

Evaluation of Reach & Rise[®] Program Enhancements to Cognitive Behavioral Mentoring

Technical Report

G. Roger Jarjoura, Carla Herrera, Manolya Tanyu
American Institutes for Research

September 2022

**DRAFT REPORT –
NOT FOR
DISSEMINATION**



Advancing Evidence.
Improving Lives.

Evaluation of Reach & Rise[®] Program Enhancements to Cognitive Behavioral Mentoring Technical Report

G. Roger Jarjoura, Carla Herrera, Manolya Tanyu
American Institutes for Research

SEPTEMBER 2022



AIR[®] Headquarters
1400 Crystal Drive, 10th Floor
Arlington, VA 22202-3289
+1.202.403.5000 | **AIR.ORG**

Notice of Trademark: “American Institutes for Research” and “AIR” are registered trademarks. All other brand, product, or company names are trademarks or registered trademarks of their respective owners.

Copyright © 2022 American Institutes for Research[®]. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, website display, or other electronic or mechanical methods, without the prior written permission of the American Institutes for Research. For permission requests, please use the Contact Us form on [AIR.ORG](https://www.air.org).

Contents

- Evaluation of Reach & Rise® Program Enhancements to Cognitive Behavioral Mentoring..... 1
- Technical Report 1
 - Abstract..... 7
 - Chapter 1. Introduction..... 1
 - Background 1
 - Cognitive Behavioral Therapy for Adolescents 2
 - Mentoring and CBT 3
 - The Reach & Rise® Mentoring Program 4
 - Reach & Rise® Program Characteristics 5
 - Chapter 2. The Evaluation 8
 - Program Enhancements Implemented at CBT Sites 8
 - Theory of Change 10
 - Research Questions 12
 - Design of the Implementation Evaluation 12
 - Design of the Outcome Evaluation 13
 - Data Sources 15
 - Researcher-Practitioner Partnership 20
 - Analyses for the Outcome Study..... 21
 - Characteristics of Participants 24
 - The Youth 24
 - The Mentors..... 25
 - The Mentor-Mentee Matches 26
 - Chapter 3. Results from Outcome Analyses 32
 - Did Reach & Rise® Mentoring Have an Impact on Youth Outcomes? 32
 - Did CBT-Enhanced R&R Mentoring Benefit Youth More Than BAU R&R Mentoring? 34
 - Effects of the Programmatic Enhancements on Mentor-Mentee Relationship Quality and Youth Outcomes 35
 - Effects of the Programmatic Enhancements on Caregiver Experiences and Youth Outcomes..... 41
 - Chapter 4. Reach & Rise® Implementation 46
 - Implementation of Mentor Training..... 47
 - Implementation of Ongoing Support to Mentors..... 48
 - Implementation of Parent Education and Support..... 50
 - Mentor Exposure to the Intervention and Enhancements..... 53
 - Mentor Uptake of the Intervention 57
 - Caregiver Exposure to R&R Components and the Enhancements 62

Supports and Challenges to Implementation Quality.....	66
Program Implementation Costs	71
Chapter 5. Discussion and Conclusion.....	79
Did R&R Improve Youth Outcomes?	79
Did Exposure to Enhanced Program Practices Make a Difference in Program Impacts?.....	82
To what extent were the program model and the enhancements implemented with fidelity?.....	82
What Factors were Challenging in Implementing the Enhancements?.....	84
Study Limitations	86
Conclusion.....	87
References	89

Exhibits

Exhibit 1. Geographic Distribution of the Reach & Rise® Sites	4
Exhibit 2. Reach & Rise® Mentor Training Outline	5
Exhibit 3. Theory of Change	11
Exhibit 4. Characteristics of Reach & Rise® Evaluation Sites (N=21).....	14
Exhibit 5. Data Sources Used to Address the Reach & Rise® Evaluation Questions.....	15
Exhibit 6. Attrition Rates for Follow-up Surveys of Youth, Caregivers, and Mentors	19
Exhibit 7. Baseline Characteristics and Effect Size Based on Treatment-Control Group Differences.....	24
Exhibit 8. Baseline Characteristics of Mentors	26
Exhibit 9. Mean Levels of Relationship Quality by Type of Program	28
Exhibit 10. Caregiver Report of Challenges with Child’s Mentoring Relationship (N = 181)	29
Exhibit 11. Results from Multilevel Mixed-Effects Models: Distal Youth Outcomes.....	33
Exhibit 12. Results from Multilevel Mixed-Effects Models: Intermediate Youth Outcomes.....	34
Exhibit 13. Segment of Theory of Change Tested in Mentor Enhancement Path Models.....	36
Exhibit 14. Measurement Model Results for Path Models Examining Mentor Enhancements ...	36
Exhibit 15. Results from Path Model Examining the Effects of Exposure to Mentor Enhancements	39
Exhibit 16. Indirect Effects of Mentor Enhancements.....	40
Exhibit 17. Indirect Effects of Youth Report of Mentor Using CBT Strategies.....	40
Exhibit 18. Indirect Effects of Relationship Quality	41
Exhibit 19. Segment of Theory of Change Tested in Caregiver Enhancement Path Models	42
Exhibit 20. Measurement Model Results for Path Models Examining Caregiver Enhancements	42
Exhibit 21. Results from Path Model Examining the Effects of Exposure to Caregiver Enhancements	44
Exhibit 22. Indirect Effects of Caregiver Enhancements Received.....	45

Exhibit 23. Indirect Effects of Caregiver Uses CBT Strategies	45
Exhibit 24. Frequency of Contact between Mentors and Program Staff	54
Exhibit 25. Mentor Reports of What the Program did to Help Them Use CBT Strategies	55
Exhibit 26. CBT Mentor Reports of How Often They Talked with Their Site director about CBT Strategies (N=116)	56
Exhibit 27. Mentors’ Readiness to Use CBT strategies	57
Exhibit 28. Mentors’ Use of Tips/Pointers from the Program	58
Exhibit 29. CBT Mentors’ Reports of How Often They Tried Each CBT strategy and How Difficult It Was (N=117)	59
Exhibit 30. Themes of Strategies CBT Mentors Used with Similar Frequencies.....	60
Exhibit 31. Mentor-Reported Challenges	62
Exhibit 32. Caregiver Reports of Frequency Discussing Goals with Mentors and Program Staff .	63
Exhibit 33. Caregiver Reports of How Frequently They Discussed CBT Strategies with Mentors and Program Staff (N=123)	64
Exhibit 34. Caregiver Reports of Their Communication with Staff and Youth Communication with Mentors During the Pandemic	66
Exhibit 35. CBT Site Director Reports of Receiving Support in Areas in which they Needed Help (N=12)	69
Exhibit 36. Site Director Reports of the Extent to YMCA Staff Were Committed to the Program (N=11)	70
Exhibit 37. Program Costs and Youth Served	73
Exhibit 38. Staff Reports of Challenges among Programs with High versus Low Cost (N=9 sites)	76
Exhibit 39. Staff Allocation of Time by Tasks	77

Abstract

Research has identified both mentoring and cognitive behavioral therapy (CBT) as effective delinquency prevention approaches. Yet, few studies have been conducted to identify the extent to which CBT-infused enhancements to mentor programming can make a difference in the lives of at-risk youth. This study deepens our understanding of how to leverage and bring to scale, innovative techniques that help equip mentoring to meet the needs of at-risk youth and prevent future system involvement.

We evaluated the implementation and impact of CBT enhancements to a mentoring program already committed to a CBT focus—YMCA’s Reach & Rise® program (R&R), including pre-match training modules for mentors on CBT techniques, strategies for augmenting the youth’s growth plan (i.e., goals and strategies to achieve those goals), mentor-support CBT-focused “check-in” tools, and a CBT parent education and support component. The project’s goal was to rigorously evaluate: (1) the impacts of this mentoring model on mentoring relationship quality and youth outcomes, including the prevention of delinquency and juvenile justice involvement; (2) the effects of the CBT-related enhancements on receipt of these impacts; and (3) the implementation of the program and its enhancements including their costs.

The evaluation was guided by a theory of change positing that mentors exposed to enhanced training and support should be more likely to engage in the types of behaviors encouraged through the initiative, and through these behaviors promote more positive relationships with their mentees, which should, in turn, promote stronger positive outcomes for youth.

Not all proposed enhancements were implemented with fidelity to the designed practices, and the report details how and why their implementation differed from the intended design. Caregiver engagement in CBT-oriented strategies through the use of a program-provided caregiver manual was the most challenging component of the enhancements. Costs were quite variable across programs and dependent on the number of youth served.

We found statistically significant or marginally significant impacts of the R&R program (i.e., random assignment to the treatment group) on parent reports of arrest, self-reports of delinquency and substance use, hope for the future and school and family connectedness. We did not detect statistically significant differences in outcomes for those youth attending programs randomly assigned to implement the enhancements relative to those attending programs using the standard R&R model. However, analyses provided some support for our theory of change: mentors who received more program supports for their use of CBT strategies had mentees who reported mentors’ more frequent

use of these approaches during their interactions, which were in turn associated with stronger relationships and ultimately more positive outcomes. We also found that caregivers who received program supports for their use of CBT strategies were more likely to report implementing those strategies with their children, and caregiver implementation of CBT strategies was associated with more positive youth outcomes. Implications for practice are discussed.

Chapter 1. Introduction

Background

Youth today face a host of challenges in school, their lives at home, and in their broader community, including poverty, peer rejection, and violence—all of which are linked to a range of mental and emotional challenges (Biglan et al., 2017).

Research supports the idea that mentoring program participation can make a difference. Mentoring has been cited as a protective factor that can promote cognitive, social, and emotional benefits for youth and prevent problem behaviors in young people exposed to a wide range of stressors (Rhodes, 2002). A growing body of rigorous research on youth mentoring has demonstrated improvements in peer and parent relationships and school performance (Tierney et al., 1995). Studies of mentoring have also shown benefits in key areas of mental health including externalizing behaviors such as aggression and substance use (Aseltine et al., 2000; DuBois et al., 2022; Tierney et al., 1995) and internalizing symptoms (Erdem et al., 2016; Keller & Pryce, 2012; Herrera et al., 2013; King et al., 2021; Browne et al., 2022; DeWit et al., 2016). Benefits have also been supported in related areas of well-being including self-esteem (Marino et al., 2019; King et al., 2021; Haft et al., 2019), self-control (Aseltine et al., 2000; DuBois et al., 2022), and emotional symptoms (Herrera et al., 2013).

Mentoring achieves these outcomes, perhaps in part, because it has characteristics of several effective types of clinical intervention (Cavell & Elledge 2014; Kerr & King, 2014). For example, one treatment for depression involves helping patients identify and engage in activities they enjoy—a strategy often used in mentoring (Cuijpers et al., 2007). Mentors model and reinforce positive behaviors, discourage antisocial behaviors, and support the development of social-emotional and cognitive skills such as conflict management and problem-solving—behaviors that may also help reduce externalizing difficulties (Kerr & King, 2014). These approaches and activities make mentors particularly well suited for improving youth’s emotional well-being and improving maladaptive behaviors.

Yet, meta-analyses which assess the impacts of mentoring programs across several evaluations suggest that the actual improvements youth experience in these areas are relatively modest (i.e., the “effect sizes” are moderate; DuBois et al., 2002; Raposa et al., 2019). These studies suggest that benefits depend on several factors. For example, findings are strongest when there is a strong relationship established between the youth and their mentors (Browne et al., 2022, Keller & Pryce, 2012; Haft et al., 2019) and when mentors meet consistently with youth (Karcher, 2005). In fact, premature match endings and inconsistent mentoring are associated with setbacks in adolescent’s

self-worth (Karcher, 2005; Grossman & Rhodes, 2002). These studies highlight the importance of program practices aimed at helping ensure matches are high quality, well supported and sustained long enough to make a difference.

Parallel work across several studies and meta-analyses, suggests that programs that implement strong supports (e.g., mentor training, frequent contacts with program staff) are more likely to create high-quality, long-lasting mentoring relationships (Sass & Karcher, 2013; Weiler et al., 2019; Kupersmidt et al., 2017; Stelter et al., 2018; McQuillin & Lyons, 2021) and yield youth outcomes in areas of import (Herrera et al., 2008). Research has also outlined more specific practices that can make a difference in yielding youth outcomes. For example, meta-analyses reveal greater benefits for youth in programs that provide strong training for mentors, and support and engage the youth's parents (DuBois et al., 2011; Tolan et al., 2013).

Cognitive Behavioral Therapy for Adolescents

Cognitive behavioral therapy (CBT)—an intervention aimed at changing negative patterns of thinking that influence feelings and behavior—has shown promise as an intervention for youth experiencing a wide range of mental health challenges including depression, obsessive compulsive disorder, post-traumatic stress disorder, anxiety, and phobias (Watson & Rees, 2008; Keles & Idsoe, 2018; King et al., 2005; Dorsey et al., 2011; Sudhir, 2015). There is also some—albeit more tentative—support for CBT approaches being effective in *preventing* depression and anxiety in youth with subclinical levels of these challenges (Rasing et al., 2017). CBT has also been used effectively in treating delinquency-related behaviors in adolescents such as substance use, aggression, and anger expression (Hoogsteder et al., 2015; Van Vugt et al., 2016; Magill & Ray, 2009; Irvin et al., 1999). In fact, CBT approaches are among the most effective interventions for youth involved in the justice system due to behavioral problems, particularly those approaches tailored for youth with anger management issues or substance use disorders and sex offenders (Latessa, 2006; Pearson et al., 2002).

CBT's effectiveness across such a wide range of challenges likely stems from its very fundamental premise—that how one thinks about the world around them and their behavioral response to these thoughts—is the basis for a range of mental health disorders and negative behaviors; and can also be the foundation for healthy well-being. CBT focuses on helping youth gain new skills that enable them to recognize maladaptive thought patterns, such as cognitive thinking errors, and leverage strategies to improve thinking and modify negative behavior patterns (Pearson et al., 2002).

Caregiver involvement is one of the most important features of CBT's success in yielding positive outcomes (Albano & Kendall, 2002; King et al., 2005). A meta-analysis including 76 randomized controlled trials of therapies using CBT to treat anxiety, depression, posttraumatic stress disorder, and obsessive-compulsive disorder, found that programs involving parents yielded significantly larger effect sizes than programs without parent involvement (Sun et al., 2019). Involving parents and other

significant adults in the child’s life as collaborators, or “cognitive behavioral coaches,” can help strengthen outcomes by altering maladaptive patterns these adults may be supporting and reinforcing thinking skills learned through CBT. This involvement can help ensure that the skills learned in therapy extend into the day-to-day life of the young person.

Mentoring and CBT

Mentoring naturally includes several components of CBT—components which could potentially strengthen outcomes if highlighted and supported. For example, it often involves modeling and reinforcement of realistic appraisals, coping, and problem-solving (Kerr & King, 2014). Well-trained mentors can help youth spot negative patterns of thinking that influence their feelings and behavior and reinforce positive behaviors. They can suggest and support youth engagement in constructive activities to help them understand the positive consequences of engaging in adaptive behaviors. Well-trained mentors can also provide a safe and supportive interactive platform for youth to learn and practice new ways of thinking and behaving.

There is reason to believe that pairing research-informed CBT practices with strong mentoring programming could promote targeted benefits to youth at risk of negative outcomes. Although evidence is still evolving on how CBT approaches can enrich mentoring, several studies show promise. In one study, youth referred to a community mental health center were randomly assigned to participate in small CBT-infused mentoring groups for 12 weekly 4-hour sessions or to a control group (Jent & Niec, 2009). Mentors received at least 24 hours of initial training and weekly supervision by an experienced clinician. These practices supported the mentor’s use of modeling, praise, and token economies to reinforce appropriate behavior. After 3 months, mentored youth improved more than those in the control group in social problem solving and externalizing and internalizing symptoms.

An important question is to what extent volunteer mentors would be able take on a therapeutic approach like CBT, and if they did, what types of supports would be needed, and would this approach be more effective than less targeted mentoring? Findings from a meta-analysis of 150 outcome studies suggest that trained and supervised paraprofessionals—lay individuals trained to deliver a particular intervention—may yield even larger effects than mental health professionals when treating some types of behavior problems (Weisz et al., 1995). Weisz et al. (1995) argued, however, that a critical component of the studies yielding these effects was targeted training and supervision of the paraprofessionals, suggesting that programs asking mentors to take on an approach like CBT may be most effective when targeted supports are in place.

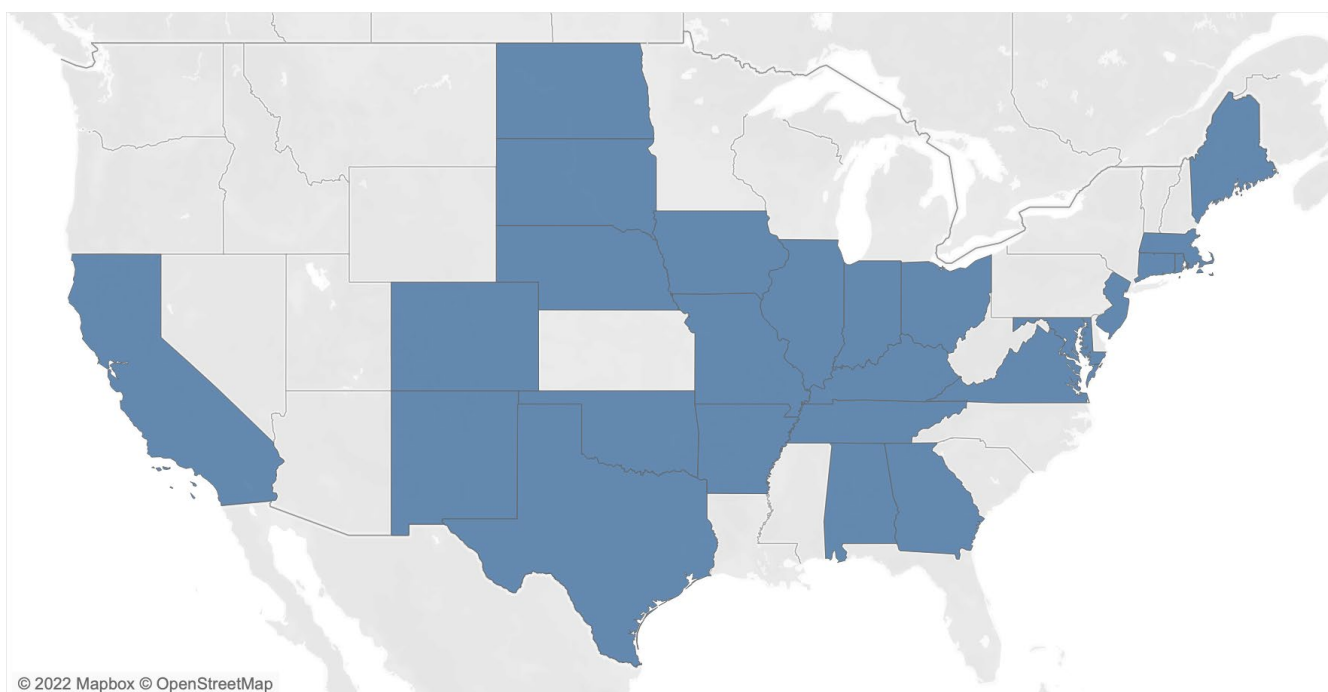
Together, these studies support the idea that training and supporting mentors to use CBT strategies in their interactions with their mentees has the potential to yield effects at least as large as those yielded by more relationship-focused approaches. However, ensuring that the program has strong, targeted supports in place for mentors will be key to success. For example, extensive, interactive mentor

training prior to beginning the relationship would be essential to ground mentors in key CBT principles and provide examples of how CBT can be used in everyday interactions. Also essential would be regular, focused support throughout the mentoring relationship from an experienced staff person knowledgeable in CBT to encourage the consistent use of effective strategies and redirect mentors when necessary. Finally, engaging and educating parents is critical to ensuring that positive strategies are reinforced consistently at home.

