can address trauma and other emotional and social strains due to the incarcerated parent's arrest, trial, incarceration, and reentry. This may help to promote good relationships between youth and community parents (i.e., non-incarcerated parents caring for children). Service providers can potentially help children build or maintain relationships with incarcerated parents, e.g., by providing transportation for visitation, encouraging communication when appropriate, and helping children process their feelings about their parent's incarceration. These relationships could help children to deal with insecure attachment issues that arise due to the parent's incarceration. More generally, CIPs' strengths (e.g., interpersonal; social-emotional) may be increased through the use of strength-based counseling.

Another potential source of stress for children is the negative effects of incarceration on "the other parent" (the non-incarcerated/care giving parent; Newby, 2008). The care giving parent may have difficulty dealing with the incarceration, and this may negatively affect the child. Newby (2008) noted that the care giving parent's needs, often overlooked, may include social and emotional support, help dealing with financial demands, and support in coping with anger and putting the child's needs first. Wraparound services can help to address these caregiver needs and indirectly support the child. Further, Murray and Farrington (2006) stated that, while there is a lack of high-quality evidence on effective programs for CIP, interventions to improve parenting skills for community parents might benefit their children.

There is a lack of evaluation work on home-based counseling and case management as an intervention for CIP. However, Johnston (2012) reviewed a number of types of services for CIP including therapeutic services, for which she reported a reduction in later crime and incarceration. In addition to this evidence, a strong logical argument can be made that children should benefit from comprehensive services to themselves and their families.

Summary

The purpose of this report is to evaluate two types of services for CIP funded by IMRP — mentoring and home-based case management and counseling. The focus is on short-term outcomes including children's strengths, functioning, and problems. The report is intended as a

preliminary document on services for CIP, intended to be followed by work on other types of services and longer-term outcomes (e.g., justice involvement of youths receiving services).

Method

Service Providers

Nutmeg Big Brothers Big Sisters (BBBS). IMRP contracted with Nutmeg BBBS, in partnership with Brothers Big Sisters of Southwestern Connecticut and Big Brothers Big Sisters of Southeastern Connecticut, to provide mentoring services to children with incarcerated parents in the Hartford, Bridgeport, and southeastern Connecticut areas. Services were provided through Nutmeg BBBS' Coalition of Mentoring Excellence (COMET) program, based on the Amachi model (Goode & Smith, 2005). The children, aged 5 to 18, were served in the greater Hartford and Bridgeport areas as well as southeastern Connecticut. BBBS's agreement with IMRP was that they would identify eligible children and recruit mentors to match with children based on shared interests, and that the mentor-mentee pairs would meet on average 6-10 hours per month, and at least 96 hours in a 12-month period. Matches could be either community-based (mentor/mentee pairs could meet at locations of their choosing) or school-based (pairs meet at a designated school), though in practice almost all matches were community-based. BBBS agreed to provide ongoing support and needs assessment for mentors and children. When multiple children in the same family were served, each child received his or her own mentor (i.e., services were separate).

According to materials submitted to IMRP by BBBS in 2008 (regarding their practices and results prior to IMRP funding), during the four years prior, COMET provided mentoring services for over 450 children with an incarcerated parent. The agency recruited mentees and mentors through the media, relationships with partners, and presentations/tabling events at churches, local corporations, and community groups. The average mentor-mentee match in the COMET program had lasted 1.5 years. BBBS stated that matches lasting less than 6 months were not beneficial to the children, and that for children with incarcerated parents match length was particularly important (the research literature suggests that poorly implemented mentoring can actually harm a child; e.g., Grossman & Rhodes, 2002, showed that children in matches terminating after a short time tended to have negative outcomes).

We note that in a meeting with Nutmeg BBBS while this report was in preparation, BBBS stated that they have made changes to their mentoring model since the data reported here were collected, involving greater supports for youths. This would be consistent with newer practices described by Garringer (2011). To the extent that the mentoring model has been changed, the current evaluation results do not necessarily hold for the current BBBS model.

For the 111 children with valid intake and 7-month data, a rating by the BBBS caseworker (based on discussion with the mentor) at 7 months of relationship closeness indicated that 75.5% of matches had either a close or very close relationship. Caseworkers were asked how many times per month the mentee and mentor met, on average; 41 mentor-mentee pairs met once or twice per month, 43 met more than twice, and for 27 pairs the caseworker did not answer the question.

Families in Crisis (FIC). The IMRP contracted with FIC to provide home-based case management and counseling, which involved assessing children's and families' needs, developing and implementing a care plan, and assessing outcomes. FIC's proposal stated that they would provide to families the "Tomorrow's Children" program which focused on in-home strength-based counseling (in which all case managers have been educated) and case management. Other services could include, as appropriate, providing transportation to visit the incarcerated parent, educational support (e.g., attending parent-teacher conferences), and parent education and support. When multiple children in the same family were served, a separate treatment plan was developed for each child considering the child's individual situation, challenges, and strengths.

FIC has provided services for over 20 years to families in Connecticut affected by incarceration. The agency serves CIP referred to them as being in need of services, e.g., by a parent, school, incarcerated parent, or other social service agency. FIC spreads the word to affected families, e.g., by posting flyers in waiting areas of correctional facilities, informing incarcerated parents during corrections-based programming, and having a presence in the lobby areas of courthouses.

A child was deemed eligible for the CIP program if aged 0-18 with a currently incarcerated parent (only children age 5 and up were included in the evaluation study.). Counseling occurred either weekly, biweekly, or monthly depending on a child's treatment plan, and lasted about 45 minutes to one hour. The focus of counseling was to identify negative behavior patterns at home and/or at school, and to deal with them by identifying children's and families' strengths and building on them. At intake the case worker/counselor worked with the child and family to agree on goals and a time frame for achieving them. Progress toward goals was assessed at the end of the agreed-upon time frame. Case management involved connecting children and families with other services (e.g., health services, recreational programs, etc.).