The Reach & Rise® Mentoring Program

This study examines the implementation of CBT approaches in the Reach & Rise® mentoring program (R&R)—a CBT-based program that includes all these important components. In 1992, the YMCA of San Francisco developed this therapeutic mentoring program to serve youth throughout its communities. In 2009, the mentoring program received funding to expand to additional associations throughout the country (San Francisco, Oakland, Cincinnati, Phoenix, Nashville, and Baltimore). In 2013, YMCA of San Francisco partnered with the YMCA of the USA and expanded to 38 additional states. Each R&R program is located at a YMCA facility. There were 25 program sites that enrolled youth into the evaluation. Exhibit 1 shows the location of the states where those sites were based.

Exhibit 1. Geographic Distribution of the Reach & Rise® Sites



Reach & Rise® Program Characteristics

At each (R&R) site, the program is operated by a full- or part-time site director who typically has credentials in mental health such as counseling or social work. The site director is responsible for implementing all aspects of the program including recruiting and screening youth and volunteers, providing mentor training, supporting program participants throughout the life of the match, and performing data collection and reporting duties as identified by the R&R national office. Because each site is located and operates through a YMCA facility, the site director is supervised by local YMCA staff and expected to maintain relationships with YMCA staff and leadership to keep them informed of program activities and facilitate support for the program. Each site director is trained by the R&R national director upon hiring and participates in monthly monitoring and support calls with the national leadership team.

Each R&R program is designed to serve 30 mentoring matches for 12 months, although matches can be extended past the 12 months if they show interest and are willing to commit. Each site is expected to maintain a minimum of 25 active matches during a program year. The YMCA supports recruitment of volunteers and youth who have membership at the YMCA.

Volunteer Recruitment and Preparation. Volunteers are recruited from the community or through the YMCA to mentor a youth for a minimum of 12 months. The program provides mentors with 15 hours of pre-match training, prior to being matched. The training is delivered by site directors in a group setting with other volunteers and typically broken down into five sessions but may also be tailored depending on volunteers' availability. The training is guided by an extensive manual and is structured into 10 modules (see Exhibit 2). Each training module has learning objectives and exercises to help mentors understand and apply what they have learned. The training is designed to help volunteers understand the challenges youth may experience and ways to support their development using strategies to change their thinking and behaviors. Site directors are given the flexibility to spend more time on some modules than others to make the training relevant to the specific needs of the youth in their program and broader community.

Exhibit 2. Reach & Rise® Mentor Training Outline

Module	Module Topic	Module Objectives
1	The Basics of Mentoring Youth	Understand the basics of the Reach & Rise® mentoring program and what therapeutic mentoring means.
2	The Therapeutic Mentoring Relationship	Understand the stages of therapeutic mentoring (i.e., developing rapport and building trust, goal setting, goal attainment, ending the relationship), barriers, and strategies to address these barriers.

Module	Module Topic	Module Objectives
3	Relationship Building and Communication	Learn about communication and listening strategies to develop a positive relationship with youth. Introduce CBT strategies such as refuting lies we tell ourselves.
4	Theoretical Approaches to Mentoring Youth	Provide an overview of therapeutic concepts and approaches that can be used when working with mentees to help influence positive change. Introduce CBT strategies such as mindfulness.
5	Issues Youth May Experience	Understand how life events and experiences (e.g., divorce/separation, domestic abuse, growing up in a military family) may impact youth and how they may react socially, emotionally, and behaviorally at different developmental stages. Recognize stressors, develop empathy, and learn about strategies to help youth practice positive behaviors and decision making. Introduce CBT strategies such as relaxation, restructuring, communication, humor to manage anger, cognitive restructuring, and the whole-health check-up.
6	Family Relationships	Discuss family dynamics and how they may impact youth. Discuss confidentiality and communicating and working with families. Introduce CBT strategies such as journaling.
7	Safety Issues	Discuss crisis and safety procedures mentors should be familiar with in case situations such as abuse, suicidal thoughts, or self-harm concerns arise. Increase familiarity with legal and ethical issues, and learn how to respond to and protect self, others, and the mentoring relationship after crisis/safety issues. Introduce CBT strategies such as mood mapping.
8	Cultural Sensitivity and Humility	Discuss how culture shapes one's worldview and interactions with others. Help mentors increase their understanding of their own views and ways to respond to their mentee's racial identity, cultural values, and worldview to build a positive relationship. Introduce CBT strategies such as affirmations.
9	Ending the Mentoring Relationship	Emphasize the importance of match closure and discuss why ending in a deliberate, careful, compassionate way can greatly contribute to the healing process for youth. Provide mentors with practical information to prepare them for ending their mentoring relationship. Introduce CBT strategies such as creating new habits and celebrating success.
10	Policies, Protocols, and Procedures	This module includes a final checklist of program expectations including the monthly activity log.

Youth Recruitment and Enrollment. Youth are also recruited from the YMCA or broader community. At intake, the program collects information from the youth and caregiver to assess youth mental health needs and past experiences with trauma (e.g., depression, school problems, poor decision making, peer and other relationship challenges). Then, at the initial match meeting with the youth, mentor, and caregiver, the site director helps the match identify at least one goal and objectives around that/those goal(s) based on those identified needs. The match is then expected to work toward achieving that/those goal(s) over the course of the mentoring meetings. These goals are selected from a list of seven potential goals: (1) improve healthy relationships; (2) improve academic engagement; (3) increase emotional/psychological wellness; (4) increase connectedness to the

community; (5) develop workforce readiness; (6) prevent delinquency; or (7) another goal. The Youth Growth Plan is a structured tool that helps the site director document the identified goals for the mentee and monitor progress in working on and achieving those goals during monthly support calls.

Once the mentor is matched with a youth, they spend time in the community engaging in activities of their choosing. Matches also can engage in activities at the YMCA (e.g., swimming, basketball). Although most matches meet both in the broader community and at the YMCA facility, some sites (two in the current study) limit mentoring activities to the YMCA facility. All mentors are asked to document their activities with youth in an activity log and send it to the site director so they can monitor match interactions and activities.

Site directors are expected to contact each match on an ongoing basis to check in and provide support as needed. Reach & Rise® program guidelines require that the site director make at least three attempts to communicate with the mentor, youth, and caregiver each month. The primary form of contact is by phone or in-person if the match meets at the YMCA facility, and site directors may email or send text messages to maintain contact with the match. The ongoing support to families is also meant to include case management that supports not only the youth but also his or her family. For example, the site director may provide referrals to services and resources in the community during these contacts.

For each contact, site directors are expected to use a *Monthly Check-in and Data Collection Tool* to document match activities and progress toward goals and update the *Youth Growth Plan* based on the information they gather from the mentor, youth, and caregiver.

Chapter 2. The Evaluation

The evaluation was funded through OJJDP’s Researcher-Practitioner Partnership Program.¹ As part of the initiative, American Institutes for Research (AIR) partnered with the Young Men’s Christian Association (YMCA) of San Francisco. R&R program affiliates across the country were randomly assigned to one of two groups—a group that implemented enhancements focused on more explicitly incorporating cognitive behavioral therapy (CBT) techniques into the R&R model (the “CBT” model) or a group that would continue to implement the already existing model (the “Business as Usual” or “BAU” model). AIR’s evaluation assessed the implementation and impact of enhancements to the program as well as the impacts and implementation of R&R more broadly across both program types.²

In designing the proposed study, we felt that it was important to go beyond a comparative effectiveness design on the *incremental* benefits of the enhanced practices relative to existing practice. As recent studies of enhanced mentoring practices have shown, when building in enhancements to already effective mentoring programs, significant differences in impact between existing practices and enhanced practices are not typically found and we may underestimate the *full* effects of the enhancements relative to no mentoring.³ Within the context of a pragmatic trial, it is noteworthy that Reach & Rise® is designing a set of enhancements that it intends to incorporate permanently into the program model. R&R is interested in determining whether the enhancements are incrementally better than their current practices. To that end, we offer a design that compares the effectiveness of enhanced mentoring to no mentoring *and* compares the effectiveness of the BAU mentoring to no mentoring. In addition, this design allows for a comparison between BAU mentoring and enhanced mentoring.

Program Enhancements Implemented at CBT Sites

While the R&R program model incorporates therapeutic approaches to mentoring and infuses CBT principles throughout the program, the initiative funded through OJJDP aimed to explore

¹ <https://ojjdp.ojp.gov/funding/opportunities/ojjdp-2016-9053>

² In 2018, Y-USA received additional funding from OJJDP’s Mentoring Opportunities for Youth Initiative program to support program operations of each Reach & Rise® site.

³ See, for example, two recent OJJDP-funded comparative effectiveness trials: DuBois, D. L., & Keller, T. (under review). Investigation of the integration of supports for youth thriving into a community-based mentoring program. *Child Development*; Peaslee, L., & Teye, A. C. (2015). Testing the impact of mentor training and peer support on the quality of mentor-mentee relationships and outcomes for at-risk youth. Final Technical Report to OJJDP.

more targeted approaches to supporting the incorporation of CBT into the mentoring relationship. The goal was to help youth and families create new, healthy patterns of thinking, feeling, and behaving to improve academic success, self-esteem, decision making, problem-solving, and relationships with families and peers, and to prevent youth from entering the juvenile justice system. In the CBT-enhanced model, cognitive behavioral principles and strategies were more explicitly integrated into mentor training, goal setting, and caregiver education, coaching, and support in the following specific ways:

- **Enhancement to pre-match mentor training.** A module (Module 4b) was added to mentors' pre-match training to introduce them to CBT terminology and help them understand how to use CBT strategies, namely: (1) identifying thoughts, beliefs, assumptions, and feelings that are unhealthy, faulty, or irrational; (2) refuting, or disputing, irrational thoughts and assumptions; (3) restructuring, or changing, thoughts that are faulty, irrational, inaccurate, unhelpful or are causing emotional pain; (4) examining different situations where they tried using restructuring strategies to process their experiences and feelings; (5) interrupting and breaking negative cycles or dysfunctional patterns; (6) tracking and monitoring progress made toward goals and healthy strategies; and (7) celebrating success. The module also introduced mentors to tools (e.g., mood mapping, journaling) they could use in their interactions with their mentees. Other training modules were also enhanced with additions of more specific information about CBT strategies. With the new module, mentors in the CBT group were slated to receive about 17 hours of training, whereas BAU mentors were meant to receive about 15.
- **Enhancement to ongoing match support.** While the BAU model already included monthly check-ins with the mentors, enhancements augmented these check-in conversations to reinforce mentors' use of CBT strategies and tools during their interactions with their mentees. Two components of support were enhanced:
 - The *Youth Growth Plan* that documents the goals identified for each match was restructured. Each match (in both the BAU and CBT groups) was required to have "Exhibit a Desired Change in Family Relationships" as their first goal. In addition, an expectation was added for CBT matches to identify which of the seven CBT strategies the match would use to support their goals and the objectives aligned with each goal.
 - *The Monthly Check-in and Data Collection Tool* was also restructured to guide staff and document mentors' application of the seven CBT strategies. While this tool was already in use prior to the initiative, additional questions were added that asked mentors to identify which of the CBT strategies they used.
- **Enhancement to caregiver engagement.** While the BAU model includes check-ins with the caregivers, the monthly check-in calls were enhanced to engage the caregiver more actively in

the mentoring relationship, ask about their use of CBT strategies and encourage caregivers to use them. A caregiver workbook was developed to introduce them to CBT principles and strategies. Site directors were asked to share this workbook with caregivers during the initial match meeting so they could refer to relevant worksheets in this workbook during their monthly check-in calls. In addition, the *Monthly Check-in and Data Collection Tool* was enhanced to enable site directors to provide more targeted guidance to help caregivers understand how they could use CBT strategies during their interactions with their children (e.g., by referencing worksheets in the workbook they could use). The tool was also enhanced to ask the caregiver as well as the youth about the progress youth made toward their goals and which CBT strategies they had used.

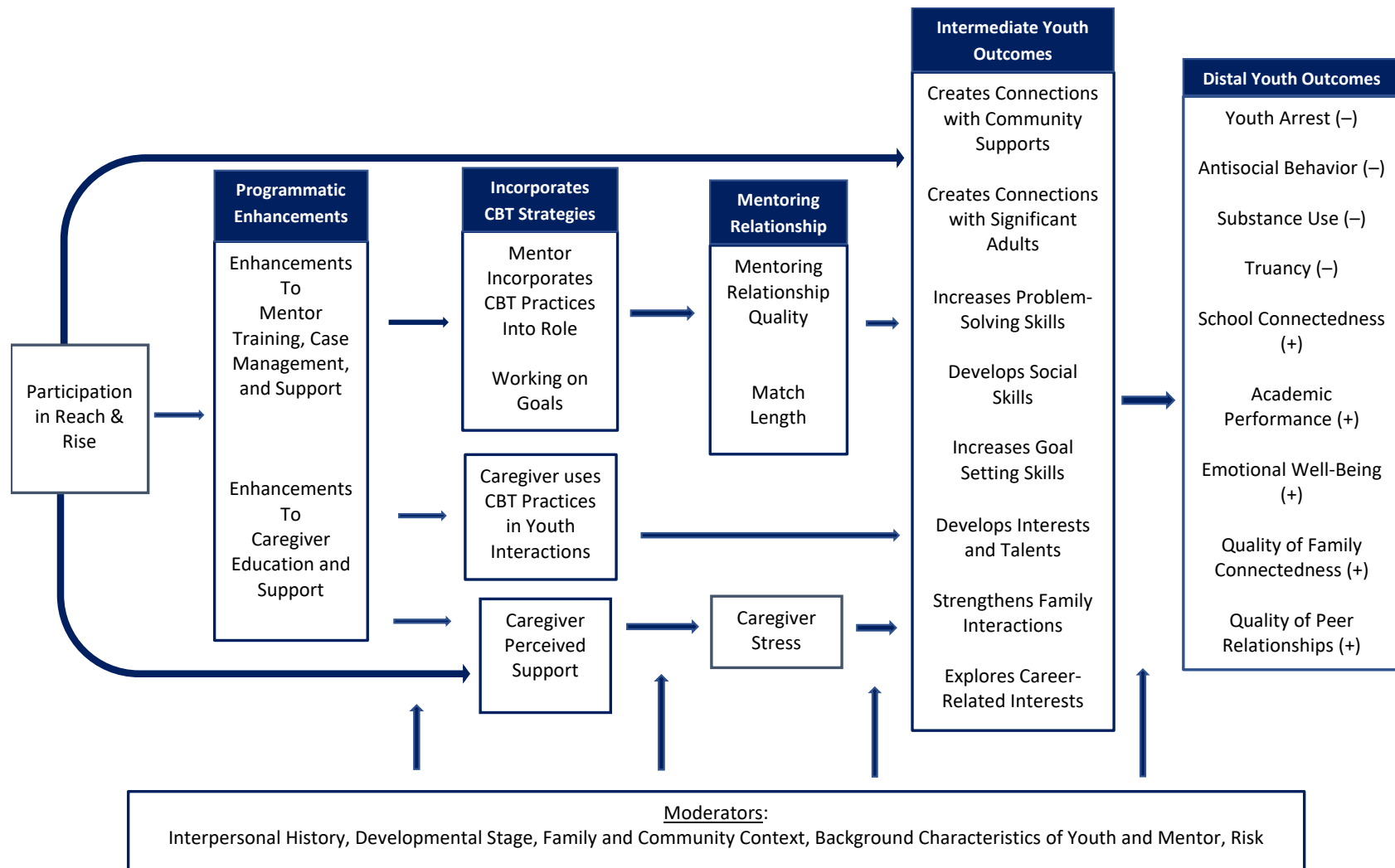
Theory of Change

The evaluation was designed to test the extent to which R&R participants benefit in a number of key areas, whether the CBT enhancements increased program benefits, and the practices and program characteristics associated with these impacts. This combined outcome and implementation study was guided by a theory of change, as shown in Exhibit 3.

The theory of change outlines the hypothesized mechanisms of change in matches receiving CBT-related practices. Broadly speaking, we hypothesized that, relative to those youth assigned to the control group, those youth who were assigned to be matched with a mentor (both BAU and CBT groups) would be more likely to create connections with community supports and adults, and develop important skills including problem-solving, goal setting and social skills. These changes should contribute to longer-term outcomes in three broad areas: increases in connections to peers and adults; improvements in emotional well-being; and decreases in delinquent behaviors. In addition, because of receiving a mentor, youth's parents should feel more supported and less stressed, and through their interactions with youth, further contribute to the short- and longer-term outcomes noted above.

In addition, analyses will test hypotheses relevant to only those youth who receive mentors. We posit that mentors of youth in the CBT-enhanced program sites (CBT group) should receive additional training in CBT and CBT-related supports from program staff to encourage and reinforce their use of CBT strategies. The caregivers of these youth should also receive support in the use of these CBT strategies. When these enhancements are implemented well, we expected to find that both mentors and parents would incorporate CBT practices into their interactions with youth. Matches in which mentors incorporate CBT practices into their relationship are expected to be higher quality relative to matches in which mentors implemented fewer CBT practices, all of which should translate into stronger short- and longer-term outcomes as noted above.

Exhibit 3. Theory of Change



Research Questions

Our study is guided by the following questions that aim to examine the program's outcomes (Q1-4), implementation (Q5-9), and cost (Q10).

1. Did participation in R&R improve connectedness and well-being and reduce involvement in problem behaviors?
2. Did CBT-enhanced R&R mentoring benefit youth more than BAU R&R mentoring?
3. Did exposure to CBT enhancements improve mentoring relationship quality?
4. Were effects of mentoring on youth outcomes mediated by implementation by mentors and caregivers of CBT strategies?
5. To what extent was the R&R mentoring program implemented as intended?
6. Were the enhancements clearly differentiated from existing practices?
7. To what extent were study participants exposed to key components of the program and the enhancements?
8. To what extent did mentors and caregivers incorporate CBT practices into their interactions with youth?
9. What factors affected implementation of the CBT enhancements?
10. What were the costs of the enhancements relative to their benefits?

Design of the Implementation Evaluation

Our implementation study is grounded in a systems-based perspective to understand the interrelationships among individuals, resources, and events at the local and national levels (Durlak & DuPre, 2008; Scaccia et al., 2015). It is organized around two components (i.e., implementation quality and support; and challenges to implementation quality) to address our five study questions related to implementation.

As part of implementation quality, we assessed **adherence** (the degree to which an intervention is delivered as it was designed), by examining the extent to which study sites used the planned practices and protocols to coach mentor and caregiver adoption of CBT strategies and achievement of goals (i.e., 15-17 hours of training delivered at each site; use of the enhanced youth growth plan; monthly check-in calls with the mentor, youth, and caregiver; use of the caregiver workbook). **Participant exposure** (the extent to which participants received the intervention) was assessed through mentor and parent reports of the training and support they received to help them use the CBT strategies. We also examined participants' **response to the**

intervention and their engagement with the CBT practices they were trained and supported to implement.

As part of our assessment of **supports for, and challenges to implementation quality**, we examined aspects of program delivery that were not directly related to the implementation of the intervention within a mentoring relationship but nevertheless could influence the implementation capacity of site directors at each location. Scaccia and his colleagues (2015) have characterized these capacities as individuals' motivation (i.e., belief in and willingness to support the intervention), general program capacity (i.e., organizational climate, resources, and leadership support), and specific intervention capacity (i.e., staff knowledge of the intervention, perceived supports for the intervention).

To examine the implementation of the enhancements and investigate the processes that influenced the level of implementation, we employed a mixed-methods approach, collecting both qualitative and quantitative data at different periods in the project. We used survey data collected from the mentors, parents, and program staff. We also interviewed site directors in Year 3 of the study. In addition, we conducted focus groups with groups of mentors and parents across different sites. Our analysis of program implementation is presented in Chapter 4, and it includes both implementation of the broader R&R program (i.e., both BAU and CBT programs) as well as implementation of the enhancements in the CBT sites.

Design of the Outcome Evaluation

A randomized controlled trial (RCT) design was used to generate evidence on youth outcomes.