Children Served

Children included in the present study had their "intakes" into services during a 13-month period from January 2008 to July 2010 (for children with intake dates near the end of this period, the follow-up surveys were collected after July 2010). There were 65 BBBS children and 38 FIC children with data collected at intake, the 7-month follow-up, and the 13-month follow-up. The N = 65 for BBBS and N = 38 for FIC represent a subset of all children served by the providers; some children's families did not participate in the evaluation, or began the evaluation but did not remain in contact with the provider for 13 months, or had invalid evaluations (e.g., conducted outside the specified time window). Table 1 shows numbers of children served, and with valid evaluations at intake, 7 months, and 13 months for each provider. Ten of the FIC children were also served by BBBS. Sample sizes vary from scale to scale and from parent to case worker ratings (in some cases parents or workers failed to complete particular scales).

An important note about our conclusions stated later is that they apply to a subset of the entire population in which we are interested. Broadly speaking, we are interested in learning about CIP in Connecticut. The population we actually sampled from is limited to clients served by two providers (BBBS and FIC) between January 2008 and July 2010; it is further

limited by attrition to clients who completed the evaluation. The percent of children beginning the study who completed the evaluation at 13 months is small (39% for BBBS and 29% for FIC), though we note that in analyses shown in the Appendix involving only intake and 7-month data (with a much higher percentage of the original clients) the substantive conclusions are essentially the same.

Description of the Quantitative Instruments

Instruments were chosen to measure outcomes that focused on the goals of IMRP and the service providers. While the legislative intent of the funding was to reduce future justice-involvement of CIP, IMRP believed that improving children's well-being (e.g., functioning and strengths), while decreasing their problems in the short term, would facilitate this. One short-term goal was the reduction, and possible prevention, of antisocial behavior (e.g., drug and alcohol use; conflicts with others); we considered this important because research has shown that parental incarceration may contribute to children's antisocial behavior and mental health problems (Murray et al., 2012). A second short-term goal was to build CIPs' strengths (e.g., interpersonal and emotional) because we believed that building strengths could help children cope and avoid the potential negative effects of parental incarceration. These short-term goals were consistent with the approaches of BBBS and FIC (e.g., FIC's use of a strength-based counseling approach).

Table 1: Number of Children with Incarcerated Parents with Valid Evaluations at Intake, 7 Months, and 13 Months

Provider	Number of CIF Served	Intake Evaluations	Intake and 7- Month Evaluations	Intake, 7-Month, and 13-Month Evaluations
BBBS	191	165	111	65
FIC	212*	132*	55*	38*

Note. Some "CIP served" did not participate in the evaluation because they were below age 5 or the community parent/guardian did not consent to participation.

* FIC evaluations are not final totals because data collection is on-going (e.g., some children who currently have only intake evaluations will eventually have 7- and 13-month evaluations).

Problems were assessed using the Ohio Scales and strengths using the Behavioral and Emotional Rating Scales.

Ohio Scales Short Form. The Ohio Scales Short Form (Ogles, Melendez, Davis, & Lunnen, 2000; 2001) includes forms for parent and case worker reports. Each source's form has two subscales, problem severity (focusing on problems such as getting into fights and feeling anxious and fearful; lower scores are better) and functioning (focusing on things like getting along with friends and feeling good about self; higher scores are better). The problem severity

scale consists of a list of 20 problems (e.g., "Getting into fights," "Feeling sad or depressed"); parents and workers rate each problem on a scale from 0 ("Not at All") to 5 ("All of the Time").

The functioning scale presents a list of everyday activities (e.g., "Getting along with friends," "Concentrating, paying attention, and completing tasks"). Respondents indicate the degree to which the child's problems affect his or her ability in these activities on a scale from 0 ("Extreme Troubles") to 4 ("Doing Very Well").

Ogles et al. (2000; 2001) provided reliability and validity evidence to support both the problem severity and functioning scales, and for both parent and worker versions. Internal consistency reliabilities were high (at least .86 for each scale) as were test-retest reliabilities (at least .77 for each scale over one week, though only the parent version was assessed). Validity was demonstrated by high correlations with similar measures such as the Child Behavior Checklist (r's= .89 for problem severity and .77 for functioning). (Note: for test-retest and validity data, the long form [44 items] of the problem severity scale was used.)

Behavioral and Emotional Rating Scale-2 (BERS-2). The BERS-2 (Epstein, 2004) is a measure of children's emotional and behavioral strengths; it has a total Strengths score as well as six subscales: Interpersonal, Family, Intrapersonal, School, Affective, and Career strengths (the Career subscale only applies to parents and not to the teacher/case worker version). On all subscales higher scores indicate greater strengths. Epstein (2004) summarized substantial evidence of reliability and validity for the total strengths scores as well as subscales, and for both the parent and teacher/case worker versions. Internal consistency reliabilities were at least .97 for the total strength score, and at least .80 for all subscales, and test-retest reliabilities were at least .80 over two weeks and ranged from .53 to .68 for a six-month interval (teacher/worker form only). Validity evidence was provided in the form of substantial correlations with other instruments.

In our interpretations we will concentrate on the parent ratings because case worker ratings had more missing data. This is especially evident for the BERS Strength score (total); when at least 10 BERS items are left blank the total Strengths score cannot be computed (Epstein, 2004). This occurred in the case worker data for a substantial number of children, whereas for parent ratings it only occurred a handful of times (see the lower *Ns* for BERS Strength scores than for Ohio Scales in Table 4 vs. the *N* for parent ratings in Table 3). The missing data may be an indication that case workers were less sure (and therefore possibly less accurate) at assessing children. A related issue is that, as can be seen by comparing Tables 3 and 4, BERS ratings were substantially higher for case workers than for parents. While the exact source of this difference is unclear it is consistent with the idea that case workers have less accurate knowledge than parents of children's strengths.

Procedure

The Ohio Scales and BERS were completed by the community parent or guardian and the service provider's case worker at intake into services (for BBBS, case workers completed instruments based on input from mentors). It should be noted that at the onset of the evaluation, child-clients completed the youth version of the Ohio Scales and BERS (if at least nine years of age and assented to do so) to provide a third perspective on effect of participation in service. This practice was halted due to low completion rate (many youths were less than

nine years old); therefore, this information is not included in this analysis. Instruments were completed again 7 and 13 months following intake (within a four-week window; evaluations completed outside this window were considered invalid and were not used). The assessment time frame was determined based on information in providers' proposals that BBBS' average match-length was 12 months, and FIC's average service length was 6 to 7 months.