Site Selection

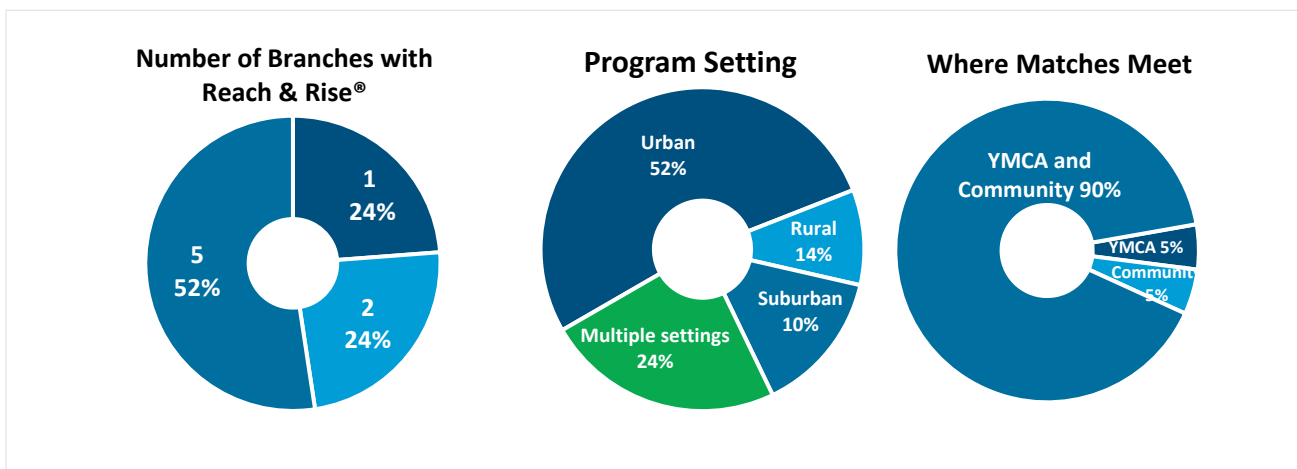
AIR worked together with Reach & Rise® to select sites for the evaluation. Using an evaluation readiness screening tool, we identified 33 sites to include in the evaluation. Of the 38 R&R programs across the country, five were determined to be unprepared to participate in a randomized controlled trial due to several factors, including the capacity of the program to deliver the BAU model of R&R and whether there was a site director in place.

To compare the enhancements to the business-as-usual (BAU) model, the most feasible design was determined to be a split of 25% of sites using the business-as-usual model and 75% of sites using the enhancements. Sites were selected to be business-as-usual or enhancement using stratified sampling after the full set of program sites were sorted into four groups using cluster analysis. There were 33 program sites identified to participate in the evaluation and the goal was to select 8 of those sites for the business-as-usual group, leaving 25 sites for the enhancement group. Using cluster analysis provided the opportunity to create four relatively homogeneous strata from which to select the final sample using random sampling procedures. By constructing

clusters first, we ensure that we get as diverse a set of programs in the BAU condition as possible, given that we are only selecting one-quarter of the sites (rather than one half) for this comparison condition. The BAU group would then continue to provide services following the existing program model; and the remaining 25 were trained to provide enhanced services and supports to their matches. This design allowed us to rigorously compare the impacts of programs using the R&R BAU model versus programs assigned to the new enhanced condition.

Exhibit 4 presents the distribution from 21 YMCA sites included in our analyses in terms of the number of branches they operate in, their geographical setting, and where the matches meet.⁴ Most of the sites operated in urban areas with a smaller number serving only suburban or rural communities. Most of the matches in these sites met at both the YMCA and in the community, although matches at a few sites met either exclusively out in the community or exclusively at the YMCA facility.

Exhibit 4. Characteristics of Reach & Rise® Evaluation Sites (N=21)



Randomization of Study Participants

Within all participating sites (both CBT and BAU), researchers randomly assigned enrolling youth to either a control condition that would not receive mentoring for 15 months or a treatment condition that would be available for mentoring immediately. Random assignment occurred after program enrollment and administration of the baseline surveys to parents and youth. Site

⁴ In preparation for the cluster analysis, we surveyed each of the programs in 2017 prior to the start of the evaluation. One program site was established in 2018 and did not participate in the baseline program survey. There were ultimately 22 programs that matched youth in the evaluation with mentors, and our analyses are limited to those 22 programs. For the analysis is Exhibit 4, thus, N = 21.

directors were informed as to the assignment for each youth, and they, in turn, would notify the caregivers as to the assignment. A total of 316 youth were assigned to the treatment group and 284 youth were assigned to the control group. Youth were enrolled into the study on a rolling basis starting in October 2017 and ending in June 2020. All enrolling youth aged 9 and older were eligible to participate in the evaluation.⁵

If assigned to the control group, the youth was placed on a waiting list and not matched with a mentor for at least 15 months; if assigned to receive mentoring services, the youth was matched with a mentor as soon as a suitable volunteer became available for matching. All youth assigned to the mentoring group at a given site were assigned to either the BAU or CBT group depending on the designation of their site. Thus, all matches and the site director at a particular site were in the same study condition. All matches at sites assigned to the CBT group were to receive mentoring practices augmented by the enhancements.

Data Sources

We relied on several data sources in the evaluation. In Exhibit 5, we note how we used these data to address the nine key research questions.

Exhibit 5. Data Sources Used to Address the Reach & Rise® Evaluation Questions

Research Questions	Mentor baseline and follow up survey	Caregiver baseline and follow up survey	Youth baseline and follow up survey	Mentor and Caregiver focus groups	Staff interview	Staff survey	Program cost survey	Juvenile justice records	Program documents
Outcomes/Impacts									
1. Did participation in R&R improve connectedness and well-being and reduce involvement in problem behaviors?	X		X						
2. Did CBT-enhanced R&R mentoring									

⁵ Due to limited enrollment capacity, during the evaluation’s implementation, only youth who participated in the study were typically enrolled in the Reach & Rise program. Site directors could identify a *very small* number of youth that they would exclude from the evaluation as “hardship cases,” so those youth would not be subject to random assignment into the control group, but decisions on hardship cases were always made in consultation with staff at the national office for Reach & Rise®.

Research Questions	Mentor baseline and follow up survey	Caregiver baseline and follow up survey	Youth baseline and follow up survey	Mentor and Caregiver focus groups	Staff interview	Staff survey	Program cost survey	Juvenile justice records	Program documents
benefit youth more than BAU R&R mentoring?									
3. Did exposure to CBT enhancements improve mentoring relationship quality?			X						
4. Were effects of mentoring on youth outcomes mediated by implementation by mentors and caregivers of CBT strategies?	X	X							
Implementation									
5. To what extent was R&R program implemented as intended?	X	X		X	X	X			
6. Were the enhancements clearly differentiated from existing practices?					X				X
7. To what extent were study participants exposed to key components of the program and enhancements?	X	X	X	X	X	X			
8. To what extent did mentors and caregivers incorporate CBT	X	X	X	X	X				X

Research Questions	Mentor baseline and follow up survey	Caregiver baseline and follow up survey	Youth baseline and follow up survey	Mentor and Caregiver focus groups	Staff interview	Staff survey	Program cost survey	Juvenile justice records	Program documents
mentoring into their interactions with youth?									
9. What factors affected implementation of the CBT enhancements?	X	X		X	X	X			
10. What were the costs of the study enhancements relative to their benefits?							X		X

Data Collected from Program Participants

Mentor Baseline Survey. This survey was administered by site directors in the program office when mentors were enrolled in the study. The survey was completed independently by mentors and captured information on their background, experiences leading up to becoming mentors in the program, level of confidence in taking on the mentoring role, and experiences with the program’s preparation for the match.

Mentor Follow-Up Survey. This survey was completed by mentors 15 months after random assignment and captured information about the mentor’s relationship with the youth, their approach to mentoring, and the training and support provided by the program. The AIR research team invited mentors to complete the survey online and only if they had met the mentee at least twice. Reminders were made by phone, email, and text. Note that if the match ended, early for whatever reason, mentors were asked to complete the follow-up survey at the time of match closure. Only the survey data from the child’s most recent mentor, if they were matched with more than one mentor, were included in analyses.

Youth Baseline Survey. This survey was completed by youth at study enrollment (before random assignment) in the program office. It was administered by program staff who were instructed to read the questions aloud while youth completed the survey silently either on paper or online. The

survey asked about how the youth felt about him or herself, the adults in their life, their relationship with their parent(s) and peers, how things were going in school, and involvement in problem behaviors.

Youth Follow-Up Survey. This survey was completed by youth 15 months after random assignment and assessed all the constructs included in the youth baseline survey in addition to (for those who had been matched) their experiences in the mentoring program and their most recent R&R mentoring relationship. Site directors also administered the follow-up survey at their office or by phone using the same procedures as those used at baseline. For those families they couldn't reach, the research team administered the survey by phone, reading the questions to youth while they completed their survey silently online or on paper.

Caregiver Baseline Survey. This survey was completed independently by the youth's caregiver at study enrollment and included questions on the background of the youth and family, individual and environmental risk factors the child had been exposed to, and the youth's recent behavior prior to enrollment in the study in a variety of areas.

Caregiver Follow-Up Survey. This survey was completed independently by the caregiver online or on paper 15 months after random assignment. It included all outcome measures assessed at baseline in addition to (for those whose child had been matched) the experiences of the youth and parent in the mentoring program and in the youth's most recent mentoring relationship.

Focus groups with caregivers and mentors. Parents and mentors across different sites were invited to participate in a parent or mentor focus group respectively to share their experiences with the program. We conducted 6 focus groups with mentors (21 mentors in total), 2 focus groups with caregivers and 3 individual interviews with caregivers who could not attend the focus groups (9 caregivers in total). Because we did not talk to a representative group of mentors and caregivers across all sites, these data were used to supplement our surveys.

Survey Response Rates

In total, there were 596 youth enrolled into the evaluation. Of these, 453 (76%) participated in the sites that implemented the enhancements (CBT sites) and 143 (24%) were in the Business-as-Usual (BAU) sites. A total of 268 youth who were randomly assigned to the treatment group (86%) were matched with mentors, this included 160 at CBT sites and 54 at BAU sites. Because we were following participants across a 15-month period, we expected some program and study attrition. We minimized study attrition by collecting secondary contact information from parents at enrollment. In addition, we implemented a number of practices to ensure high response rates and assess overall and differential attrition to inform our interpretation of findings. In Exhibit 6, we

show the overall and differential attrition rates. Our study has low attrition and can be determined to meet the What Works Clearinghouse Group Design Standards “without reservations.”

Exhibit 6. Attrition Rates for Follow-up Surveys of Youth, Caregivers, and Mentors

Youth				Caregivers			
Overall	Treatment	Control	Differential	Overall	Treatment	Control	Differential
15.1%	14.2%	16.1%	1.9%	15.8%	14.6%	17.2%	2.6%

Data Collected from Staff

Staff surveys. Site directors were asked to complete a survey when the project started (or when they started their position if they began their position after the start of the project) that asked about their background (N=40). The close-out survey assessed staff perceptions of the impact of the enhancements, their experiences in implementing the enhancements, the supports they experienced from their YMCA, and their intentions and aspirations related to the incorporation of the enhancements into the program’s business-as-usual model. A close-out survey was also administered to staff as the project was ending or as the director left their position for those who left prior to the end of the study (N=34). Of the 22 sites that were retained in the study, 18 site directors completed both a baseline and close-out survey.

Interviews with site directors. In Year 3 of the study, we conducted phone interviews with 11 site directors (three from BAU sites and eight from CBT sites). At the time of our interview, four of them were no longer with the program because the program had closed, or they had left their YMCA position. The interviews asked about their experiences delivering the R&R program and the enhancements and uptake among mentors and caregivers. Each interview lasted about 60 minutes and used a semi-structured protocol that aligned with our process evaluation questions.

Program Records

Match tracking sheets. Site directors completed monthly reports on each match that documented mentor training completion, progress made toward match goals, and mentor reports of CBT strategies used during interactions with the mentee. Site directors were also expected to use the Monthly Check-in Tool, Mentor Activity Log, and Youth Growth Plan to report on each match.

Cost and time-use surveys. We administered time use surveys every four months to each site director to collect information on how they allocated their time to several key program functions (e.g., mentor recruitment, support, training). Toward the end of the data collection phase, we also administered a survey to each participating YMCA focusing on the costs of implementing the program.

Juvenile Justice Records

We worked with each program to secure records from their local juvenile justice agencies on any arrest each youth may have had prior to and during the 15-month assessment period. Our plan had been to receive the data for each site once all the youth (in that site) had completed their follow-up surveys. The timing of the pandemic meant that many juvenile justice agencies could not easily respond to our data request at the time we reached out. At the time we closed our data collection efforts, there were still five sites (of the total 22 sites in our analysis) that had not yet been able to complete the process to release the data to us. Another three sites declined to provide the data. These 8 sites for which we did not receive data on juvenile justice involvement accounted for 175 (30%) cases from our sample. We received individualized data from 11 sites, which included 231 (40%) cases from our sample. Finally, in three sites, we received aggregated data on the cases in our sample. For these three sites, there were a total of 175 (30%) cases.

Researcher-Practitioner Partnership

One of the biggest challenges in large multisite studies is to recruit enough participants for the evaluation and implement data collection and management effectively. To support these efforts, we implemented these strategies to support the sites in this study:

- We held regular calls (weekly during peak data collection periods) with program site directors and the national program coordinator during Years 2 through 4 of the project to ensure that study procedures are followed and that staff members are supported in recruiting adequate numbers of study participants and carrying out data collection responsibilities.
- The research team provided ongoing quality checks (at least monthly) of data submitted by program staff.
- The research team administered and coordinated the follow-up surveys with mentors, youth, and their parents in collaboration with program site directors to that resulted in follow-up response rates that exceeded 70% for mentors, youth, and parents.
- As data were collected and analyzed, the research team also shared the preliminary findings with the national director and program site directors.
- In addition, the research team and R&R leadership presented together at the National Mentoring Summit in January 2022 and will present results from this evaluation at the 2023 Summit.

Reach & Rise® designated one national coordinator who oversaw the implementation of the enhancements and research tasks across all sites. In August 2017, R&R staff and the AIR research

team met at a national training to prepare program staff for their roles in data collection. The training aimed to: (a) clarify the role of the evaluators to minimize the study's burden on program staff and ensure that the research design is was not compromised; (c) foster the collaborative nature of the relationship between the evaluators and program staff; (d) get staff buy-in on the importance of random assignment and informed consent, and on working with AIR to rigorously implement these elements; (e) provide in-depth instruction and practice with survey administration; and (f) guide staff on tracking study enrollment and data collection activities, and recording program data for the implementation study.

Analyses for the Outcome Study

Prior to conducting analyses, we prepared the datasets by using a multiple imputation approach to address missing data on outcome and control variables (Medeiros, 2016). Missing data occurred primarily due to lack of collection of 12-month follow-up data from youth or caregivers, with additional small numbers of youth/caregivers who did complete the survey but had missing data on a given outcome. Based on the total proportion of missing data for any particular outcome, imputation was used to create 20 different data sets. The outcome analyses were then conducted on these multiply imputed datasets. Parameter estimates were averaged across the different analyses. Standard errors for the aggregated results were calculated using Rubin's (1987) formula that combined variability within and between datasets.

The impact analyses were structured to address two key questions. First, did the R&R program (across both BAU and CBT programs) lead to positive impacts for youth (i.e., higher school connectedness, school attendance, academic performance, emotional well-being, quality of family connectedness and quality of peer relationships; and a lower likelihood of substance use, juvenile arrest, and antisocial behavior)? Second, did enhanced mentoring lead to stronger outcomes relative to BAU mentoring? For both questions, impacts were assessed by comparing youth randomly assigned to receive mentoring to those randomly assigned to a waitlist for 15 months. For each outcome of interest, we estimated intent-to-treat effects (i.e., analyzing all cases assigned to the treatment and control groups regardless of exposure to treatment) to estimate the average effect of *offering* youth the opportunity to receive enhanced mentoring on the outcomes in our theory of change. The nested structure of the data calls for the use of multilevel modeling techniques that account for interdependencies within the data. We estimated multilevel mixed effects models at three levels so that we could examine the effects for youth within families (L2) within programs (L3).

Based on the theory of change, there were a number of outcome measures that we assessed within families of outcomes. Mathematically, including more outcome measures will increase the likelihood of statistically significant findings that lead us to conclude that enhanced mentoring

contributes to a particular outcome, even if the intervention did not actually have a true effect on the youth. In an effort to minimize the number of times that we falsely reject null hypotheses, we used the Benjamini-Hochberg procedure to compute an adjustment to α (the probability of making a Type I error). We considered statistically significant results to be those where the adjusted $p < .10$. Our outcomes were grouped as noted below:

Intermediate Outcomes

Creating Connections

1. Connections with Community Supports
2. Connections with Significant Adults
3. Has Interests and Talents
4. Explores Career-Related Interests [2 measures]
 - a. Parent report
 - b. Youth report

Skill Development

5. Problem-Solving Skills
6. Social Skills
7. Goal Setting skills

Strengthening Family Interactions

8. Parenting [2 measures]
 - a. Parental Involvement
 - b. Positive Parenting

Distal Outcomes

Problem Behaviors

1. Youth Arrest [2 measures]
 - a. Official records data
 - b. Parent reports
2. Antisocial Behavior [2 measures]
 - a. Delinquent behavior
 - b. Gang involvement

3. Substance Use
4. Truancy
5. Misbehavior in School

Social Emotional Factors

6. Emotional Well-Being [4 measures]
 - a. Depressive Symptoms
 - b. Life Satisfaction
 - c. Future Expectations
 - d. Happiness

Attachments

7. Family Connectedness
8. Quality of Peer Relationships
9. School Connectedness
10. Academic Performance

Analyses for the Implementation Study

Survey data from mentors and site directors were used as the primary source of information to assess implementation quality and capacity. All data were cleaned and managed by a data coordinator, and quality assurance mechanisms were applied to check for completeness and quality. Data collected from interviews and focus groups were used to enhance our understanding of survey data responses and enrich our interpretation of findings. Where needed, individual interview and focus group notes were incorporated into our analyses to fill in any gaps and enhance our understanding of implementation processes.

All interviews and focus groups were recorded with the permission of participants and used to clean interviewer notes. The notes were coded in NVivo 12, a qualitative software program to examine program implementation and implementation of enhancements, implementation fidelity and processes, supports and challenges to intervention delivery. The key components of implementation (i.e., fidelity, participant exposure, and uptake) were informed by implementation science (Durlak & DuPre, 2008; Scaccia et al., 2015). Key findings were summarized for reporting and quotes were extracted to provide supporting examples.

Characteristics of Participants

In this section we provide a brief discussion about the sample of youth and mentor participants for this evaluation in addition to a description of the matches that were created.

The Youth

Exhibit 7 includes demographic characteristics of participating youth: age, race, ethnicity, and gender. We also have several control variables that reflect the background of the youth, including the number of people in the household, the level of individual and environmental risk to which they have been exposed, and whether the youth was already receiving services related to mental or behavioral health. We also present data in Exhibit 7 on the baseline measures of each of the outcomes we will examine in the outcome analyses. For each variable included in this table, we break out the information for the treatment group and control group and provide an effect size reflecting the differences between the two groups for each variable. For each instance where the effect size is 0.05 or greater (shown in the table in **bold**), we included each of these measures as controls in all the multivariate outcome analyses presented in the next chapter.

Exhibit 7. Baseline Characteristics and Effect Size Based on Treatment-Control Group Differences

Control / Predictor Variables	Measures (N)	Control Group (%/Mean)	Treatment Group (%/Mean)	Effect Size
Youth Age	Age at Randomization (N = 578)	11.59	11.64	0.022
Youth Race	African American/Black (N = 575)	57.0%	47.7%	0.181
	Caucasian/White (N = 575)	45.7%	50.0%	0.080
	Native American or Alaska Native (N = 575)	4.2%	3.5%	0.036
	Asian (N = 575)	2.3%	2.6%	0.019
	Native Hawaiian/Pacific Islander (N = 575)	0.8%	0.6%	0.024
Youth Ethnicity	Latino/Hispanic (N = 575)	14.3%	19.7%	0.159
Youth Gender	Female (N = 580)	38.8%	44.9%	0.122
Size Of Family	Number of People in Household (N = 554)	4.42	4.21	0.115
Youth Receiving Mental Health or Behavior Health Services	Parent Report of Youth Receiving Mental or Behavioral Health Services (N = 556)	46.2%	43.5%	0.053
Environmental Risk	Top Quartile on Environmental Risk (N = 560)	22.0%	19.9%	0.052
Individual Risk	Top Quartile on Individual Risk (N = 560)	20.4%	21.5%	0.027
Connections to Community Supports	Creates Connections with Community Supports (N = 555)	71.7%	69.0%	0.058
Connections to Significant Adults	Creates Connections with Significant Adults (N = 564)	54.4%	53.7%	0.014

Control / Predictor Variables	Measures (N)	Control Group (%/Mean)	Treatment Group (%/Mean)	Effect Size
Problem Solving	Increases Problem-Solving Skills (N = 568)	3.63	3.66	0.032
Social Skills	Develops Social Skills (N = 570)	3.65	3.69	0.054
Goal Setting	Increases Goal Setting Skills (N = 569)	3.58	3.69	0.120
Interests And Talents	Develops Interests and Talents (N = 570)	83.9%	84.2%	0.010
Strengthens Family Interactions	Parental Involvement (N = 560)	3.82	3.88	0.100
	Positive Parenting (N = 560)	4.31	4.33	0.035
Career-Related Interests	Explores Career-Related Interests – Youth Report (N = 559)	3.37	3.41	0.030
	Explores Career-Related Interests – Parent Report (N = 556)	25.3%	28.2%	0.068
Youth Arrest	Youth Arrest – Parent Report (N = 555)	10.3%	13.0%	0.084
	Youth Arrest – Official Records (N = 581)	6.0%	4.8%	0.052
Antisocial Behavior	Self-Report Delinquency (N = 564)	56.7%	61.0%	0.087
	Gang Involvement (N = 559)	6.3%	9.0%	0.103
Substance Use	Substance Use (N = 562)	15.1%	19.0%	0.103
Truancy	Truancy (N = 567)	19.7%	25.2%	0.131
School Misbehavior	School Misbehavior (N = 558)	57.6%	62.1%	0.091
School Connectedness	School Connectedness (N = 570)	3.60	3.55	0.056
Emotional Well-Being	Depressive Symptoms (N = 562)	2.25	2.30	0.052
	Happiness (N = 563)	3.93	3.85	0.070
	Satisfaction with Life (N = 563)	7.27	7.18	0.041
	Hope for the Future (N = 569)	3.44	3.42	0.048
Family Connectedness	Quality of Family Connectedness (N = 566)	4.03	4.02	0.008
Peer Relationships	Quality of Peer Relationships (N = 567)	3.76	3.68	0.086

The Mentors

We present descriptive statistics for the mentors involved in the study in Exhibit 8. The mentors ranged in age from 21 to 83, and the average was 39. While less than half of the youth in the study were female, more than half (57%) of the mentors were female. Just over a quarter of mentors were Black, compared with nearly half of the youth eligible for mentoring. Half of the youth in the treatment group were White, and 62% of mentors reported being White. Less than 8% of the mentors reported being Hispanic while almost 20% of the youth in the treatment group reported being Hispanic. More than 40% of the mentors reported working in a helping profession, and just over one third reported having received previous exposure to CBT strategies. Just over 80% of mentors reported having a college degree, and nearly 40% of those matched with youth in the study had previously mentored in a formal program, including R&R. Finally, 11% of the mentors were also parenting school-age youth.

Exhibit 8. Baseline Characteristics of Mentors

Characteristic	Measure (N)	%
Mentor Age	Age at Baseline (N=191)	39.1
Mentor Race	African American/Black (N=193)	26.4
	Caucasian/White (N=193)	62.7
	Native American or Alaska Native (N=193)	3.6
	Asian (N=193)	6.7
	Native Hawaiian/Pacific Islander (N=193)	1.0
Mentor Ethnicity	Latino/Hispanic (N=187)	7.5
Mentor Gender	Female (N=193)	56.5
Occupation	Works in a helping profession (N =193)	42.5
Experience with CBT	Previous training, education or work experience in CBT (N =193)	34.2
Education	Associate or bachelor’s degree (N =193)	56.5
	Graduate degree (N =193)	24.9
Mentoring Experience	Has previously mentored in a formal program (N =193)	39.4
Children	Has children currently attending elementary, middle or high school (N =193)	10.9

The Mentor-Mentee Matches

A total of 313 youth were randomly assigned to the treatment group, which would receive mentoring as soon as a suitable volunteer was found; and 268 youth were assigned to the control group, which would not receive a mentor for at least 15 months. By our 15-month follow-up, program records noted that 8 (3%) youth in the control group had been matched with a R&R mentor, and 75% of those assigned to the treatment group had been matched with a mentor (69% of those who completed our follow-up survey similarly reported having been matched). This corresponds with an “unmatched” rate of 25% of youth in the treatment group, which is comparable to that seen in other studies of mentoring (DuBois et al., 2022; Tierney et al., 1995) and likely reflects challenges experienced by the programs related to the COVID-19 pandemic (discussed below).

Information on the length of each mentor-mentee relationship came from a combination of sources. Program records provided documentation for the date of the meeting where the mentor and mentee were introduced and goals were set, as well as the official match termination date (i.e., the date of the closure meeting with program staff or the date an official termination letter is sent when no closure meeting was possible). In most cases, these dates were used to calculate match length (i.e., the length of time between the match start and end date). Mentors and caregivers also reported the timing of the last contact between the mentor and mentee if they were no longer meeting at the time of the follow-up survey. When the final contact between the mentor and mentee occurred prior to the closure meeting, the date of the final contact was used to calculate the length of the match. Although R&R is intended to be a 12-month program, in a

small number of cases, the match was approved to extend for an additional 12 months beyond the initial 12-month period after the match began.

We found that mentoring relationships of those who were matched lasted an average of 8.5 months (ranging from 0 to 26 months); 30% of these matches were still active at the time we collected youth's follow-up survey. Mentors reported spending an average of about 5 hours with their mentee in a typical month.

In the follow-up survey, we asked caregivers of those youth whose matches had ended, why their child's match had ended. They were able to select multiple reasons. The primary reason, noted by 43% of caregivers whose child's match had ended, was that the relationship was supposed to end after 12 months. In addition, some of the caregivers (12%) reported the match ended because the program shut down or due to COVID. Some pointed to mentor-associated reasons for the match ending, including that the mentor was not a good fit for the youth (13%) or that the mentor had moved away (7%). Others selected reasons involving caregiver or youth preferences including that they (12%) or their child (10%) did not want to be in the program anymore, the family had moved (7%) or their child didn't need a mentor anymore (6%) or had other commitments (4%).

One potential concern about more targeted programs like R&R, is that a CBT focus might detract from the quality of the mentoring relationship—an important ingredient in fostering positive outcomes for youth (see, for example, Bayer et al., 2015). Reports from both youth and mentors suggest this was not the case in this sample. Youth reported feeling fairly close to their mentors, reporting an average of 3.29 on a 4-point scale from “not close at all” to “very close,” and their mentors reported feeling similarly close to them, scoring an average of 3.87 on a five-point scale from “strongly disagree” to “strongly agree.” Youth also reported infrequent conflict and criticism in these relationships (scoring close to 1 on a scale from 1 to 4 on both measures), and they reported an average of 3.21 on a 4-point scale of relational health (e.g., “My mentor helps me even more than I ask for or expected,” “I feel happy after being with my mentor”). In addition, mentors reported fairly high levels of satisfaction and investment in their relationship (3.89 and 3.60 respectively on a 5-point scale).

Because these mentors (particularly those in the enhanced condition) were encouraged to focus on the use of CBT strategies in their interactions, another potential concern is that youth might feel pressured in ways they might not in a completely “relationship-based” program, and the content of their interactions might be focused almost exclusively on goal achievement. These concerns also were not borne out in this sample. Although their relationships had a slight focus on goals, this did not seem to feel “excessive” to youth, and matches engaged in a variety of relationship-building activities. We asked both mentors and youth about the extent to which their relationship focused on “growth” and goal achievement (e.g., “My mentor helps me to set and reach goals,” “Learning new things together is an important part of our relationship”). Youth

scored lower on this scale than on those scales focused more on general satisfaction in the relationship, with an average of 2.85 on a 4-point scale. Mentors reported an average of 3.70 on the comparable 5-point scale. Youth also reported low “pressure” in the relationship (e.g., “My mentor is always trying to make me learn things I’m not interested in,” “My mentor expects too much from me sometimes”), scoring an average of 1.55 on a 4-point scale. Finally, despite the moderate focus on goal achievement, youth reported feeling that the relationship was centered on their preferences, rating the relationship 3.21 out of 4 on youth centeredness (e.g., “My mentor and I decide together what we will do when we meet,” “My mentor and I do things I really want to do”).

We examined whether the measures of relationship quality differed significantly between matches in the programs implementing the CBT enhancements and the programs operating business-as-usual (BAU). As shown in Exhibit 9, we found only one statistically significant difference between the two groups: mentors in the BAU programs reported a stronger growth focus in their relationships than mentors in the CBT-enhanced programs. Youth in CBT programs also reported a slightly higher focus on growth in their relationships than youth in the BAU programs, but this difference was not statistically significant.

Exhibit 9. Mean Levels of Relationship Quality by Type of Program

Measure of Relationship Quality	BAU	CBT
Youth Report of Closeness	3.16	3.34
Youth Report of Youth Centered	3.20	3.21
Youth Report of Growth Focus	2.93	2.82
Youth Report of Conflict	1.08	1.14
Youth Report of Criticism	1.12	1.13
Youth Report of Relational Health	3.10	3.25
Youth Report of Pressure	1.53	1.56
Mentor Report of Closeness	4.00	3.82
Mentor Report of Satisfaction	3.99	3.85
Mentor Report of Investment	3.65	3.57
Mentor Report of Growth Focus*	3.92	3.61
Match Length (Days)	241.47	264.17

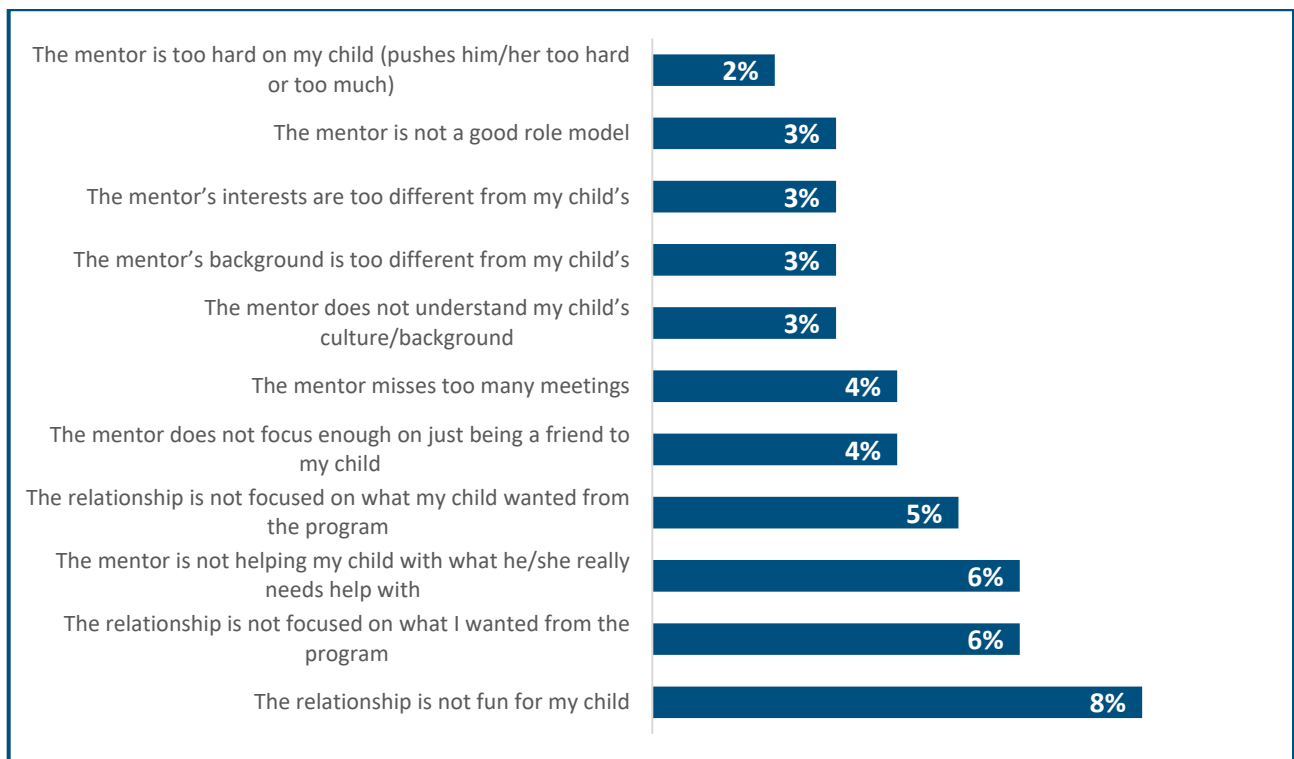
Note: * difference between two groups significant at p<.05.

Mentors also reported engaging in a wide variety of activities with their mentees, with over half reporting spending either “a lot” or “most” of their time together “making time to goof around, laugh, and have light-hearted fun” (72.6%) or talking about important people in their mentee’s life (63.4%), and relatively few reporting similar frequencies of such potentially goal-directed activities

as helping their mentee with schoolwork (9.2%) or talking about the consequences of negative behavior (23.3%).

Few caregivers reported experiencing challenges with their child’s relationship. Among caregivers with youth in mentoring relationships, 79% reported that neither they nor their child experienced any challenges with the child’s mentoring relationship. For those who did identify challenges, we asked about the nature of these challenges. In Exhibit 10, we report the percentage of caregivers who identified each of the various challenges we asked about. Respondents were able to select all that applied. The most frequently reported challenges were that the relationship was not fun for their child, the relationship was not focused on what the caregiver wanted from the program, and that the mentor was not helping the child with what they needed help with.

Exhibit 10. Caregiver Report of Challenges with Child’s Mentoring Relationship (N = 181)



A little over a third (36%) of the matches in the study had at least part of their match affected by the COVID-19 pandemic, with at least some of their 15-month follow-up period occurring after the start of the pandemic (March 2020): 14% had up to a quarter of their match take place in this period; 9% had between a quarter and a half of their match in this period; 3% had between half and three quarters of their match during this period; and 10% had more than three quarters of their follow-up period occurring after the start of the pandemic. The pandemic affected whether and how matches could be made (e.g., a handful were made remotely) and how activities could

take place. Matches could not meet in person through 2020 and into 2021, and many of the YMCAs closed temporarily with some closing permanently. Thus, even after COVID precautions lifted and matches could meet in person, in many cases, those mentors who had planned on meeting at least partially at the YMCA (90% reported this in the baseline survey) had to make alternate plans.

We asked caregivers how the COVID-19 pandemic affected their child's match interactions. Among caregivers that reported that their child was in a match during the pandemic, 37% reported the mentor and mentee got together in person, 37% reported the pair communicated using an online platform, 50% reported they were in contact by phone, and 20% reported there was no communication between the mentor and mentee during this period. For those matches that did communicate, 19% of caregivers indicated that they communicated less often than once a month, 19% about once a month, 32% once every couple of weeks; and 29% reported that there was weekly communication between the mentor and mentee. For those matches that had met prior to the pandemic, we asked parents whether they communicated more often, less often, or about the same as they had prior to the pandemic: 53% reported that they communicated less frequently; 47% said they communicated at about the same frequency; and none reported that their child communicated more often with their mentor after the start of the pandemic.

We also asked whether the caregiver had noticed changes in their child's match during the outbreak. For the matches still in place during the pandemic, 72% of caregivers reported that the youth and mentor did different types of activities together than had been typical prior to the pandemic. In 50% of the cases, caregivers reported the mentor said or did things to help the mentee handle challenges related to the pandemic (e.g., feelings, schoolwork). It is interesting to note that while the pandemic appeared to interfere with the establishment of new mentoring relationships, in less than 20% of the matches in place prior to the start of the pandemic did the caregiver report that their child seemed to feel less connected to the mentor because of the pandemic.

Finally, we also asked about challenges the mentoring relationship faced during the outbreak. For matches that were active during the pandemic, 31% of caregivers reported there were no pandemic-related challenges experienced by the match. When challenges were identified, the most common included the mentor making time for communication (32%), coming up with fun activities (43%), and difficulty finding ways (e.g., access to technology) to communicate (46%).

Broadly speaking, caregivers reported that the changes and events associated with the COVID-19 outbreak were not very difficult for their child, with 65% noting that they were "not at all" or "only slightly" difficult and 17% reporting they were "very" or "extremely" difficult for their child. Caregivers also reported on how difficult the outbreak was for themselves, with 64% noting it was

either “not at all” or “only slightly” difficult and just 10% reporting it was “very” or “extremely” difficult.

Chapter 3. Results from Outcome Analyses

In this chapter we present results from the outcome analyses. Based on the Theory of Change (Exhibit 3 in Chapter 2), the analyses were structured to address Research Questions 1-4:

1. Did participation in R&R improve connectedness and well-being and reduce involvement in problem behaviors?
2. Did CBT-enhanced R&R mentoring benefit youth more than BAU R&R mentoring?
3. Did exposure to CBT enhancements improve mentoring relationship quality?
4. Were effects of mentoring on youth outcomes mediated by implementation by mentors and caregivers of CBT strategies?

We first conducted intent-to-treat analyses to examine whether youth who were offered R&R mentoring experienced more positive outcomes relative to youth who were not offered access to the program. Following this section, we examine whether exposure to the programmatic enhancements is associated with stronger mentoring relationship quality. Finally, we will present results from structural equation models that were designed to identify the paths through which the enhancements had an impact on youth outcomes.

Did Reach & Rise® Mentoring Have an Impact on Youth Outcomes?

We assessed the impact of participation in R&R on each youth outcome using an intent-to-treat approach (i.e., all youth in both groups were retained in these analyses regardless of whether they received R&R mentoring). For each outcome, we estimated a mixed effects multilevel model comparing participants in the treatment group (i.e., assigned to receive mentoring) to those in the control group (i.e., assigned to the waitlist). The exhibits below present the coefficients and standard errors for this contrast, accompanied by indicators for the tests of statistical significance and effect estimates.⁶ When the outcome variable is a continuous measure, these results are from mixed-effects generalized linear models. When the outcome variable is dichotomous, the results are from mixed-effects logistic regression models. All the estimated models controlled for baseline assessments of the outcome variable as well as the standard control variables that adjusted for demographics and baseline differences (as listed in

⁶ To control the false discovery rate, we calculated critical values using the BH procedure. A coefficient is considered statistically significant if the p -value is less than the BH critical value.

Exhibit 7). The models also accounted for the family-level (i.e., L2) and program-level (i.e., L3) clustering of participants.

In Exhibit 11, we present the results from the models assessing the distal youth outcomes. In interpreting the findings reported in the table, we note that the variable for treatment condition is coded 1 for the treatment group and 0 for the control group. We found that youth in the treatment group were less likely to report involvement in delinquency than youth in the control group (odds ratio = 0.432). We also found that youth in the treatment group were less likely to report substance use during the follow-up period (odds ratio = 0.510).

In addition, youth in the treatment group reported significantly greater levels of connectedness to their families (effect size (d) = 0.18) and to school (d = 0.27) than those in the control group. Participants assigned to the treatment group also had better academic performance, as reported by their caregivers, than youth assigned to the control group (d = 0.21).

Exhibit 11. Results from Multilevel Mixed-Effects Models: Distal Youth Outcomes

Outcome	Effect Size ^a	Coefficient	Std. Err.	p-value	Significant? ^b
Youth Arrest					
Parent Reports	0.380 ¥	-0.968	0.241	.13	No
Official Record Data	0.218 ¥	-1.523	0.275	.23	No
Antisocial Behavior					
Self-Reported Delinquency	0.432 ¥	-0.839	0.165	.03	Yes
Gang Involvement	1.215 ¥	0.195	0.870	.79	No
Substance Use	0.510 ¥	-0.673	0.120	.00	Yes
Truancy	0.416 ¥	-0.877	0.402	.36	No
School Misbehavior	0.625 ¥	-0.470	0.250	.24	No
Emotional Well-being					
Depressive Symptoms	-0.052	-0.032	0.067	.63	No
Happiness	0.022	0.019	0.078	.80	No
Hope for the Future	0.141	0.064	0.041	.12	No
Life Satisfaction	0.044	0.067	0.153	.66	No
Family Connectedness	0.177	0.125	0.064	.05	Yes
Quality of Peer Relationships	0.010	0.007	0.066	.92	No
School Connectedness	0.267	0.218	0.071	.00	Yes
Academic Performance	0.214	0.355	0.173	.04	Yes

¥ Odds ratio from mixed-effects logistic regression models; ^b Indication whether p-value is lower than BH critical value

In Exhibit 12, we present the results from the models examining the impacts on the intermediate youth outcomes. In contrast to the results of the impacts on distal youth outcomes, we found no statistically significant differences between the treatment and control groups on any of the intermediate outcomes we tested.