Case workers also completed an intake form developed by the IMRP providing information about demographics (e.g., child's age and sex) and the incarcerated parent (e.g., extent of contact with the child). Similar follow-up forms were completed by case workers at 7 months and 13 months.

The IMRP provided training for case workers to administer the scales followed by ongoing technical assistance for program administrators in the implementation and administration of the evaluation. Parent instruments were intended to be completed in the presence of the case worker (with assistance from the case worker only if necessary), though in many cases BBBS case workers read the instruments to parents over the telephone. If a child/family was no longer receiving services when the follow-up instruments were due the service provider attempted to contact the family to arrange an appointment; in some cases families were difficult to contact. This largely accounts for the decrease shown in Table 1 from the number of intake evaluations to the number of 7- and 13-month evaluations for each provider. (Note: another reason for loss of cases between intake and follow-ups is follow-up evaluations being completed outside of the valid time window.)

Results

Descriptive Data

Table 2 shows demographic information about the children and families separately for BBBS and FIC. For both providers slightly more children were male than female, and a majority were age 10 or less. A large majority had a father incarcerated (over 75% for each provider).

At least half of the children lived with the incarcerated parent prior to arrest (60.0% for BBBS and 50.0% for FIC) and about half visited the incarcerated parent at least occasionally while in prison (as noted on the Intake form). Most children were still living in the same residence at 7 months and at 13 months as at intake; and most of the children were still receiving services at 7 months and 13 months.

The sample is likely biased toward children in families that are fairly stable. It is probably more difficult to maintain contact (and include in evaluations) families that move frequently and/or discontinue services, so such families may be underrepresented in the current dataset.

For each demographic variable we conducted significance tests comparing BBBS with FIC. In most cases this was done using χ^2 tests for independence, but for mean age we used an independent samples t-test. The only variable showing a significant difference was whether the child was still receiving services from the provider at 13 months. There was a greater likelihood of receiving services for FIC than for BBBS youths, $\chi^2(1) = 7.98$ (p < .05). Because of this difference, for analyses reported later comparing outcomes for BBBS and FIC, we re-ran analyses using a dummy variable, indicating whether or not the youth was still receiving

services at 13 months, as a covariate. Results did not change substantively so we only report the main analyses, excluding the covariate.

Table 2: Descriptive Data for Children with Valid Intake, 7-, and 13-Month Evaluations

	BBBS (N = 65)	FIC (N = 38)		
Child's Gender	((55)		
Female	31 (47.7%)	16 (42.1%)		
Male	34 (52.3%)	22 (57.9%)		
Age	Mean = 10.32 years (SD = 2.25); range from 5 to 15	Mean = 10.73 years (SD = 2.73); range from 5 to 16		
5-11	49 (75.4%)	16 (24.6%)		
12-18	23 (60.5%)	15 (39.5%)		
Race/Ethnicity				
African American/Black	21 (32.3%)	18 (47.4%)		
Latin American/Hispanic	29 (44.6%)	14 (36.8%)		
White/Caucasian (Not Hispanic)	16 (24.6%)	6 (15.8%)		
Other/Left blank	6 (9.2%)	6 (15.8%)		
Incarcerated Parent				
Father	51 (78.5%)	32 (84.2%)		
Mother	7 (10.8%)	1 (2.6%)		
Both	3 (4.6%)	5 (13.2%)		
Step-father	1 (1.5%)			
Not indicated	3 (4.6%)			
Lived with incarcerated parent prior to arrest	39 (60.0%)	19 (50.0%)		

Table 2 (Continued): Descriptive Data for Children with Valid Intake, 7-, and 13-Month Evaluations

	BBBS (N = 65)	FIC (N = 38)
Child visits incarcerated		
parent		
Intake	31 of 63 with valid data	22 of 38 (57.9%)
	(49.2%)	
7 Months	17 of 40 still incarc (42.5%)	11 of 22 still incarc (50.0%)
13 Months	13 of 36 still incarc (36.1%)	12 of 28 still incarc (42.9%)
	, ,	
Child still in same		
residence as intake		
7 Months	58 (89.2%)	35 (92.1%)
	•	, ,
13 Months	50 (76.9%)	33 (86.8%)
	,	,
Child still receiving services		
from provider ^a		
7 Months	61 (93.8%)	36 (94.7%)
	(,	,
13 Months	44 (67.7%)*	35 (92.1%)*
		,
Incarcerated parent		
released from prison		
7 Months	18 of 65 (27.7% [11 left	6 of 33 (18.2% [5 left
	blank])	blank])
	~.~1/	~·~··········/
13 Months	15 of 46 (32.6% [19	9 of 33 (27.3%)
10	missing or unknown])	2 2 2 (2 / 13 / 13 / 13 / 13 / 13 / 13 / 13 / 1
-	og or analown])	

^{*} BBBS and FIC samples differ significantly, p < .05

Children with Complete Data vs. "Non-Completers"

For a substantial number of children with intake data we did not obtain complete follow-up data at 7 months and 13 months, and this attrition may introduce a bias into our results. This level of attrition has been observed in other studies (e.g., Shlafer et al., 2009), but Ogles et al. (2000) noted that there is no way to know whether the scores of children not completing the study improved, declined, or remained unchanged. While it is impossible to

^a Numbers of children still receiving services do not include those for whom evaluations were not available; it is likely that many children without available evaluations were no longer receiving services.

know what results would have shown for the "non-completers," we compared completers and non-completers (separate comparisons for BBBS children and FIC children) on demographics and intake scores on BERS and Ohio Scales.

For BBBS, completers scored significantly (p < .05) higher than non-completers on BERS interpersonal and affective subscales, and significantly lower on the Ohio Scales Problem Scale. For FIC there were no significant differences between completers and non-completers on BERS or Ohio Scales scores.

Regarding demographics, independent-groups t-tests on children's ages indicated that neither BBBS nor FIC showed a significant age difference between completers and non-completers. Gender and racial/ethnic differences between completers and non-completers were assessed using χ^2 tests and all were non-significant. Additional χ^2 tests assessed differences in which parent was incarcerated (mother, father, both, step parent) and whether the child lived with the incarcerated parent prior to incarceration. The only significant result was for FIC children's incarcerated parent - completers were more likely to have both parents incarcerated (13% for completers vs. 1% for non-completers). In summary, we did find some differences between non-completers and CIP included in our analyses, particularly for BBBS, and our conclusions are valid for the latter group.

BBBS: Children's Changes From Intake to 7 Months and 13 Months

As stated earlier, the purpose of this report was to evaluate services for CIP, focusing on children's strengths and problems as short-term outcomes. We therefore assessed change from intake to 7 and 13 months on the BERS and Ohio Scales. Note that *N*'s reported below for each individual analysis are lower than the totals from Table 2 (65 for BBBS and 38 for FIC) because among the 65 BBBS and 38 FIC children, for each instrument some children had missing or invalid scores.

Changes in total BBBS group. We assessed changes in children's Ohio Scales scores (Problem Severity and Functioning) and BERS scores (Strengths including total score as well as subscales) at intake, 7 months, and 13 months. Means are shown in Table 3 (parent ratings) and 4 (case worker ratings), though as we noted earlier we will concentrate on interpreting parent ratings. Note that for BERS scores we only conducted significance tests for the Strengths total score and not for the subscales, following Cohen's (1990) recommendation to conduct a small number of well-chosen comparisons to avoid spurious findings.

Means in Table 3 show no evidence of positive changes in BBBS children from intake to 7 or 13 months. Paired-samples t-tests showed nonsignificant differences for the Ohio Scales Problem Severity and Functioning scores, and a significant (p<.05) <u>decrease</u> in Strengths from intake to 7 months as measured by the BERS (note – for the larger sample presented in the Appendix, the change decrease intake to 7 months is not significant).

Ogles et al. (1999) suggested that clinically significant change could be represented on the Problem Severity scale by an improvement of at least 10 points, taking the child below a score of 25. At 7 months, only 3 of 58 children showed a 10-point improvement (and 2 of them moved from above a score of 25 to below 25). For the Functioning scale a clinically significant change would be an increase of 8 or more points, bringing the youth to a score above 50. Seven

of the 58 children increased by at least 8 points, but only two of them had scores below 50 to begin with.

An additional exploratory analysis (not reported fully here) for the 44 children still receiving services at 13 months showed results substantially similar to those reported above.

Changes by age and gender. To explore whether changes over time depend on age or gender we conducted follow-up analyses using parent data. Because this involves splitting the samples, which would yield very small groups at 13 months, we concentrated on children who had valid intake and 7-month (but not necessarily 13-month) data. This meant we had N = 111 children available for BBBS and N = 55 for FIC.

For age we conducted two-way mixed analyses of variance with time (intake vs. 7-month follow-up) as a repeated measures factor, and age group (10 and under, N = 47 vs. 11 and over, N = 64) as an independent groups factor. Our main interest was in whether there were interaction effects; an interaction effect would show different amounts of change for the different age groups. We conducted analyses only for the two Ohio Scales variables and the BERS Strengths score. For age there were no significant interaction effects (p's all greater than .05), indicating no evidence that mentoring produced more change for one age group than the other. For gender we did analyses of variance similar to those for age. As with age, none of the interaction effects was statistically significant.

Mentor-mentee relationship quality. The 7-month and 13-month outcome surveys completed by BBBS caseworkers included a rating of the "relationship closeness/emotional bond between the mentor and mentee" with the following responses options: "Not at all close" (which we coded as a 0), "Somewhat close" (coded as a 1), "Close" (coded as a 2), and "Very close" (coded as a 3). We explored the role of relationship closeness by using it as a predictor of BERS total Strength scores and the Ohio Scales scores in multiple regression analyses. We began by using 7-month relationship closeness as a predictor of 7-month outcome measures, using the intake measure as a control variable (e.g., predicting 7-month BERS Strengths, using intake BERS Strengths as a control measure; parallel analyses were done for the Ohio Scales Functioning and Problem Severity measures). We then repeated the analyses using 13-month relationship quality to predict the 13-month outcome measures, again using the appropriate intake measures as control variables.

Results for the BERS at both 7 and 13 months showed that relationship closeness was positively associated with the outcome. However, none of the Ohio Scales analyses showed any significant prediction of outcomes by relationship closeness. These findings provide some exploratory evidence suggesting that mentoring can lead to positive changes if the mentor and mentee form a close emotional bond.

FIC: Children's Changes From Intake to 7 Months and 13 Months

Changes in total FIC group. Table 3 shows evidence of positive changes for FIC children. Paired-samples t-tests showed that by 7 months there was a statistically significant (p<.05) decrease in Ohio Scales Problem Severity scores, and significant increases in Ohio Scales Functioning and BERS Total Strengths scores.

Table 3: Mean Parent-Rated Outcomes (and SDs) for Ohio Scales and BERS at Intake, 7 Months, and 13 Months (Includes Children with Valid Intake, 7-, and 13-Month Evaluations)

	BBB	BBBS				FIC			
	N	Intake	7-	13-	N	Intake	7-	13-	
			Month	Month			Month	Month	
Ohio Scales									
Problem	55	7.8	10.0	8.6	35	14.6	9.0*	13.5†	
Severity		(9.2)	(9.6)	(8.2)		(9.9)	(10.0)	(11.2)	
Functioning	55	66.0	64.9	65.1	35	60.2	66.8*	64.8*	
<u>. </u>		(10.2)	(10.0)	(11.7)		(12.6)	(10.4)	(10.8)	
BERS						-			
Strengths	53	109.7	105.5*	103.0*	31	103.5	112.9*	111.4*	
(Total)		(18.0)	(13.9)	(14.1)		(20.6)	(15.1)	(16.9)	
Interpersonal	53	12.3	11.5	11.2	31	10.6	11.9	12.1	
		(3.2)	(2.8)	(3.1)		(4.2)	(3.2)	(3.0)	
Family	53	10.8	10.7	10.1	31	10.4	11.0	10.8	
		(2.6)	(2.3)	(2.5)		(3.3)	(2.8)	(3.0)	
Intrapersonal	53	11.8	11.2	10.9	31	11.8	13.2	12.8	
		(3.2)	(2.9)	(2.7)		(3.2)	(2.5)	(3.0)	
School	53	10.8	10.0	9.6	31	10.0	11.2	11.2	
		(3.2)	(2.9)	(2.7)		(3.6)	(2.8)	(2.7)	
Affective	53	11.7	10.8	10.5	31	9.9	11.7	11.7	
		(2.6)	(2.3)	(2.2)		(3.2)	(2.2)	(2.4)	
Career	42	10.6	10.0	9.7	19	10.9	11.9	12.0	
		(2.7)	(2.8)	(2.8)		(4.1)	(3.1)	(3.5)	

^{*} Indicates the 7- or 13-Month mean is statistically significantly different from that provider's intake mean (p<.05).