Exhibit 12. Results from Multilevel Mixed-Effects Models: Intermediate Youth Outcomes

Outcome	Effect Size ^a	Coefficient	Std. Err.	p-value	Significant? ^b
Creates Connections with Community Supports	1.671 ¥	0.513	0.617	.17	No
Creates Connections with Significant Adults	0.741 ¥	-0.300	0.228	.33	No
Develops Interests and Talents	1.503 ¥	0.407	0.437	.16	No
Explores Career-Related Interests					
Youth Reported	0.097	0.120	0.114	.29	No
Parent Reported	0.964 ¥	-0.037	0.375	.93	No
Develops Problem-Solving Skills	0.085	0.057	0.063	.37	No
Develops Social Skills	0.086	0.055	0.060	.36	No
Develops Goal Setting Skills	0.146	0.105	0.066	.11	No
Strengthens Family Interactions					
Parental Involvement	0.054	0.038	0.059	.52	No
Positive Parenting	-0.018	-0.010	0.045	.83	No

¥ Odds ratio from mixed-effects logistic regression models; ^b Indication whether p-value is lower than BH critical value

Did CBT-Enhanced R&R Mentoring Benefit Youth More Than BAU R&R Mentoring?

We also considered whether mentoring impacts at the CBT-enhancement sites were significantly stronger than the impacts from mentoring at the BAU sites. There were three different approaches used in these analyses. First, we included a dichotomous measure in each of our analyses that distinguished between the BAU and CBT sites. Whether this measure was the only predictor variable in the model or was included along with the indicator for treatment condition (i.e., treatment vs. control), we did not find a significantly stronger impact of mentoring in the CBT sites as compared to the BAU sites on any of the outcomes we examined.

A second approach was to test for moderation effects of the enhancement status (i.e., CBT vs. BAU) of the program site. Again, we did not find any evidence of differential impact for those sites implementing the enhancements. Finally, we tested for differences in main effects (i.e., treatment vs. control) between models estimated exclusively on the CBT sites and models estimated exclusively on the BAU sites. Once again, we did not detect any significant

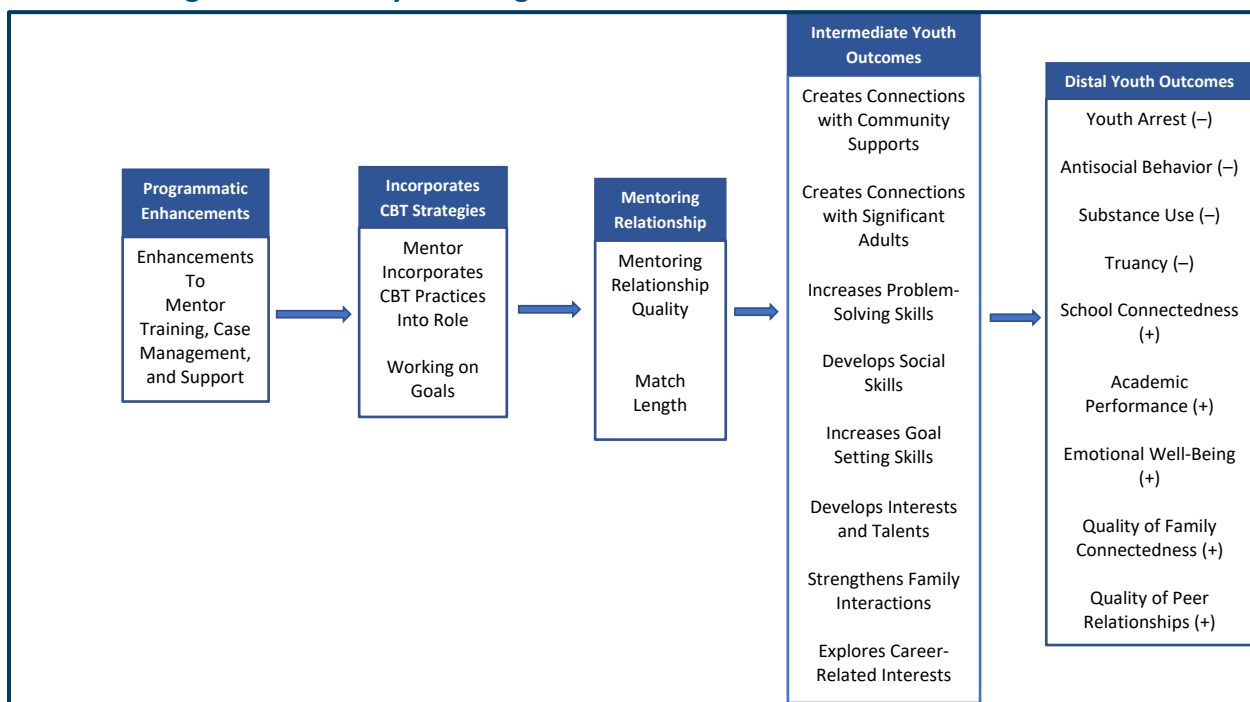
differences in impact based on whether the sites were intended to implement the enhancements.

Does this suggest that CBT mentoring is not an effective enhancement? We should note that the number of BAU sites, and thus the number of cases from BAU sites, was much smaller than the number of CBT sites. As such, statistical power may be insufficient to detect differences in treatment effects. In the analyses that follow in this chapter and the one that follows, we look more closely at the implementation of the CBT enhancements and how they shape the quality of the mentoring relationships and youth outcomes. We also look closely at the implementation of the enhancements across the program sites.

Effects of the Programmatic Enhancements on Mentor-Mentee Relationship Quality and Youth Outcomes

The implementation analyses presented earlier suggested variability in the extent to which mentors reported experiencing the programmatic enhancements. In this section of the report, we test the theory of change (see Exhibit 3) related to the specific enhancements targeting mentors. For this analysis, we estimated structural equation models based on the segment of the theory of change shown in Exhibit 13. The sample for this analysis was limited to those youth who were matched with a mentor and who reported meeting with their mentor at least 2 or more times. Measures of each construct were included from the follow-up surveys of the mentors, youth, and caregivers. Discussion of the survey items used for each construct was presented earlier in this report.

Exhibit 13. Segment of Theory of Change Tested in Mentor Enhancement Path Models



We first estimated measurement models to create several latent variables. The results from these measurement models are presented in Exhibit 14. The latent variable *Mentor Programmatic Enhancements* is comprised of three measures that speak to the efforts by program staff to expose the mentors to the CBT enhancements. As reported by the mentors, the observed variables include (in order of strength as reflected by the standardized coefficients) how often the staff talk about CBT strategies in their regular support calls with mentors, whether program staff often review the youth growth plans with the mentor, and the ways that program staff helped the mentor use CBT principles.

Exhibit 14. Measurement Model Results for Path Models Examining Mentor Enhancements

Latent Variable	Observed Variables	Standardized Coefficients	Significance
Mentor Programmatic Enhancements	Mentor Reported Ways Agency Helped to Use CBT Principles	0.468	a
	Program Staff Often Reviews Growth Plan with Mentor	0.446	***
	How Often Staff Talk About CBT Strategies in Support Calls	0.884	***
Relationship Quality	Youth Report of Relational Health	0.922	a
	Mentor Report of Closeness	0.346	***
	Mentor Report of Satisfaction	0.333	***
	Mentor Report of Investment	0.266	***
	Mentor Report of Growth	0.364	***

Latent Variable	Observed Variables	Standardized Coefficients	Significance
	Youth Report of Closeness	0.814	***
	Youth Report of Youth Centered	0.905	***
	Youth Report of Growth Focus	0.900	***
Intermediate Outcome--Connections	Creates Connections with Community Supports	0.304	a
	Creates Connections with Significant Adults	0.500	***
	Develops Interests and Talents	0.421	***
	Explores Career-Related Interests (Youth Report)	0.543	***
Intermediate Outcomes--Skills	Develops Social Skills	0.528	a
	Increases Goal Setting Skills	0.828	***
	Increases Problem-Solving Skills	0.884	***
Distal Outcomes--Problem Behaviors	Substance Use	0.358	a
	Self-Report Delinquency	0.679	***
	Gang Involvement	0.358	***
	Truancy	0.639	***
	School Misbehavior	0.438	***
Distal Outcomes--Social Emotional Factors	Hope for the Future	0.646	a
	Satisfaction with Life	0.660	***
	Depressive Symptoms	-0.670	***
	Happiness	0.678	***
Distal Outcomes--Attachments	School Connectedness	0.773	a
	Family Connectedness	0.655	***
	Academic Performance	0.333	***
	Quality of Peer Relationships	0.452	***

Notes: For each model, one observed variable is constrained for analysis, as indicated by ^a. * p < .10, ** p < .05, *** p < .01. N = 221.

The latent variable *Relationship Quality* is comprised of eight different measures of how the mentor and youth characterized their mentoring relationship. This includes four measures as reported by the youth addressing relational health, closeness, a focus on the mentee, and a focus on growth; and four measures as reported by the mentor focusing on closeness, satisfaction, investment, and growth. The results from the measurement model show that the eight measures have significant associations with a single latent variable on the quality of the mentor-mentee relationship.

We also constructed latent variables for the intermediate and distal outcomes identified in the theory of change. Analyses sorted most of the intermediate outcomes into two latent variables and sorted the full set of distal outcomes into three latent variables. The latent variable *Connections* is comprised of four intermediate outcomes, all of which are reported by the

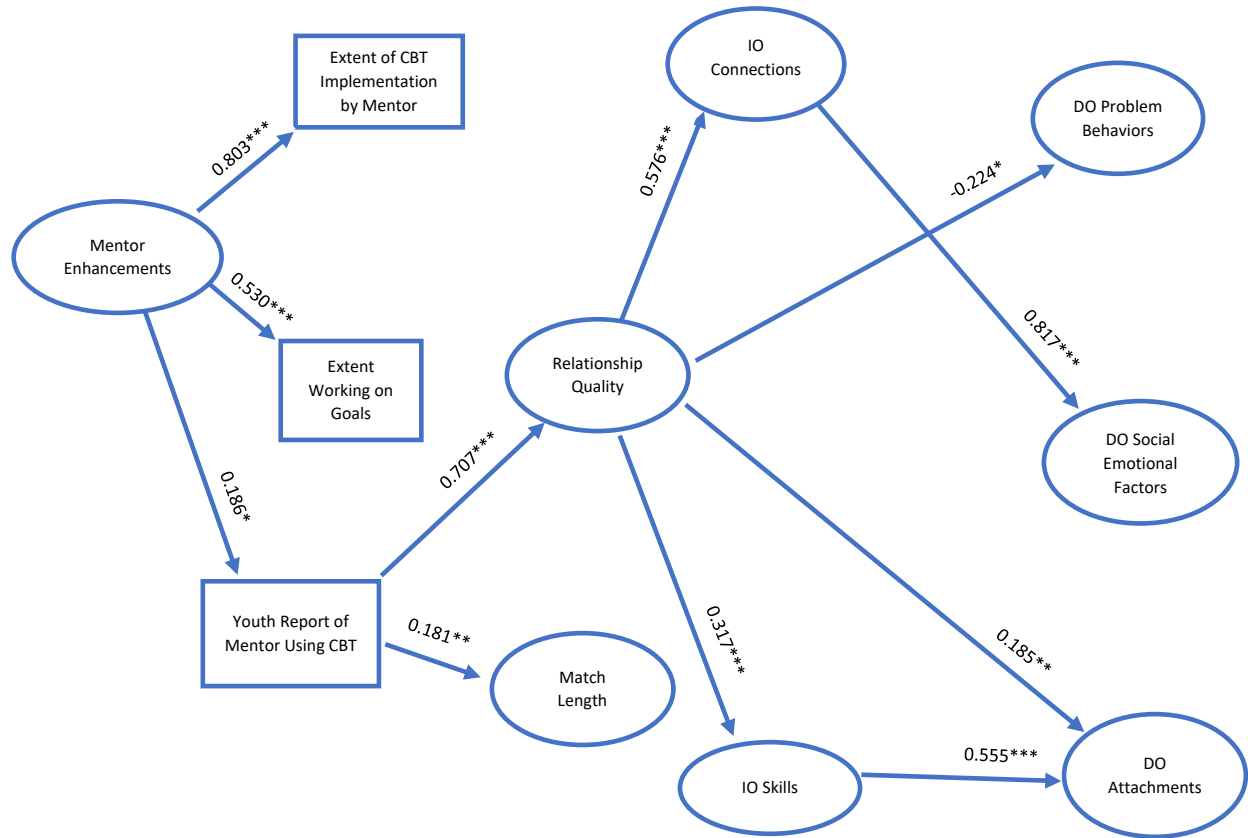
youth: exploration of career-related interests, creation of connections with significant adults, development of interests and talents, and creation of connections with community supports. The latent variable *Skills* is comprised of three youth-reported intermediate outcomes related to the development of problem-solving, goal setting, and social skills.

The latent variable *Problem Behaviors* is comprised of six different distal outcomes addressing a range of negative behaviors, including self-reports of delinquency, truancy, gang involvement, and substance use, and two measures, as reported by caregivers, of youth getting in trouble with the police and in school. The latent variable *Social Emotional Factors* is comprised of four different youth-reported measures of hope for the future, happiness, depressive symptoms, and satisfaction with life. The latent variable *Attachments* is comprised of three measures, as reported by the youth, of school connectedness, family connectedness, and quality of peer relationships.

The full path model that we estimated is shown in Exhibit 15. In this diagram, we show each of the direct effects that were found to be statistically significant. Of key interest in this analysis is whether the exposure to the programmatic enhancements for the mentors makes a difference for how they implement the CBT strategies, the quality of the mentor-mentee relationship, and the intermediate and distal youth outcomes. We find that exposure to the enhanced practices is indeed associated with a greater level of implementation by the mentor of the CBT strategies and a greater level of engagement of the mentors in working with their mentees on goals. We also find that greater exposure of the mentors to the CBT enhancements is associated with a higher likelihood that their mentees will report that the mentor is using CBT strategies in their interactions.

We do not find, however, direct effects from mentor reports of implementation of CBT strategies or working with their mentees on goals on the quality of their relationships with the mentees. We report standardized coefficients in the diagram in Exhibit 15, and one of the strongest effects is from the youth report of their mentor using CBT strategies and the quality of the mentor-mentee relationship. When youth can articulate ways in which their mentors are utilizing the CBT strategies, the quality of their mentor relationship is higher. As hypothesized in the theory of change, the quality of the mentor-mentee relationship is associated with intermediate and distal youth outcomes. Also, as expected, we find strong associations between the intermediate and distal outcomes.

Exhibit 15. Results from Path Model Examining the Effects of Exposure to Mentor Enhancements



The path diagram in Exhibit 15 shows the direct effects estimated in the analyses. It is also of interest to understand how the programmatic enhancements may have indirect effects on the quality of the mentor-mentee relationship and each of the youth outcomes. In Exhibit 16, we present these indirect effects. As in the path diagram, we show the standardized coefficients. We find a significant positive indirect effect of the exposure to CBT enhancements and relationship quality. Those mentors who report greater exposure to the enhanced practices are more likely to experience relationships of higher quality with their mentees. Although the effects are small, we also find significant positive indirect effects between exposure of the mentor to the CBT enhancements and the youth intermediate outcome *Connections* and youth distal outcomes *Attachments* and *Social Emotional Factors*.

Stronger indirect effects are evident when we examine the youth reports that mentors are using the CBT strategies. As shown in Exhibit 17, there are statistically significant indirect effects on each of the five latent youth outcomes. Each of these effects is in the hypothesized direction. When youth report higher levels of use by their mentors of the CBT strategies, we

find higher levels of the intermediate outcomes *Connections* and *Skills*, the distal outcomes *Social Emotional Factors* and *Attachments*, and lower levels of the distal outcome *Problem Behaviors*.

Exhibit 16. Indirect Effects of Mentor Enhancements

Outcome	Indirect Effect
Relationship Quality	0.176 **
Intermediate Outcomes	
Connections	0.101 *
Skills	0.063 *
Distal Youth Outcomes	
Problem Behaviors	-0.041
Social Emotional Factors	0.083 *
Attachments	0.067 *

Note: * $p < .10$, ** $p < .05$. Values reported in the table are standardized coefficients.

Exhibit 17. Indirect Effects of Youth Report of Mentor Using CBT Strategies

Outcome	Indirect Effect
Intermediate Outcomes	
Connections	0.408 ***
Skills	0.205 ***
Distal Youth Outcomes	
Problem Behaviors	-0.153 *
Social Emotional Factors	0.333 ***
Attachments	0.245 ***

Note: * $p < .10$, *** $p < .01$. Values reported in the table are standardized coefficients.

In Exhibit 18, we present the indirect effects of relationship quality on the distal youth outcomes. In the theory of change, we hypothesized that the effects of relationship quality on the distal youth outcomes would be indirect through the intermediate youth outcomes. Yet, the structural equation models we estimated indicated a better fit with the data if we estimated direct effects from relationship quality on the distal youth outcomes *Problem Behaviors* and *Attachments*. Interestingly, the effects of relationship quality on *Social Emotional Factors* were only found to be indirect through the effects of *Connections* on *Social Emotional Factors*. And we found that relationship quality had both direct and indirect effects (through *Skills*) on *Attachments*.

Exhibit 18. Indirect Effects of Relationship Quality

Outcome	Indirect Effect
Distal Youth Outcomes	
Problem Behaviors	---
Social Emotional Factors	0.471 ***
Attachments	0.176 ***

Note: *** p < .01. Values reported in the table are standardized coefficients.

Effects of the Programmatic Enhancements on Caregiver Experiences and Youth Outcomes

In this section of the report, we test the theory of change (see Exhibit 3) related to the specific enhancements targeting caregivers. For this analysis, we estimated structural equation models based on the segment of the theory of change shown in Exhibit 19. We used the full sample for these analyses. Measures of each construct were included from the follow-up surveys of the youth and the caregivers. Discussion of the survey items used for each construct is presented in Appendix A.

As we did for the path models examining the mentoring enhancements, we estimated measurement models to create latent variables for the intermediate and distal outcomes. The results from these measurement models are presented in Exhibit 20. These results align with the previous results so that we once again sorted the intermediate outcomes among two latent variables, *Connections* and *Skills*. The intermediate outcomes were sorted into three latent variables: *Problem Behaviors*, *Social Emotional Factors*, and *Attachments*. We note some differences in the standardized coefficients from those reported in Exhibit 14, but we attribute these differences to the fact that we are using the full sample (N = 581) for this analysis.