Notes. Only children with valid intake, 7-month, and 13-month evaluations are included. To reduce the number of statistical significance tests, we only report significance results for BERS Total Strength scores and not for the dimension scores.

In most cases the significant improvements were maintained at 13 months, although for Ohio Scales Problem Severity, the scores had increased significantly from 7 to 13 months to almost the intake level.

[†] Indicates the 13-Month mean is statistically significantly different from that provider's 7-Month mean (p<.05).

Table 4: Mean Case Worker-Rated Outcomes (and SDs) for Ohio Scales and BERS at Intake, 7 Months, and 13 Months

	BBBS				FIC	FIC			
	N	Intake	7-	13-	N	Intake	7-	13-	
			Month	Month			Month	Month	
Ohio Scales									
Problem	61	6.7	7.9	7.0	35	14.4	12.8	12.7	
Severity		(7.8)	(8.4)	(6.9)		(12.8)	(17.1)	(8.6)	
Functioning	61	64.5	67.0	65.0	35	61.3	66.4*	64.6	
		(13.5)	(9.5)	(10.9)		(10.5)	(9.5)	(10.7)	
BERS									
Strengths	43	136.7	136.6	136.8	26	132.7	136.5	137.3	
(Total)		(14.8)	(13.3)	(12.3)		(16.4)	(13.4)	(15.7)	
Interpersonal	52	16.1	15.6	15.7	33	14.8	15.5	15.5	
		(2.4)	(2.5)	(2.5)		(3.2)	(2.3)	(2.4)	
Family	54	15.4	15.4	15.0	33	15.1	15.4	15.3	
		(2.0)	(1.9)	(1.9)		(2.9)	(2.6)	(2.5)	
Intrapersonal	50	15.8	16.3	16.3	33	15.9	17.0	17.1	
		(3.3)	(2.8)	(2.7)		(3.0)	(2.7)	(2.5)	
School	55	15.0	14.6	14.5	33	14.3	15.2	14.5	
		(2.9)	(2.6)	(2.2)		(3.2)	(3.4)	(3.6)	
Affective	55	15.7	15.3	15.2	32	13.8	14.7	15.2	
		(2.9)	(2.8)	(2.3)		(2.8)	(2.9)	(2.8)	

^{*} Indicates the 7- or 13-Month mean is statistically significantly different from that provider's intake mean (p<.05).

Notes. Only children with valid intake, 7-month, and 13-month evaluations are included. The smaller N for the BERS Strength score than for BERS subscales is due to missing data. To reduce the number of statistical significance tests, we only report significance results for BERS Total Strength scores and not for the dimension scores.

Regarding clinically significant change by 7 months on the Ohio Scales, on the Problem Severity scale 11 of 35 children showed an improvement of at least 10 points, although 6 of them already had scores below the cutoff of 25 (so only 5 showed clinically significant change). For the Functioning scale 15 children showed an increase of 8 or more points, but only five rose above 50 from below the cutoff.

These results are consistent with a positive effect of FIC's services. We note though, that without a control group we cannot be sure that the children are better off than they would

[†] Indicates the 13-Month mean is statistically significantly different from that provider's 7-Month mean (p<.05).

have been without services. However, we believe (as we discuss later) the evidence is consistent with the idea that FIC's services did in fact have positive effects.

Changes by age and gender. We conducted age and gender analyses parallel to those we reported earlier for BBBS. No significant interaction effects were found.

Comparing Mentoring and Home-Based Counseling/Case Management Services

Comparative analyses were done to evaluate whether (a) the mean scores at intake for children receiving mentoring and those receiving counseling/case management were different, and (b) whether the amount of change was different for children receiving different types of services. The main reason for this comparison was that the cost per CIP served was lower for mentoring than for home-based counseling/case management, and wanted to see if mentoring provided equal benefits. Our dependent variables were Ohio Scales Problem Severity scores, Ohio Scales Functioning scores, and BERS Strengths (Total) scores.

Comparison of intake scores for mentoring and counseling/case management. Before comparing service providers on changes over time, we compared the children they served at intake. Means in Table 3 show that children receiving mentoring had lower problem scores and higher functioning and strength scores. Independent-samples t-tests showed significant differences on both Ohio Scales measures. There was a higher intake mean problem score for children receiving counseling/case management than for those receiving mentoring, t(88) = -3.30, p < .05. Functioning scores showed a significantly lower mean score for children receiving counseling/case management than for children receiving mentoring, t(88) = 2.39, p < .05. For BERS scores the difference in total strength scores was nonsignificant.

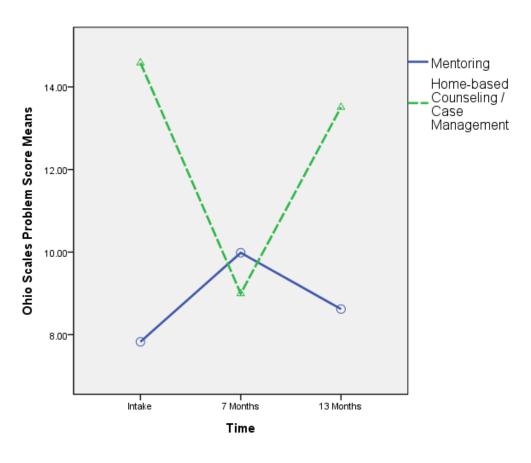
Comparison of change from intake to 7 and 13 months. We conducted a two-way mixed analysis of variance for each dependent variable, with time as a repeated measures factor with three levels (intake vs. 7 months vs. 13 months) and type of services as an independent groups factor with two levels (mentoring vs. counseling/case management). A significant interaction effect would indicate that the amount of change in mean scores over time was different for different types of services. Regardless of whether there was a significant interaction, we followed each analysis of variance with independent-samples *t*-tests comparing types of services at each time period.

Figures 1-3 show the patterns of means over time for each provider. Each dependent variable did show a significant interaction effect, though the exact pattern differed from one dependent variable to another.

A reader commented that the appropriate analysis would focus on "residualized change," i.e., an analysis of covariance (ANCOVA) using the intake (pretest) scores as a covariate when comparing groups on the 7- or 13-month scores (posttests). Without getting into the statistical arguments for and against each approach, we will note that for the BERS Total Strength score, which showed a significantly higher FIC mean at 7 months, we ran an ANCOVA model with intake score as a covariate and 7-month score as the outcome variable, and reached the same substantive conclusion that we currently report (the same is true when 13-month BERS score is used as the outcome variable). Further, when we analyzed Ohio Scales Functioning scores (which in our ANOVA did not show a significant difference at 7 months) we found that, with pretest scores adjusted for in the ANCOVA, FIC showed significantly higher 7-month functioning. These results are consistent with the findings we report and we are comfortable that our conclusions are robust.

Ohio Scales - Problem Severity. Figure 1 shows patterns of means for Problem Severity. A statistically significant interaction effect, F(2, 176) = 7.12, p<.05, indicated different patterns over time for different types of services. As noted earlier (Table 3), for children receiving mentoring there were no statistically significant changes over time. For children receiving home-based case management/counseling there was a significant decrease in problems from intake to 7 months and a significant increase from 7 to 13 months. Independent-samples t-tests showed significantly higher mean problem scores at intake for children receiving counseling/case management than for those receiving mentoring, t(88) = -3.30, p<.05, and 13 months, t(88) = -2.39, p<.05 (there was no significant difference at 7 months).

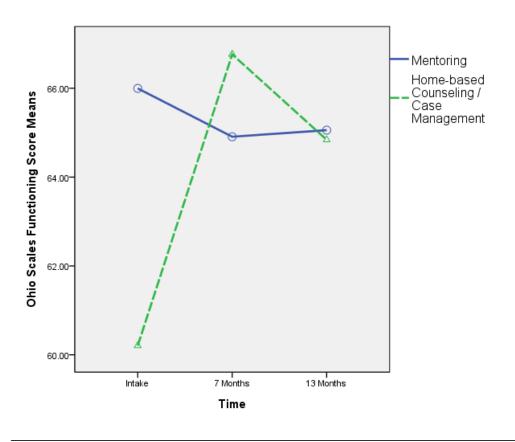
Figure 1: Mean Ohio Scales Problem Severity Scores (Parent-Rated) at Intake, 7 Months, and 13 Months



Ohio Scales - Functioning. Patterns of means for Functioning are shown in Figure 2. Greater improvement in functioning for children receiving counseling/case management than for those receiving mentoring was indicated by a statistically significant interaction effect, F(2, 176) = 5.74, p<.05. As noted in Table 3, children receiving counseling/case management improved significantly from intake to 7 months but showed a nonsignificant change from 7 to 13 months; children receiving mentoring showed no significant changes. Independent-samples

t-tests indicated that, at intake, children receiving counseling/case management were significantly lower than those receiving mentoring on functioning, t(88) = 2.39, p<.05, but the types of services showed no significant differences at 7 or 13 months.

Figure 2: Mean Ohio Scales Functioning Scores (Parent-Rated) at Intake, 7 Months, and 13 Months



BERS Strengths. Figure 3 shows means for BERS Strengths scores. A statistically significant interaction effect, F(2, 164) = 10.39, p<.05, indicated different trends for children receiving different types of services. Results noted in Table 3 indicated a significant increase in strengths from intake to 7 months for children receiving counseling/case management (nonsignificant change from 7 to 13 months); and a significant decrease in strengths from intake to 7 months for children receiving mentoring (there was a nonsignificant change from 7 to 13 months). At intake the difference between types of services was not significant according to an independent-samples t-test (though it appears substantial), but was significant (favoring children receiving counseling/case management) at 7 months, t(82) = -2.10, p<.05, and 13 months, t(82) = -2.44, p<.05.

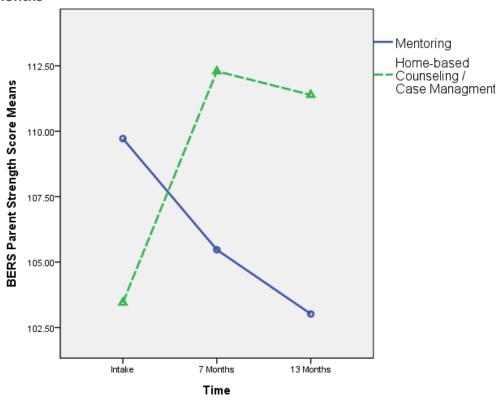


Figure 3: Mean BERS Strength Total Scores (Parent-Rated) at Intake, 7 Months, and 13 Months

Comparison with normative data. We can also compare children in the CIP project with those reported on in users' manuals for the Ohio Scales and the BERS. The Ohio Scales Technical Manual (Ogles et al., 1999) reports mean scores for a community sample (over 300 children in southeastern Ohio, most of them rated only by a parent) and a clinical sample of over 130 children receiving clinical services. For the community sample (parent ratings) the mean Problem Severity score was 10.29 which is higher than the intake mean of 7.8 for children receiving mentoring, but lower than the intake mean of 14.6 for children receiving counseling/case management (this mean dropped below the normative value at 7 months but rose above it again at 13 months). The mean Functioning score was 63.95, lower than the intake mean of 66.0 for children receiving mentoring and higher than the intake mean of 60.2 for children receiving counseling/case management. For the Ohio Scales' clinical sample both parent ratings of Problem Severity were much higher (means greater than 36) than for CIP children, and Functioning scores were much lower (means below 42).

BERS subscale scores each have normative means of 10 and the total strength score has a normative mean of 100 (Epstein, 2004). Intake scores (parent-rated) for children receiving both types of services tended to be slightly above the normative scores.

Research Conclusions and Policy Implications

The purpose of this evaluation study was to assess changes in CIP receiving either mentoring services (provided by BBBS) or home-based counseling and case management services (provided by FIC). We believe this evaluation study helps to address the shortage of evidence on outcomes of services for CIP. Our results support several research conclusions.