Exhibit 19. Segment of Theory of Change Tested in Caregiver Enhancement Path Models

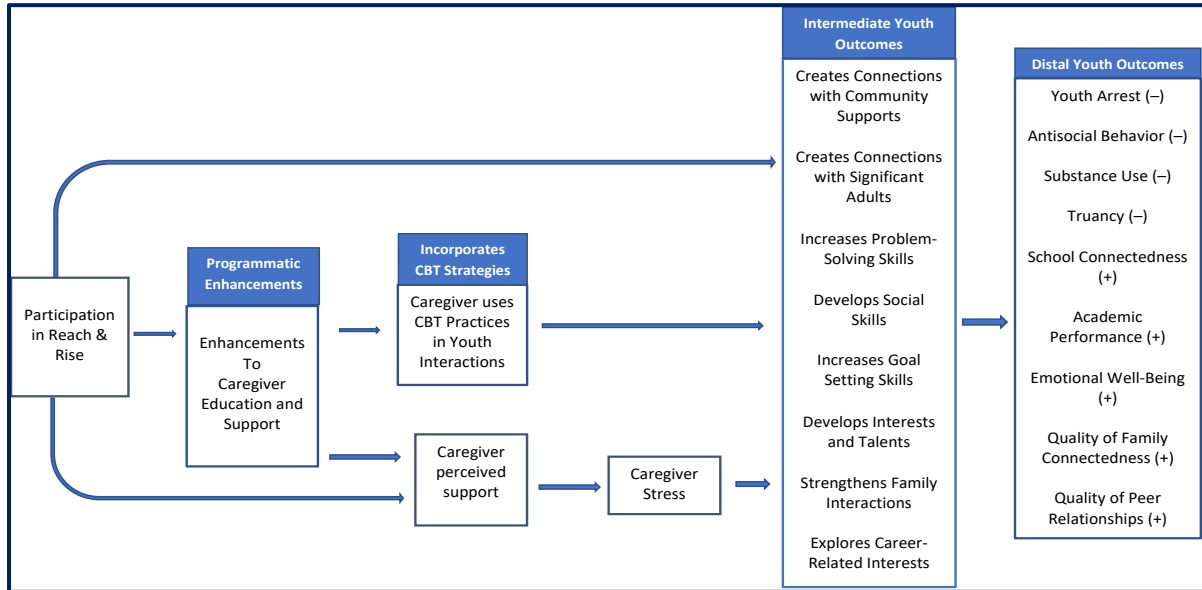


Exhibit 20. Measurement Model Results for Path Models Examining Caregiver Enhancements

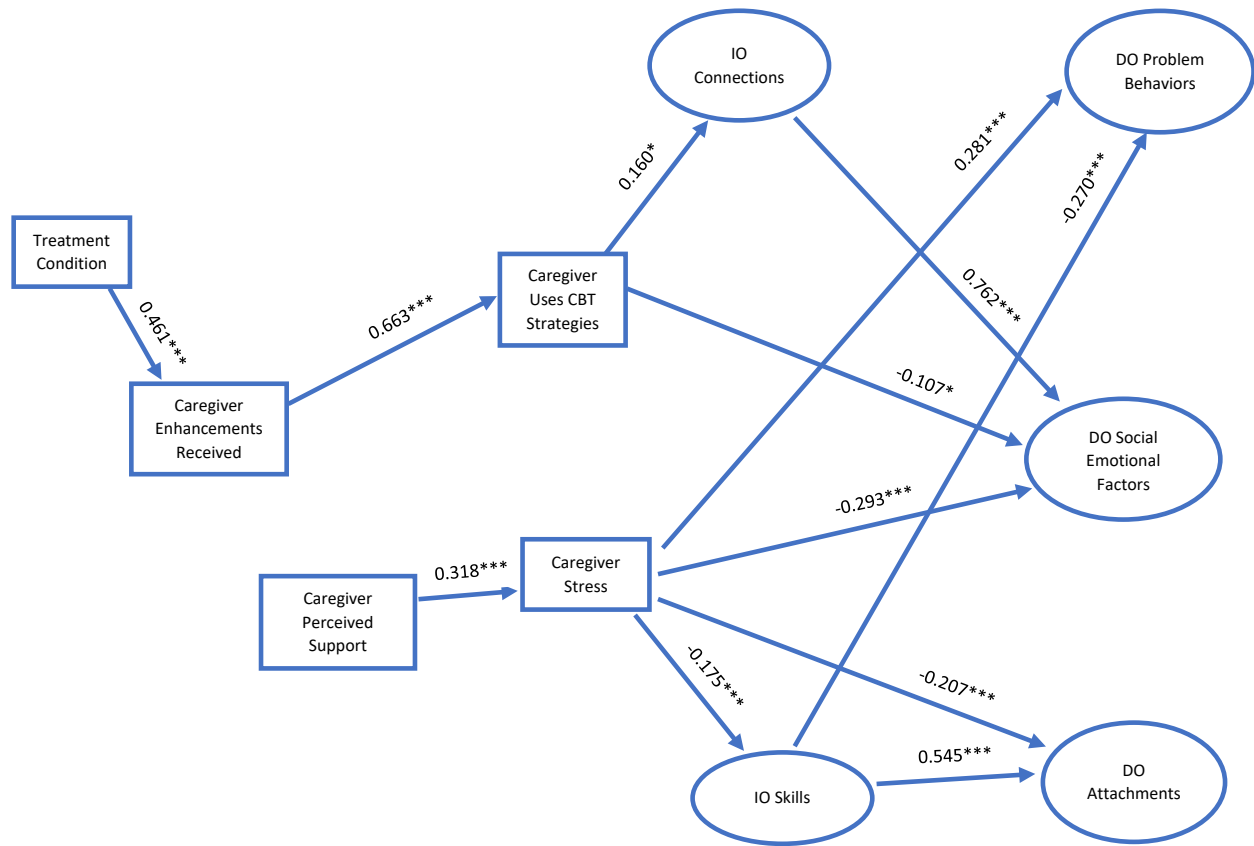
Latent Variable	Observed Variables	Standardized Coefficients	Significance
Intermediate Outcome--Connections	Creates Connections with Community Supports	0.159	a
	Creates Connections with Significant Adults	0.393	***
	Develops Interests and Talents	0.467	***
	Explores Career-Related Interests YR	0.534	***
Intermediate Outcomes--Skills	Develops Social Skills	0.452	a
	Increases Goal Setting Skills	0.810	***
	Increases Problem-Solving Skills	0.826	***
Distal Outcomes--Problem Behaviors	Substance Use	0.359	a
	Self-Report Delinquency	0.687	***
	Gang Involvement	0.329	***
	Youth Report of Truancy	0.547	***
	School Misbehavior	0.302	***
Distal Outcomes--Social Emotional Factors	Hope for the Future	0.691	a
	Satisfaction with Life	0.652	***
	Depressive Symptoms	-0.634	***
	Happiness	0.643	***
Distal Outcomes--Attachments	School Connectedness	0.763	a
	Family Connectedness	0.671	***
	Academic Performance	0.303	***
	Quality of Peer Relationships	0.468	***

Notes: For each model, one observed variable is constrained for analysis, as indicated by ^a. *** p < .01.

The full path model that we estimated is shown in Exhibit 21. In this diagram, we show each of the direct effects that were found to be statistically significant. Of key interest in this analysis is whether the exposure to the programmatic enhancements for the caregivers made a difference in how they adopted the CBT strategies, the level of stress they were experiencing, and the intermediate and distal youth outcomes. As we found in the analysis of the mentor enhancements, exposure to the enhanced practices was associated with higher rates of caregiver implementation of the CBT strategies. We did not find, however, that greater exposure was associated with a higher level of feeling supported by persons outside of the family. We hypothesized that perceived support would lead to reductions in the level of stress caregivers were reporting, but that is not what we found. Instead, we found a positive association between perceived outside support and level of stress. As both variables were measured at the same point in time, it is not possible for us to establish a time order that would allow us to determine if one led to the other. It might be the case that those caregivers experiencing higher levels of stress were also more likely to look to others outside of the home to provide support.

We did find evidence that the use of CBT strategies by the caregivers had direct effects on some of the youth outcomes. When caregivers reported using the CBT strategies, their children reported higher levels of *Connections*. There was not, however, a significant association between the caregiver use of CBT strategies and *Skills*. As hypothesized in the theory of change, the level of caregiver stress was associated with intermediate and distal youth outcomes. The direction of those associations was consistent with expectations based on the theory of change and previous research on youth mentoring outcomes. Also, as expected, we found statistically significant associations between the intermediate outcomes and the distal outcomes (see Exhibit 21).

Exhibit 21. Results from Path Model Examining the Effects of Exposure to Caregiver Enhancements



We also sought to understand how the programmatic enhancements may have indirect effects on each of the outcomes. In Exhibit 22, we present the indirect effects of the programmatic enhancements. As in the path diagram, we show the standardized coefficients. We found a significant positive indirect effect of exposure to CBT enhancements on the intermediate outcome *Connections*. Youth with caregivers who reported greater exposure to the enhanced practices were more likely to report higher levels of *Connections*. We found no other significant indirect effects of caregiver exposure to the CBT enhancements on youth outcomes.

We also found one significant positive indirect effect on the distal outcome *Social Emotional Factors* (see Exhibit 23). It is interesting to note that we found an inverse direct effect from the caregiver utilization of CBT strategies to *Social Emotional Factors*, and through its effect on *Connections*, a positive indirect effect as well. Exposure to and utilization of CBT strategies by caregivers was not otherwise associated with the distal youth outcomes.

Exhibit 22. Indirect Effects of Caregiver Enhancements Received

Outcome	Indirect Effect
Intermediate Outcomes	
Connections	0.107 *
Skills	0.039
Distal Youth Outcomes	
Problem Behaviors	0.017
Social Emotional Factors	0.004
Attachments	-0.021

Note: * $p < .10$. Values reported in the table are standardized coefficients.

Exhibit 23. Indirect Effects of Caregiver Uses CBT Strategies

Outcome	Indirect Effect
Distal Youth Outcomes	
Problem Behaviors	-0.017
Social Emotional Factors	0.122 **
Attachments	0.035

Note: ** $p < .05$. Values reported in the table are standardized coefficients.

In summary, when they reported exposure to the CBT programmatic enhancements, both mentors and caregivers were more likely to use CBT strategies in their interactions with youth participants. When caregivers reported using CBT strategies, their children were more likely to report experiencing connections to persons and activities. When mentors reported exposure to programmatic enhancements, their mentees were more likely to report that their mentors were using the CBT strategies, experienced higher-quality mentoring relationships, and reported more positive outcomes. Because the use of CBT strategies did not result in direct positive effects through all the paths we tested based on the theory of change, there are still questions about whether the programmatic enhancements are enough—in terms of dosage, strength, and timing—to have the level of impact R&R is seeking. And because the implementation analysis highlighted the variability in exposure to the programmatic enhancements in the different sites, it is clear there are complexities in the delivery of the enhanced R&R program. We discuss the results from the implementation analysis next.

Chapter 4. Reach & Rise® Implementation

In this chapter, we address six questions (Research Questions 5-10 in Exhibit 5):

1. To what extent was the R&R program implemented as intended?
2. Were the enhancements clearly differentiated from existing practices?
3. To what extent were study participants exposed to key components of the program and the enhancements?
4. To what extent did mentors and caregivers incorporate CBT practices into their interactions with youth?
5. What factors affected implementation of the CBT enhancements?
6. What were the costs of the enhancements relative to their benefits?

As described in Chapter 2, OJJDP funding enabled R&R to enhance its core program components with these additions:

- Pre-match mentor training was enhanced with an additional two-hour training module (Module 4B) that focused specifically on CBT strategies.
- Ongoing mentor support was restructured to more explicitly help mentors adopt CBT strategies during their interactions with youth, including asking about mentors' use of CBT strategies and progress made toward the developmental goals set for the mentee and using a restructured *Youth Growth Plan* to identify CBT strategies to achieve the goals set for youth.
- Caregiver education and support was enhanced by providing caregivers with a workbook with resources and tips to help them use CBT strategies in their interactions with their child. Site directors were also provided with a checklist of questions to document the extent to which the caregiver implemented these strategies during monthly support calls.

In this chapter, we first examine **implementation quality** by assessing the extent to which program components and the enhancements were implemented as intended. We summarize site directors' reports of their implementation of mentor training and ongoing support to mentors and caregivers, and the extent to which they adhered to program design. Next, we examine participant (mentor and caregiver) exposure to program components using data collected through surveys and focus groups with the mentors and caregivers and summarize

their experiences with the intervention and the enhancements. Then, we examine uptake to summarize the extent to which mentors incorporated goal setting and CBT practices into their mentoring role. We also examine the extent to which caregivers used CBT strategies in their interactions with youth using data collected from surveys and focus groups. We then examine **implementation supports and challenges** using staff surveys and interviews.

In each section we begin with a description of how the R&R program was implemented, more broadly, across all sites. Then we turn to a description of how the CBT enhancements were implemented in the CBT sites. Finally, we share our analysis of program costs using data provided by YMCA administration and site directors.

Implementation of Mentor Training

Implementation across all R&R sites

Interviews with site directors suggested they adhered closely to program guidelines for training and use of the 10-Module training manual. When we asked site directors to rate their level of fidelity to the intended mentor training on a scale from 1 to 10 (1 being the lowest and 10 the highest), they consistently rated themselves between 8 and 10. They explained that if they made any changes to the training, it was in response to the needs of those attending the training, for example, reducing the number of role plays from 3 to 2 or delivering the training in 4 sessions instead of 5 if there were fewer mentors in the group. Site directors noted that in some cases, they also enhanced the training content to increase its cultural and contextual relevance, as this director shared:

“I added brief YouTube videos that are online and added opportunities for more interactions among mentors--things that I think are important to break up the monotony and flow of the training. I get a little bit more out of the mentors when I break up the PowerPoint slides. I [added] a video on empathetic listening, and a little cartoon when we talk about communications in Module 3. I added in cultural humility in module 8--I show a video on equity.”

Another site director described how they tailored the conversation to make it relevant to participants in the training:

“I am creative with mentors. Say I have a mentor who is a teacher, I would ask them to tell me what ADHD looks like in the classroom, if I knew they had examples to share.”

Adherence to the Training Enhancement: Added Module on CBT

All CBT site directors noted that they implemented the new CBT Training Module as it was outlined in the enhanced Training Manual, but they also noted the limitations of the module

and how it could be improved to enhance mentors' experiences in the training. Two site directors said that three hours (the intended length of the training) was not enough time to cover all the concepts in the module. In addition, four site directors noted that the new module is more didactic, has fewer visual materials to engage with, and is less interactive than other modules in the training. In addition, unlike the other modules, the new module does not include role plays that provide an opportunity to practice applying targeted skills in their interactions with their mentee. For example, one of them said:

“It would be better if it were longer but then it [would be] too long. Sometimes it gets redundant when I am going through the materials as provided. It would be helpful if there were more time built into it and the materials [in previous modules] expanded so it wasn't redundant. Then when we get to the enhancement [Module 4B], it would be better if we could do more role plays, [and had more] ways to engage with the material. The enhancements are kind of dry. We have role plays peppered throughout [the rest of the training] but when we get Module 4B, it is didactic, so some role playing and engaging with the material would be better. It is very clear to me that there were different authors who created 4B and the rest of the manual.”

Implementation of Ongoing Support to Mentors

We asked site directors about the frequency with which they contacted the mentors to provide support. We also asked about their interactions with the mentors and how they encouraged mentors to use CBT strategies.

Implementation across all R&R sites

All site directors said they adhered closely to program guidelines for frequency of contact with the mentors. We asked them to rate how closely they followed match support guidelines from 1 to 10 with 1 being the lowest and 10 the highest. All 12 directors we interviewed rated themselves at 8.5 or higher. Directors from both the CBT and BAU sites reported that they attempted to contact their mentors at least once a month (see *Exposure* for mentor reports of the frequency of their actual contact with site directors). One site director said:

“We go above and beyond with match support. We do once-a-month tracking; however, we communicate at least 2-3 times a month [to] try to navigate the challenges.

Site directors saw the mentors (and caregivers) more frequently if the matches met at the YMCA site. Directors from the CBT sites also engaged in additional practices to support the matches. For example, two reported that they organized quarterly online meetings with groups of mentors to enable them to share experiences and learn from each other.

Site directors from all three BAU sites shared that they used the youth growth plan as a tool to guide their conversations with the mentors and monitor progress made on the developmental

goals the mentor, youth, and caregiver identified early in the match. They all agreed that the youth growth plan was useful. One of them said:

“For most matches, the goals were school or family-relationship oriented. That’s what the kids were struggling with. The growth plan was one of the favorite pieces [of the program] for the family—that the mentoring was centered around the goals that would support the family. Mentoring is very useful when it is targeted.”

Site directors in both the BAU and CBT sites reported different levels of adherence to and success with the monthly logs in which mentors were expected to document their activities each time they met. One site director requested the logs from the mentors on a weekly basis; most others requested them monthly as expected by program guidelines. Yet, they noted they did not get the logs back from all mentors. One site director said:

“I had one mentor--she was good [at] keeping her own mentor activity log. I had others who were not as much. I did the logs with them. The women will write things down more than the guys to keep track. [The women] would also go over things with me to improve.”

Adherence to the Match Support Enhancement: Restructured Mentor Support

Site directors used the monthly check-in tool, but varied in how they used it, in response to mentor needs. The monthly check-in tool was restructured to ask about mentors’ use of the CBT strategies and provide ways to use them. Although directors at the CBT sites found the enhanced monthly check-in tool useful, half of them shared that they struggled with the details requested, which contributed to their lack of adherence. Site directors said the terminology describing the CBT strategies was “clinical” and “confusing” for the mentors. During mentor check-in calls, the directors’ understanding of CBT was important in navigating these conversations and helping the mentors understand what these strategies entailed and how to apply them to their interactions with their mentee. One site director found the check-in tool useful but said that *“if you are too hung up on the terminology, it would be frustrating for the mentors and the family, so I would change the words [to words] they were comfortable with and give examples to make it ‘real world.’”*

Adherence to the use of the restructured youth growth plan to document progress toward the goals and encourage the use of CBT strategies was also modified. Five of the site directors shared that they regularly asked the mentors about progress in their goals and the extent to which they used CBT strategies during their mentoring activities, adding that they needed to remind the mentors about using these strategies. In contrast, two site directors said they did not ask the mentors about their use of CBT strategies at each match support meeting but completed the monthly check-in tool themselves based on what the mentors reported. One of them said:

“I don’t refer to the growth plan, but a lot of it is observations and what I heard from the mentor. I think looking back at how I do match support, more focus could be spent on the youth growth plan each month.”

Another director noted that the enhanced growth plan listed the seven CBT strategies⁷ for each goal to monitor which strategies the mentor had applied during their interactions with the mentee each month. Reviewing each of these strategies to mark them off one-by-one was confusing to the mentors, as these strategies often occurred together. Thus, the director suggested revising the growth plan to ask about these strategies more generally and perhaps suggest sample activities:

“If the different pieces of the growth plan were all one piece of strategy instead of different strategies that are kind of similar, it would be easier. My main belief is that it needs to be condensed into one thing. And then celebrating successes would be a second piece. ...Most mentors struggle with the goals. The steps [strategies] then could be things you could go over with the mentor if they are having issues.”

Implementation of Parent Education and Support

Implementation across all R&R sites

As noted in Chapter 2, parent education and support are a core component of R&R. Program guidelines require the site director to make monthly contact with the mentor, caregiver, and youth. In addition, site directors are expected to take a case management approach with participating families by supporting them in accessing needed resources and services.

In the interviews, directors described the importance of involving the youth’s caregiver: *“When you serve the child you have to service the family. Whatever happens in the family affects the child.”* Three directors referred to the case management approach used by R&R as a key component of the program. One of them noted:

“A lot of match support at Reach & Rise® is based on building a strong relationship [with families], be[ing] a reliable person to depend on which comes back to trauma-informed and wrap-around services we are able to provide to them. Our YMCA is 49 percent social services. [It’s] more than a gym. We have [a] mental clinic, we have shelter, group homes for kids out of foster care, we can refer families to a mental health clinic which cuts on the time of waiting (1-3 weeks instead of waiting for months) and that feeds into the relationship.”

⁷ (1) Identify, (2) Test and refute, (3) Restructure, (4) Process, (5) Interrupt/Break patterns of irrational thoughts, feelings, and behaviors, (6) Track and Monitor Goals, and (7) Celebrate success and goal achievements

Maintaining ongoing communications with the caregivers was described as a primary barrier to providing support to families; thus, this component of the program was challenging to implement at the required frequency. For five site directors, maintaining contact with the caregivers was the most significant challenge they experienced in implementing the program. One director explained:

“There are so many challenges I would say, communication is probably the biggest challenge, because there are so many factors involved in it. This is an area of extreme poverty, people moving, cell phones shut off.”

One director mentioned that some caregivers were not interested in communicating with the site director and only concerned about their child having a mentor. In these cases, the director continued to provide services for the child, and when needed, reached out to other family members other than the caregiver such as a grandparent to provide support.

Directors used several strategies to stay in contact with caregivers. For example, using texts or doing home visits were more effective than scheduling group meetings with caregivers as these group meetings were poorly attended.

Adherence to the Caregiver Education Enhancement: Use of the Workbook

Site directors varied in their use of the Caregiver Workbook in response to their assessment of their caregivers’ needs. In our close-out surveys, we asked site directors what approach they typically took to deliver this enhancement. Of the 11 site directors who responded, one reported that they did not implement the parent component of the enhancements, and two were not able to review the manual with most caregivers. The other seven site directors gave the workbook to caregivers but their approach to encouraging caregivers’ use of the workbook varied. For example, three of them reported that they reviewed components of the workbook each time they talked with the caregiver, three others reviewed pieces when they were relevant, and one asked the caregivers to work through the exercises in the workbook but did not talk about them. In addition, one site director worked through pieces of the workbook with caregivers without asking them to read it.

In interviews, site directors shared two reasons why they did not adhere closely to program expectations for this enhancement. The first was their own limited buy-in to this enhancement. Three directors who were part of the intervention since the beginning of the study said this enhancement was not a good fit for the caregivers they worked with, which led them to use it with caregivers infrequently. One director was reluctant to even introduce the workbook to parents at their initial meeting:

“When I first started the study, I did not introduce [the workbook] at the parent meeting. But the more I worked with the families, they said they wished they had the workbook from the beginning. So, I started introducing it earlier.”

The second reason for their hesitance to encourage use of this enhancement was the reactions they received from caregivers:

“I will be honest, when I handed it to families, it felt almost offensive. Like I was kind of telling them how to parent. One is a foster parent and had been through a lot already; the other was a single father. They expressed they don’t have time. I emphasized that it is a crazy time and said it would help them to take a look at it, but with COVID I let it go.”

Referring to challenges with caregiver uptake, directors noted that many caregivers may start with good intentions to use the workbook and “*maybe half or less than half are trying it,*” but then over time they do not use it because “*life gets busy.*” Site directors reasoned that some caregivers’ reading and educational level creates an additional barrier for the level of uptake the program can expect from them:

“A couple of parents are almost non-readers. They struggled with reading when we did the match meeting. And yet we give them a manual that has terminology, things that are heavily worded. It is a technical [requirement] on top of the time requirement.”

Another director discussed the limited uptake from caregivers in using the workbook and applying CBT strategies as reflecting an educational and cultural divide between the families and what CBT is asking them to do:

“Mentors know that they are getting into CBT, but for parents, we don’t do that. They are not necessarily interested in the clinical language. In the parent world, the language is very abstract. There is a pretty clear class gap between mentors and mentees—and [an] educational gap. The class difference [is] what makes the engagement difference. CBT takes on a Eurocentric approach built on the presumptions that thinking through a problem [is] the best way to resolve it. People are coming to understand that trauma and stresses are body problems. If we were more open to somatic and body approaches, we would be able to close a class gap in the intervention.”

To support caregivers’ use of the CBT strategies, a couple of site directors developed creative ways to share the information included in the workbook. For example, one director focused on sharing only specific, targeted areas of the workbook that were relevant to their conversation with caregivers to encourage their use of the worksheets. Another director created a monthly newsletter and emailed caregivers, as she knew “they would open it up to see the Y activities.” A couple of directors noted that if parents were asked to use the workbook on their own, they

likely wouldn't, but encouraging their use of CBT strategies at a group workshop could be an effective way to engage caregivers in their use.

Directors also described that the restructured match support to monitor caregiver use of CBT strategies changed the nature of their interactions from those they typically engaged in as part of BAU programming. The check-ins now felt stilted and lengthy. One director said:

"Previous to adding CBT [enhancements], family engagement and check-in seemed a little less structured, a little less, 'Are you doing this, this, and this?' because we added many, many more questions to check-ins. It became longer. They were 5-10 min in the past but it was a free-flowing conversation. Now it is 10 to 15 minutes, but it is more a checklist, 'Have you done this?', 'On a scale of 1-10...' etc., so it feels like a checklist. Parents seem to answer quickly [to] get through the call. I am not sure I am hearing the realities of what the parents are going through, because there are so many things we have to go through in the checklist. Even though the questions [such as] 'Is there anything else happening in your family?' are there, I feel some information flow has been shut off."

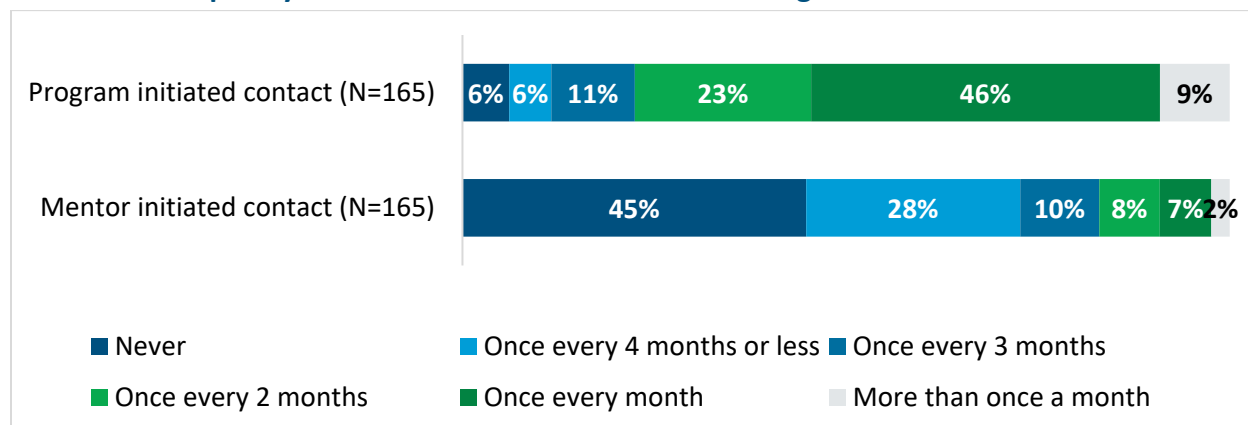
Mentor Exposure to the Intervention and Enhancements

In our surveys and focus groups with mentors, we examined mentors' experiences with the program components and CBT enhancements, including pre-match training and use of the training manual, level and content of program support, and support in their use of the CBT strategies. Where applicable, we compared mentors' experiences across the two study groups.

Exposure to Program Components across all R&R sites

A little more than half of the mentors reported that they were contacted on a monthly basis or more frequently, as outlined in the program model. Others were contacted less frequently. More than half of the mentors (55%) also initiated contact with the program to get help with issues with the mentee (Exhibit 24). These reports contrast with site director reports of regular monthly contact with mentors. This discrepancy likely reflects the fact that staff may do everything they can to contact a program participant, but ultimately, they are constrained by whether participants are responsive to their efforts.

Exhibit 24. Frequency of Contact between Mentors and Program Staff



Mentors reported that, on average, they talked with program staff about 6 to 10 minutes during support calls. We asked all mentors when R&R staff called or met with them to see how their mentoring relationship was going, how long these conversations typically lasted. Mentors responded on a scale from 0 to 4 (0 = Agency staff did not contact me, 1 = 1-5 minutes, 2 = 6-10 minutes, 3 = 11-20 minutes, 4 = more than 20 minutes).

The average duration of these discussions did not differ significantly between mentors in the CBT group (M=2.14, SD=1.12) and those in the BAU group (M=2.09, SD=0.77). However, a higher proportion of CBT mentors (18% vs. 2%) reported conversations with staff that lasted more than 20 minutes.

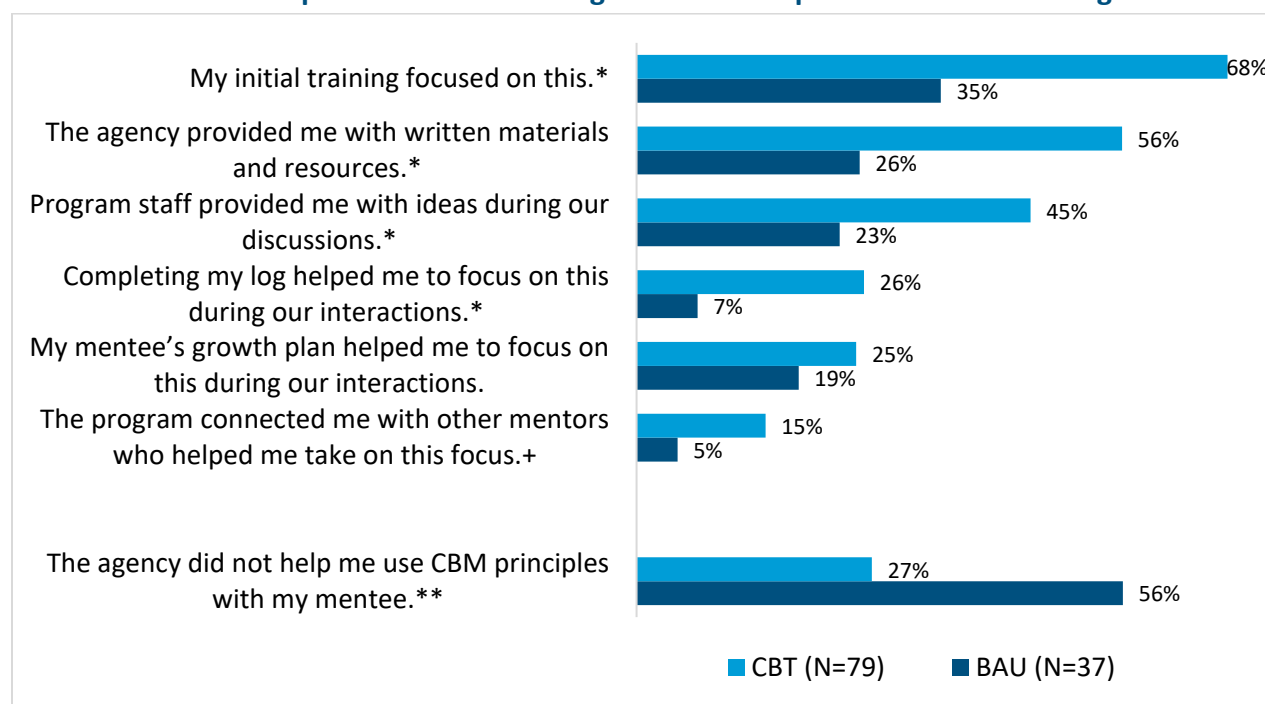
Most mentors who reported setting goals for youth reported that they frequently talked with program staff about these goals. A core intervention component was the creation of goals for youth and the expectations set for the mentor to support the achievement of these goals. We asked mentors how often they talked with site directors about these goals (0 = never, 1 = once or twice, 2 = several times, 3 = about every time we met). About three in four mentors (74%) reported that they set a goal for their mentee (see *Uptake* section for a discussion). Among this group of mentors, 3 percent reported that they never talked about these goals with their site director, 30 percent talked about them once or twice, 45 percent discussed them several times, and 21 percent discussed them every time they talked with their site director. BAU mentors discussed these goals with their site directors more frequently (M=2.11, SD=0.89) than CBT mentors (M=1.73, SD=0.72), $t_{(162)} = 2.14, p=.03$.

Exposure to the CBT Enhancements: Communication about CBT Strategies

About three quarters of CBT mentors and almost half of BAU mentors reported that their site director helped them use CBT strategies with their mentee. In our follow-up surveys, we asked mentors what their agency did to help them use CBT principles with their mentee, noting,

“When we refer to ‘CBT principles’ (or principles of ‘cognitive behavioral therapy’), we are referring to strategies around helping youth to understand the connections between thoughts, feelings, and behaviors.” A little more than a quarter (27%) of the CBT mentors and over half (56%) of the BAU mentors said their agency did not help them use CBT principles with their mentee (see Exhibit 25). While this suggests that this enhancement was not implemented as intended across all CBT matches, it is also possible that the mentors did not recall the terminology used in the training they received or that site directors did not use this terminology with the mentors, as we heard in several of our interviews.

Exhibit 25. Mentor Reports of What the Program did to Help Them Use CBT Strategies



Note. Mentors were asked to select all that apply of these program supports. *Mentors in the CBT group were significantly more likely to select this statement than mentors in the BAU group ($p < .001$). ** Mentors in the BAU group were significantly more likely to select this statement than mentors in the CBT group ($p < .001$). +There was a trend for mentors in the CBT group to select this statement more often than those in the BAU group.

Most CBT mentors reported that they received support in how to use CBT strategies through their initial training (68%) and written materials and resources (56%). A little less than half (45%) noted that they were provided with ideas during their discussions with program staff. About a quarter reported that completing their monthly log and their mentee’s growth plan, respectively, helped them focus on these strategies. Broadly speaking, higher proportions of CBT mentors noted experiencing these types of supports in their use of CBT strategies than BAU mentors.

We also examined how often CBT mentors reported talking about specific CBT strategies with their site directors during their check-in calls. Mentors were provided with five options for responding: 1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Very often*, or ‘I don’t know what this means.’ As Exhibit 26 shows, on average, mentors talked about celebrating success, getting their mentee to stop and think about their behavior, creating new habits, and mindfulness more often than other strategies. In contrast, *Mood mapping*, was, on average, the least often discussed strategy as reported by the mentors. For six CBT strategies (the last six strategies listed in Exhibit 26), at least a third of CBT mentors reported that they did not know what the term meant.

Exhibit 26. CBT Mentor Reports of How Often They Talked with Their Site director about CBT Strategies (N=116)

CBT Strategy	Mean	SD
Celebrating success (N=112)	3.22	0.71
Getting my mentee to stop and think about his/her behavior (N=109)	3.22	0.67
Creating new habits (i.e., encouraging your mentee to create new routines and ways of behaving) (N=110)	3.17	0.87
Mindfulness (i.e., how to be aware of thoughts, feelings, or behaviors) (N=110)	3.11	0.81
Helping my mentee to understand the links between thoughts and behaviors (N=91)	3.03	0.74
Relaxation, restructuring, communication, or humor to manage anger (N=84)	2.95	0.80
Affirmation—10 things I like about me (i.e., reminding youth to use positive thinking and empowerment) (N=97)	2.94	0.92
Putting core beliefs and thoughts on trial (i.e., thinking about how you view yourself, others and the world) (N=66)	2.82	0.74
How to help your mentee set and achieve the goals outlined in your mentee’s growth plan (N=73)	2.79	0.88
Refuting lies we tell ourselves (i.e., questioning negative self-talk) (N=67)	2.72	0.85
Whole health check-up (i.e., discussing physical, social, emotional, spiritual, intellectual, or vocational/occupational well-being) (N=79)	2.67	0.92
Journaling (i.e., writing down thoughts, feelings, and experiences) (N=68)	2.34	1.00
Mood mapping (i.e., how to track your moods) (N=49)	2.04	0.89

Notes. M = Mean SD = Standard deviation. The mean is based on a scale from 1 to 4 where 1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, and 4 = *Very often*. The sample size varies for each strategy because mentors who said “*I don’t know what this means*” were excluded from the mean.

We explored data from our interviews with the site directors to understand why mentors may have responded to some of these strategies with, ‘*I don’t know what this means.*’ Site directors noted that even though mentors were trained on the CBT terminology prior to starting their relationship with their mentee, the site directors didn’t always use that terminology in their

communications with the mentors. Instead, they often relabeled these strategies in ways that would be more accessible to mentors:

“The language is clinical, so we make it more relational. When the mentors start to think heavily on terminology of CBT, I try to help them to think more intuitively, and relax the language so they don’t get stuck on the terminology. I try to help them to think out of their head and do things intuitively. Teaching them and then having them relax and use intuition is how things come out in really cool ways. The training is good, but they also need to try it out. Somewhere in between there, is where this works the best.”

“If they got too hung up on terminology, sometimes [I would] just listen to what they were saying to identify the strategy they talked about. By listening to their description, you [could] determine they are using the strategy.”

Mentors in the CBT group felt more knowledgeable and prepared to apply CBT strategies than mentors in the BAU group. We asked mentors about the extent to which they understood and felt ready to use CBT strategies in their interactions with their mentees. On a scale from 1 to 5 (1 = Strongly disagree, 2 = Disagree, 3 = Neither disagree nor agree, 4 = Agree, 5 = Strongly agree), mentors in the CBT group reported better understanding of, and readiness to use, the CBT strategies (see Exhibit 27).

Exhibit 27. Mentors’ Readiness to Use CBT strategies

Survey Item	M	SD
I understand what CBT (i.e., “cognitive behavioral therapy”) is. * (N=157)	3.73	0.83
I know how to apply CBT in my relationship with my mentee. * (N=158)	3.49	0.86
My program has been clear about wanting me to use CBT principles during my interactions with my mentee. * (N=159)	3.36	1.07
The training I got helped me understand how to use CBT principles in my relationship with my mentee. * (N=156)	3.31	1.02
My program has given me ideas for activities I could do with my mentee to help him/her use CBT principles in her/his daily life. + (N=157)	3.35	1.02
The support I’ve gotten from the program after my match started has helped me understand how to use CBT principles in my relationship with my mentee. (N=158)	3.22	1.03

Notes: M = Mean SD = Standard deviation. *CBT mentors reported significantly higher average ratings than BAU mentors (p<.05). + There was a trend for CBT mentors to report higher average ratings than BAU mentors (p=.05).

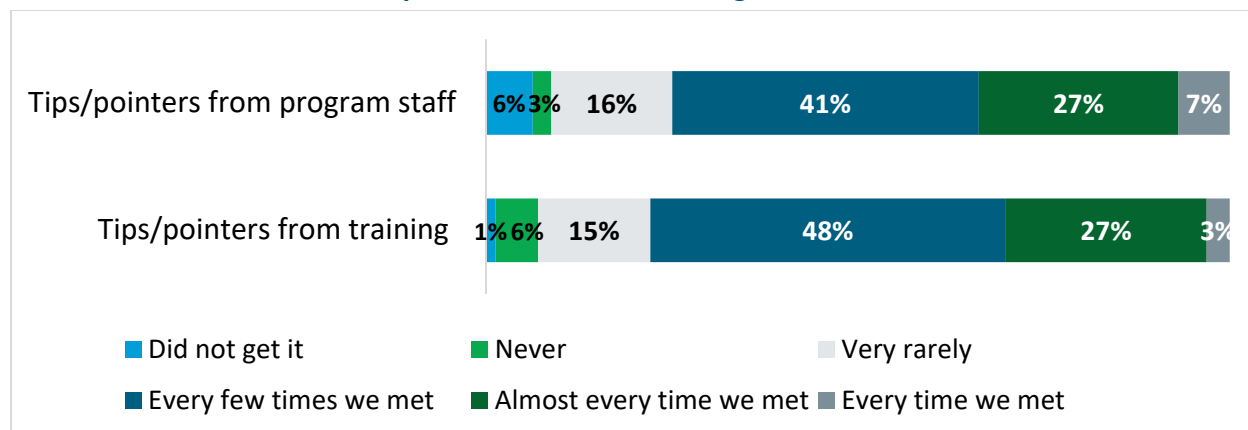
Mentor Uptake of the Intervention

Uptake of Program Components across all R&R sites

We asked mentors how often they used the tips and pointers they received from staff (either in training or monthly staff support) during their interactions with their mentees. In general, mentors reported that they frequently applied the advice they received from their program

with about three quarters implementing these tips at least every few times they met (see Exhibit 28).

Exhibit 28. Mentors' Use of Tips/Pointers from the Program



We also examined mentor reports of the goals they set with their mentees and CBT mentors' use of the strategies they were expected to apply in their interactions with their mentees.

About three quarters of mentors reported that they set a goal with their mentee. During the initial stages of the mentoring relationship, the mentee, parent, and mentor, with the support of the site director, are expected to identify individualized goals for the match to work on. They record these goals in writing in the growth plan so the director can support the match in making progress on these goals during monthly check-in calls. As part of this study, all matches were expected to select *'exhibit a desired change in family relationships'* as one of their goals.

As noted, a total of 74 percent of the mentors reported in our survey that they set a goal with their mentee (86% of BAU vs. 70% of CBT). These goals focused on the following areas:

- social improvements (e.g., relationships with family, other adults or peers) (88%);
- increasing self-esteem (68%);
- academic improvements (44%);
- developing new skills (e.g., a talent or hobby) (37%); or
- connecting the mentee with positive activities at school or in the community (e.g., after-school activities, a job) (21%).