Research Conclusions

The results of the present analyses support several conclusions (note that conclusions apply to children completing the evaluation study):

- 1. The analysis of change from intake to 7 and 13 months showed that, in general, children receiving home-based counseling and case management improved in their functioning and strength scores and showed a decrease in problem severity from intake to 7 and 13 months. The exception was that problem severity, after a significant decrease from intake to 7 months, showed a significant increase from 7 to 13 months. (Note that a follow-up analysis with a later sample for FIC showed that this increase from 7 to 13 months was no longer present.) These results suggest that FIC's case management and counseling services provided benefits to the children they served (though without a control group we cannot be certain about the reasons for their children's improvements over time, as we discuss later).
- 2. There was no evidence that children receiving mentoring services were better off 7 or 13 months from intake. In fact, there was a significant decrease in Strengths (though the cause of the decrease is unclear, as we discuss later). Our lack of positive findings is consistent with those of Herrera et al. (2013), but inconsistent with ICF International (2011).
- 3. Ohio Scales results showed that children receiving mentoring services had lower problem severity and higher functioning than children receiving home-based counseling/case management at intake. This suggests that FIC tends to serve children with greater needs. However, we also found that at 7 months the mean scores reversed position, with the FIC children slightly (but statistically nonsignificantly) better off. It is also important to note that for problem severity the intake difference favoring BBBS children re-emerged at 13 months.
- 4. We did not find any evidence that either type of service showed more change over time for one gender than the other, or that change depended on the age of the youth. But as we note below, sample size may have been a problem for this analysis.

The different results for mentoring vs. home-based counseling/case management are striking, and we can speculate on the exact reasons for the more favorable counseling/case management results. One obvious possibility is that the home-based counseling/case management services are more useful to children with incarcerated parents than the mentoring services we evaluated (which, we note, was only one approach to mentoring; and we have had discussion with BBBS indicating that their model has changed since the evaluation data were collected). Home-based counseling and case management services are broader than the mentoring we evaluated in this report, explicitly focusing on needs of the family and the community parent as well as the child (the services are also tailored to the needs of a specific child and family), and this may be important to a child's success. A related possibility is that children benefit most from services that explicitly recognize the incarcerated parent as a part of

the child's life, and that deal with the potential issues a child and family may endure due to a loved one's incarceration.

Another possible explanation for the difference between the mentoring and homebased counseling/case management services we evaluated is a combination of pre-existing differences and regression to the mean (a tendency for extreme scores to move closer to the mean over time). Pre-existing differences are clear, indicating that BBBS and FIC served somewhat different populations (despite serving the same geographic location). At intake, the children receiving mentoring services showed significantly higher Functioning and lower Problem Severity than the children receiving counseling/case management. Regression to the mean would predict that the more extreme group (e.g., the low Functioning and Strength scores for FIC) would tend to converge with the less extreme group (BBBS) at 7 months. Data on the Ohio Scales shown in Figure 2 (Functioning scores) are consistent with this pattern, but results shown in Figure 1 (Problem Severity scores) are less consistent; if regression to the mean were the explanation, we would not expect the widening of differences from 7 months to 13 months. And the findings for the BERS Strength scores (Figure 3) clearly are not consistent with regression to the mean. For the BERS total strength scores, means did not merely converge at 7 months; instead, FIC children surpassed the BBBS children with significantly higher strength scores at 7 months, a pattern that persisted at 13 months. While we cannot rule out all possible alternative explanations, we believe regression to the mean provides an inadequate explanation. We therefore believe that while regression to the mean may have played some role, our findings are consistent with the idea that FIC services were in fact effective, resulting in improvement over time.

An issue that deserves further research is the importance of the child's relationship with the incarcerated parent; we noted earlier that disruption of attachment may be a significant issue for CIP. The importance of a relationship with the incarcerated parent is attested to by *Children of Incarcerated Parents: A Bill of Rights* (San Francisco Children of Incarcerated Parents, 2005). The document was produced based in part on interviews with children who have had an incarcerated parent, and two of the eight rights deal with the child-incarcerated parent relationship ("5. I have the right to speak with, see and touch my parent," "8. I have the right to a lifelong relationship with my parent"). Poehlmann, Dallaire, Loper, and Shear (2010) reviewed evidence on the effects of children's contact with an incarcerated parent and showed that there is substantial evidence that greater contact is associated with positive outcomes for children. This is true for both mail contact and for visitation in prison (though a sizable minority of visitation studies showed that negative effects are possible; see Poehlmann et al., 2010, for a discussion of contextual factors). Therefore a possible benefit of the home-based counseling and case management services is to help the children by facilitating connections to the incarcerated parents.

Trauma may also be important to consider. If children with an incarcerated parent suffer trauma, e.g., due to witnessing the arrest, losing the parent to incarceration, etc., then the child's trauma must be addressed. If this is true, one implication is that services should be provided by those with knowledge of specific challenges CIP may face, such as trauma, the disruption of attachment to the incarcerated parent, and potential loyalty conflicts between the incarcerated parent and the community parent. Having knowledgeable staff may be an important element of effective services. CIP may have specific needs including trauma and

disruption of attachment that other youths (even the "higher-risk" youths included in Herrera et al.'s 2013 mentoring evaluation study) do not. It is possible that this difference accounts for why Herrera et al. found no evidence of effectiveness of mentoring for CIP whereas it was effective for other youths.

It is also noteworthy that children receiving mentoring showed a significant decline in strengths (as measured by the BERS) from intake to 7 months. While the significant decline was **not** shown in the larger sample reported in the Appendix, we still believe it is worth some discussion. The explanation for the decline is not clear, but one possibility is that the children were experiencing unaddressed negative effects of their parents' incarceration. For example, stresses on the families may have grown over time and affected the children. Another possibility, raised by BBBS staff, is that initially there was some wariness by families of being open about children's well being and therefore the information they shared for evaluations was somewhat more positive than children's actual situations warranted. As families' trust increased over time, evaluations became more accurate (i.e., somewhat more negative). It is possible this explanation is valid, though if it is, the same may be applicable to FIC's families (who did not show a decline in Strength scores).

Policy Implications

Mentoring. One implication of our findings is that there is not support for investing resources in the mentoring services we evaluated for children with incarcerated parents. We want to be careful to explain and qualify this statement. First, we acknowledge that the lack of significant improvement does not mean mentoring had no benefits for children; e.g., there may have been benefits that we did not measure. Second, it is possible that the mentoring services would be useful for children with greater need, and that the lack of positive results is due to the relative lack of high problem severity scores for the CIP in our evaluation who received mentoring services; perhaps mentoring would show benefits if it is provided for children with greater problems at intake. Third, we recognize the variety of mentoring models that exist (e.g., peer mentoring, highly intensive long-term mentoring, etc.) and even if the mentoring services we evaluated did not show benefits for CIP, other models might.

DuBois et al. (2011) noted the diversity of mentoring programs, and Herrera et al. (2013) stated that mentoring programs are being asked to service youths with greater risk factors than in the past. For example, in a recent discussion BBBS discussed with us moving to a mentoring model involving more supports for youths. It may be useful to examine mentoring programs that (a) combine mentoring with other supports for CIP, (b) specifically address challenges and stressors unique to CIP (e.g., disrupted attachment; stigma of incarceration, loyalty conflict), and (c) involve training for mentors in how to best support CIP and their families. Rather than closing the door on the investigation of mentoring we believe it may be worthwhile to explore the potential benefits of other mentoring approaches for children with incarcerated parents.

Home-based case management/counseling. A second implication is that it appears valuable to put resources into more comprehensive home-based case management and counseling services to children. We recommend that there be discussion about the most appropriate avenue for delivery of services. One possibility may be to identify relevant service providers (e.g., through a competitive request-for-proposals process) to provide services

statewide. These providers would be funded to engage in training to increase providers' awareness of the special needs of CIPs and their families (e.g., stressors faced by CIP and their families such as stigma, lack of community support, and disrupted attachment), develop supportive services specifically for children with an incarcerated parent and their families, create awareness within the community of its availability to solicit self-referrals by families that would find the service appealing and potentially helpful, and for providing services to them. Another possibility would be to use existing systems to provide services. If this is done we still believe it is very important that providers be knowledgeable about how incarceration affects children, develop services specifically for CIP, and increase awareness in the community.

Other services. Other types of services (besides the ones we evaluated) may be of value for CIP. For example, psychotherapy using evidence-based approaches designed for CIP may bring additional benefits. We recommend continued exploration of additional programs and providers, including those equipped to provide intensive psychotherapy. An important goal should be to determine the ideal mix of services (e.g., case management, visitation with the incarcerated parent, psychotherapy, etc.) that should be available and to determine how to make these services accessible.

Communities affected by incarceration. A final recommendation is to cultivate relationships in communities most affected by incarceration. Connecticut Department of Corrections inmates come largely from a few cities (primarily Bridgeport, Hartford, New Haven, Waterbury, and New Britain; Reinhart, 2010), and it may be that particular neighborhoods within these cities are disproportionately affected.

Organizations with the most resources for providing comprehensive services may or may not have connections in the neighborhoods hardest hit by parental incarceration. Conversely, people and organizations embedded in the neighborhoods most affected by incarceration (and therefore potentially in the best position to relate to and understand the challenges faced by people in that community) may not have the resources to most effectively assist the families with their needs. Therefore, it may be useful to establish relationships with community-based organizations in the hardest-hit areas, connecting them with better-resourced organizations so that both types of providers can potentially provide better services.

Limitations

Some limitations of the current evaluation have already been discussed. These include the population to which we can generalize (which is limited by attrition as well as the recruitment methods for CIP), the lack of comparability between BBBS and FIC youths at intake, and the lack of randomly assigned control groups.

An additional limitation of this analysis is the relatively small samples. However, a major reason that small sample size is a limitation is that it makes it difficult to find statistically significant differences. As reported we found a number of significant differences, suggesting that sample size is not a major problem with the evaluation study. Where sample size is particularly problematic is in the subgroup analyses for gender and age. Breaking each provider's sample into smaller groups for comparison reduces the ability to find significant differences, and this may account for the lack of gender and/or age findings.

We also note that the CIP served represent a wide range of ages and developmental levels (ages 5-18) and this is beneficial for generalizability, but is a limitation in that we are grouping together for statistical analysis children who differ in important ways.

Another possible limitation is that BBBS' follow-up evaluations with parents were administered by telephone, and we do not know how this may have affected the validity of the scores.

Lastly, the current evaluation is limited in its time-frame; we assessed children only from intake to 13 months. In our ongoing evaluations we plan to track children for several years to determine whether they become justice-involved (we will also be looking at other factors, including educational performance); but due to the nature of this research it will be several years before we can report on the results.

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Appendix

Mean Parent- and Worker-Rated Outcomes (and SDs) for Ohio Scales and BERS at Intake and 7 Months (Includes Children with Valid Intake and 7-Month Evaluations)

Parent Ratings

	3	BBBS	5		FIC		
		N	Intake	7-	Ν	Intake	7-
				Month			Month
Oh	io Scales						
	Problem	96	8.7	9.5	51	15.9	10.3*
_	Severity		(10.2)	(9.8)		(9.8)	(9.9)
	Functioning	96	64.6	64.9	51	58.3	64.2*
			(10.3)	(9.7)		(12.0)	(11.4)
BE	RS		·				
	Strengths	102	107.9	105.6	44	102.1	110.3*
	(Total)		(18.5)	(15.0)		(20.0)	(15.1)

Case Worker Ratings

		BBBS	5		FIC		
		N	Intake	7-	N	Intake	7-
				Month			Month
Ol	nio Scales						
	Problem	104	7.7	7.9	51	15.7	13.1
	Severity		(9.4)	(9.4)		(12.5)	(15.5)
	Functioning	104	63.1	65.4	51	59.5	64.4*
			(13.8)	(10.7)		(10.2)	(10.3)
BE	RS						
	Strengths	75	134.9	135.8	43	130.1	133.3
	(Total)		(15.9)	(15.5)		(17.0)	(15.5)

^{*} Indicates the 7-Month mean is statistically significantly different from that provider's intake mean (p<.05).