Uptake of the CBT Enhancements: Use of CBT Strategies

Mentors in the CBT group used some strategies more frequently than others and found some strategies harder to apply in their interactions with their mentee. As Exhibit 29 shows, all but two of the CBT strategies were implemented, on average, ‘sometimes’ (i.e., the average across mentors was between 2.5 and 3.5). Mentors also reported that the strategies were not very difficult to implement, with all but two strategies being reported as “slightly difficult” (i.e., the average across mentors was between 1.5 and 2.5). *Celebrating success* was the strategy mentors reported using most often and with which they experienced the least difficulty. *Creating new habits* was another strategy used by most mentors and experienced as slightly more difficult. *Mood mapping* and *Journaling* were two strategies tried by a little more than a quarter of the mentors (28%) and used relatively infrequently. Among those mentors who tried using these strategies, they were experienced as the most difficult.

Exhibit 29. CBT Mentors’ Reports of How Often They Tried Each CBT strategy and How Difficult It Was (N=117)

CBT Strategy	How Often Tried		How Difficult	
	M	SD	M	SD
Celebrating success (N=110)	3.46	0.65	1.26	0.91
Creating new habits (i.e., encouraging your mentee to create new routines and ways of behaving) (N=104)	3.30	0.71	1.95	1.01
Getting my mentee to stop and think about his/her behavior (N=107)	3.26	0.60	2.15	0.93
Mindfulness (i.e., how to be aware of thoughts, feelings, or behaviors) (N=64)	3.23	0.64	2.02	0.94
How to help your mentee set and achieve the goals outlined in your mentee’s growth plan (N=66)	3.11	0.68	2.16	0.94
Helping my mentee to understand the links between thoughts and behaviors (N=88)	3.10	0.64	2.23	1.01
Affirmation—10 things I like about me (i.e., reminding youth to use positive thinking and empowerment) (N=90)	3.09	0.92	1.83	0.77
Relaxation, restructuring, communication, or humor to manage anger (N=81)	3.02	0.71	2.22	1.00
Putting core beliefs and thoughts on trial (i.e., thinking about how you view yourself, others and the world) (N=64)	2.88	0.68	2.44	1.02
Refuting lies we tell ourselves (i.e., questioning negative self-talk) (N=67)	2.92	0.65	2.30	0.98
Whole health check-up (i.e., discussing physical, social, emotional, spiritual, intellectual, or vocational/occupational well-being) (N=67)	2.91	0.63	2.16	0.98
Journaling (i.e., writing down thoughts, feelings, and experiences) (N=51)	2.78	0.73	2.63	1.17
Mood mapping (i.e., how to track your moods) (N=33)	2.55	0.62	2.52	0.94

Notes. M = Mean SD = Standard deviation. Frequency of implementing the strategy was rated on a scale from 1 to 4 where 1 = Never, 2 = Rarely, 3 = Sometimes, and 4 = Very often. Mentors who said, “I don’t know what this means” were omitted from this count. Level of difficulty was rated on a scale from 1 to 4 where 1 = Not at all, 2 = Slightly, 3 = Somewhat, and 4 = Very. Mentors who said, “I don’t know what this means” and mentors who never tried the strategy were excluded from the count.

In our focus groups, mentors described how they used some of these strategies:

*“My mentee was rather indecisive about a lot of things. Eventually we had a talk about decision making as building confidence. When I saw some growth there, we **celebrated success**.”*

*“I did a lot of **whole health check-ups** because she’s a super busy high schooler—working, interning, side business, taking college classes. I would just check in with her to ensure that she’s not neglecting herself.”*

*“We probably touched on every single strategy a little bit. **Putting core beliefs and thoughts on trial** was a recurrent theme. My mentee tended to act on emotion a lot, so **mood mapping** was consistently happening.”*

Mentors also shared why they did not use some of the strategies we asked them about:

*“**Creating new habits was hard**. I worked with [my] mentee to create a schedule to try and set a time for him to do schoolwork every day and things like that. I noticed that his receptiveness depended on who was communicating with him – he would respond differently if I said it versus his mom.”*

*“We didn’t use **mood mapping**. Like my mentee, I was more of a doer than a deep thinker. We did a lot but we didn’t do a lot of talking as much as just doing activities together. “*

*“I didn’t really try the **mood mapping**. **Relaxation**, I didn’t really try that stuff. What was a little bit challenging for her was to think about things that she was good at.”*

Our analyses on the use of CBT strategies suggested three groups of strategies that were commonly used with similar frequencies (e.g., mentors who reported frequently using a strategy in one group were relatively likely to report using the other strategies in that group). The first group focuses on helping mentees *identify* thoughts, feelings, and behaviors. The second group of strategies helps mentees *understand the relationship* among thoughts, feelings, and behaviors. The third group helps mentees *track and reflect* on thoughts, feelings, and behaviors (see Exhibit 30).

Exhibit 30. Themes of Strategies CBT Mentors Used with Similar Frequencies

Theme	Strategy
Identify thoughts, feelings, and behaviors	<ul style="list-style-type: none"> • Helping my mentee to understand the links between thoughts and behaviors • Getting my mentee to stop and think about his/her behavior • Refuting lies we tell ourselves (i.e., questioning negative self-talk) • Relaxation, restructuring, communication, or humor to manage anger

Understand the relationships among thoughts, feelings, and behaviors	<ul style="list-style-type: none"> • Putting core beliefs and thoughts on trial (i.e., thinking about how you view yourself, others and the world) • Celebrating success • Whole health check-up (i.e., discussing physical, social, emotional, spiritual, intellectual or vocational/occupational well-being) • How to help your mentee set and achieve the goals outlined in your mentee’s growth plan • Affirmation—10 things I like about me (i.e., reminding youth to use positive thinking and empowerment)
Track and reflect on thoughts, feelings, and behaviors	<ul style="list-style-type: none"> • Mood mapping (i.e., how to track your moods) • Journaling (i.e., writing down thoughts, feelings and experiences) • Creating new habits (i.e., encouraging your mentee to create new routines and ways of behaving) • Mindfulness (i.e., how to be aware of thoughts, feelings or behaviors)

Mentor Challenges

We also examined the challenges mentors experienced in their relationships with youth.

Mentors reported experiencing a number of challenges in their relationships, but on average, none were very difficult for them. We asked mentors to rate a range of potential challenges they may have faced in their mentoring relationship on a scale from 1 to 4 (1 = Not at all challenging, 2 = Not very challenging, 3 = Somewhat challenging, 4 = Very challenging; see Exhibit 31). Mentors, on average, rated all challenges as slightly less than “somewhat” challenging. Their biggest challenge was ensuring that the strategies they used with their mentee were being reinforced at home. Conversely, they reported relatively low challenge ratings on the mentee’s family asking for too much help and finding community resources for their mentee or the mentee’s family. To overcome these challenges, mentors most commonly reported that they got advice from the R&R site director (46%), talked with their mentee about it (39%), or talked with their mentee’s caregiver about it (33%). Over one third (37%) of the mentors reported that they did not face any significant challenges.

There were very few differences in these ratings between CBT and BAU mentors. CBT mentors rated keeping their mentee engaged in their relationship (M=2.54, SD=0.91) as significantly more challenging than BAU mentors (M=2.16, SD=0.75), $t_{(156)}= 2.42, p=.02$. BAU mentors reported getting together with their mentee as more challenging (M=2.65, SD=1.09) than did CBT mentors (M=2.25, SD=1.00), $t_{(156)}= 2.18, p=.03$.

Exhibit 31. Mentor-Reported Challenges

Type of Challenge	M	SD
My mentee’s family asking me for too much help (N=154)	1.56	0.83
Finding resources for my mentee or his/her family in the community (N=146)	1.73	0.79
My mentee’s preparation for our meetings (e.g., being ready on time, canceling meetings without sufficient notice or a good reason) (N=157)	2.03	0.95
Differences in our interests or personalities (N=158)	2.04	0.81
Managing my mentee’s behavioral issues (N=157)	2.07	0.91
Having conversations with my mentee (N=158)	2.19	0.76
Getting support from my mentee’s family in fostering our relationship (N=157)	2.20	1.02
Getting my mentee interested in the resources/experiences I offered him/her (N=155)	2.32	0.83
Getting together with my mentee (e.g., transportation, scheduling, disconnected phone)* (N=158)	2.36	1.04
Keeping my mentee engaged in our relationship*(N=158)	2.44	0.88
Ensuring that the strategies I’m using with my mentee are being reinforced at home (N=143)	2.63	0.95

Notes. M = Mean, SD = Standard Deviation. *Responses were significantly different for the CBT and BAU groups (see text).

Caregiver Exposure to R&R Components and the Enhancements

Exposure to Program Components across all R&R sites

We noted earlier that although directors highlighted the importance of family involvement in R&R programming, they faced challenges with maintaining regular communication with caregivers. In the surveys we administered to caregivers, we also asked for their perspective on their communications with program staff.⁸

Almost two-thirds of caregivers (63%) reported speaking with their site director at least monthly. A little over half (53%) reported they had spoken with the R&R site director about once a month, eight percent reported discussions occurring 2 to 3 times a month, and two percent noted weekly communication. A small proportion of caregivers spoke with staff less frequently than dictated by program requirements: a quarter reported speaking with program staff every 2 to 3 months; five percent reported communicating every 4 to 6 months; and seven percent reported that they spoke with R&R staff less than every 6 months or not at all. On

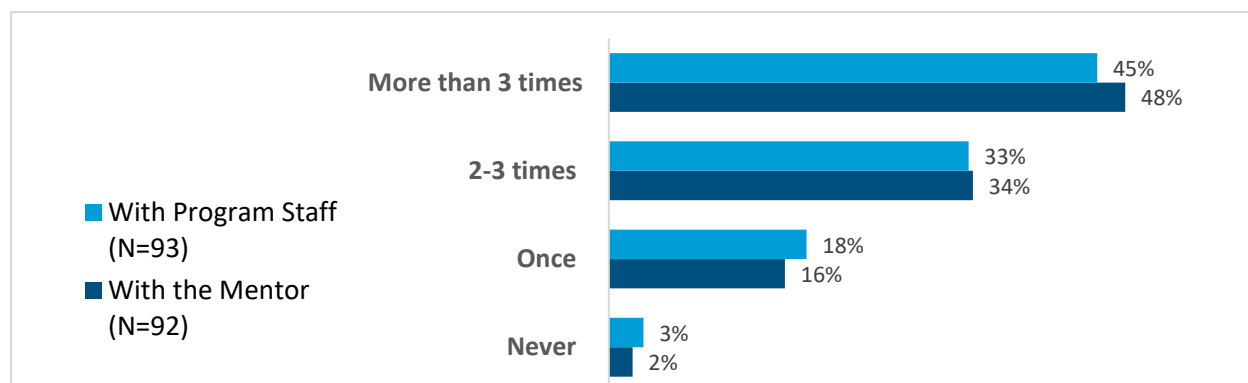
⁸ Our analyses included only caregivers who reported their child met with a mentor at least two times since study enrollment (N=180).

average, caregivers in the BAU group reported speaking with program staff more often (M=3.77, SD=0.78) than those in the CBT group (M=3.45, SD=1.23), $t_{(132)}=2.06$, $p=.02$.

Only a little over half of the caregivers (51%) reported that the mentor was helping their child achieve a goal. About 15 percent said their mentor was not helping their child achieve a goal, and about one third (33%) reported they did not know. Those caregivers who reported having goals discussed these goals at about the same frequency with the mentor and program staff, with close to half reporting they had discussed these goals with program staff and mentors respectively more than three times (see Exhibit 32).

On average, caregivers in the BAU group reported discussing the goals set for their child with the mentor (M=2.50, SD=0.63) significantly more frequently than did those in the CBT group (M=2.15, SD=0.88), $t_{(77)}= 2.17$, $p=.03$. Similarly, caregivers in the BAU group discussed goals with program staff (M=2.57, SD=0.73) more frequently than caregivers in the CBT group (M=2.0, SD=0.86), $t_{(67)}=3.27$, $p=.02$.

Exhibit 32. Caregiver Reports of Frequency Discussing Goals with Mentors and Program Staff



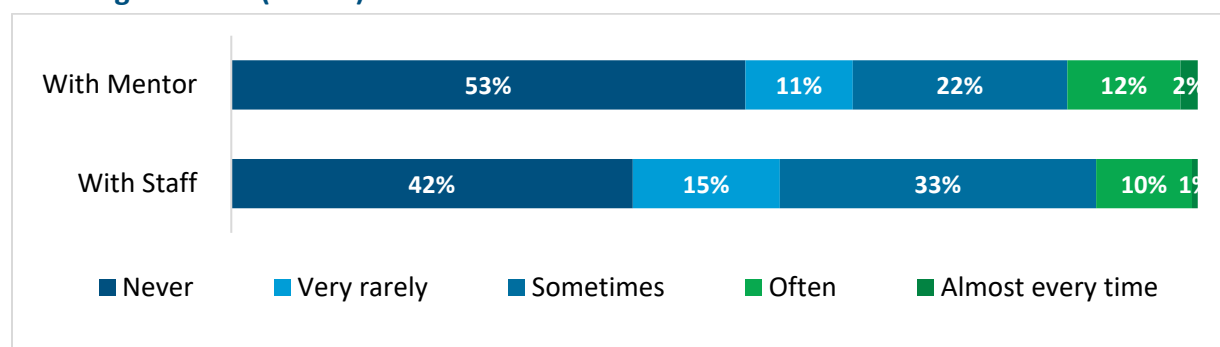
Exposure to the CBT Enhancements: Workbook and Communications about CBT Strategies

About two thirds of caregivers in the CBT group reported receiving the Workbook developed as an enhancement to caregiver support and education. Of the 132 caregivers whose children were in the CBT group, 67% of them (N=86) said they received the Parent Workbook. Of these who received the workbook, 82% (N=80) that they read at least some of it (i.e., “less than half of it” (30%), “half or more of it” (32%) or “all of it” (20%)).

Caregivers talked about the CBT strategies with their mentor and site directors infrequently. More than half of the caregivers said they had *never* talked about the CBT strategies with the mentor (53%) or program staff (42%). The 13 caregivers (11%) who talked with staff about the

CBT strategies ‘often’ or ‘every time they talked with staff’ also discussed these strategies ‘often’ or ‘every time they talked with the mentor.’ On average, caregivers talked more often with program staff (M=2.34, SD=1.05) about CBT strategies than they did with their child’s mentor (M=2.17, SD=1.18), $t_{(121)}=2.027$, $p=.04$ (see Exhibit 33).

Exhibit 33. Caregiver Reports of How Frequently They Discussed CBT Strategies with Mentors and Program Staff (N=123)



Caregiver Uptake of the CBT Enhancements

Caregivers used the CBT workbook infrequently. Among those who read the workbook they received from the program (N=68), 88 percent found it ‘somewhat’ (67%) or ‘very’ (21%) useful in giving them ideas about how they could support their child’s development. Yet, close to half (48%) reported they did not use the worksheets in the workbook either because they did not know about the worksheets (25%) or didn’t get a chance to use them (24%). An additional 26 percent used them ‘very rarely,’ 20 percent used the worksheets ‘sometimes,’ and only 6 percent used them ‘often’ or ‘very often.’ Only 5 caregivers (6%) read all the workbook and used the worksheets ‘often’ or ‘very often’.

In our focus groups and interviews, caregivers explained that they found the workbook technical and not very practical in design. Caregivers said:

“It could be a bit more user friendly. Some of the terms are technical. I had to sometimes ask [program staff], ‘What does that mean? Can you explain it a bit more?’ It has to be [worded] so that the children can also understand it.”

“My thoughts are to cut out the Handbook. It’s useless. No one wants to work on a piece of paper or a packet or something like that.”

“I think now that we’re in 2021, there are probably more effective ways. Maybe electronically so people can view it on electronics or maybe in chunks. If there are worksheets or exercises, maybe send it in chunks to parents to think about it. I would have responded better if there was more accountability on my end – I don’t know if that’s very micromanage-y but that’s my suggestion.”

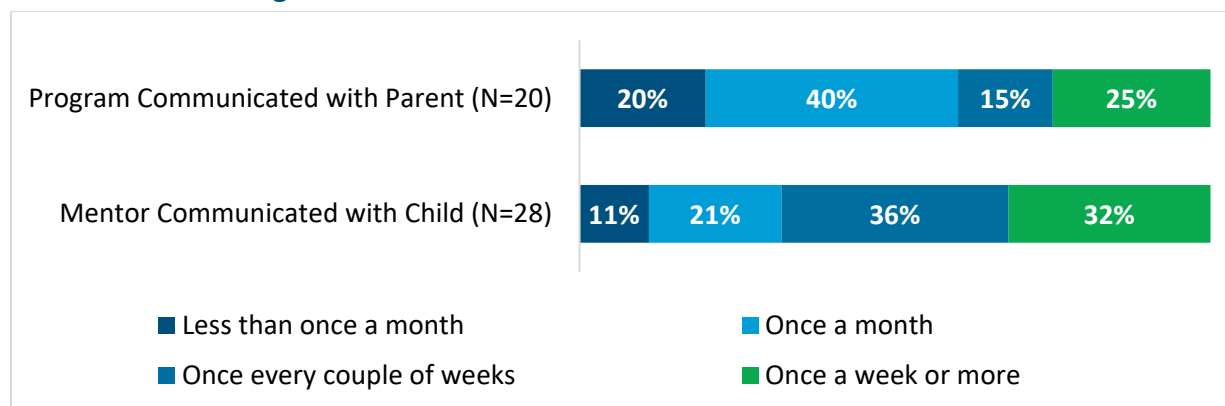
Caregivers also infrequently used the ideas and tips they received about CBT. We asked caregivers if they used tips from what they learned about CBT (either through their workbook or in discussions with R&R staff) during interactions with their child. While 37% said they did not learn about CBT from the program, among other caregivers (N=78) who learned about CBT, 21% used the tips they learned *often* or *very often*, 33% used them *sometimes*, 31% used them *very rarely*, and 15% reported that they learned about CBT, but didn't use any of these tips. Among those caregivers who were given ideas and tips on CBT from their site directors (N=60), 13% found them *very helpful* in supporting their child's development, 60% found them *somewhat helpful*, and 27% did not find them helpful.

Caregiver Experiences with the Mentor and the Program During the COVID-19 Pandemic

Thirty-seven of the caregivers (21%) had children with active matches during the pandemic and were asked about their child's mentoring relationship during this period. Nine of them (24%) said their child and mentor did not communicate during the pandemic. The remaining 28 caregivers reported on their child's communications with the mentor and their communications with the program during this period.

- Caregivers reported that their mentors communicated with their child either in person, online, by phone or through multiple means. A total of 10 caregivers said the mentor used all three forms of communications.
- About 58 percent of caregivers reported that mentors communicated with their child at least every couple of weeks during the pandemic (see Exhibit 34).
- Of the 16 caregivers whose children also met with their mentor prior to the pandemic, seven (25%) said their mentor communicated with their child with about the same frequency as they did before the pandemic, but nine (32%) said their mentor communicated with their child less frequently.
- Almost a third of the 28 caregivers (29%) reported they did not have any contact with the program during the pandemic, while about 40 percent reported communicating with the program at least once every couple of weeks (see Exhibit 34).

Exhibit 34. Caregiver Reports of Their Communication with Staff and Youth Communication with Mentors During the Pandemic



Fifteen of the 28 caregivers reported that the R&R program provided them with a variety of supports during the pandemic, reporting that the program:

- Provided my family with “essentials” like food or childcare (43% of 28);
- Helped to keep my child’s mentoring relationship together (32%);
- Helped my family find educational resources for my child (e.g., online activities, books, academic help (23%); and
- Connected my family with other resources (e.g., internet access, loans, housing information, health care (21%).

Supports and Challenges to Implementation Quality

It is worth noting the context within which mentoring is supported and implemented across the various R&R sites. The program offers a manualized curriculum designed by clinicians and intended for youth facing high levels of individual and environmental risk factors. The national office for Reach & Rise®, based in San Francisco, features a national director and, until the fall of 2019, two full time supervisors to support the directors across all the program sites. The site directors were part of a community of practice where they participated in a three-day group training at the launch of the CBT enhancement initiative, regular team meetings 2-3 times each month, and ongoing peer support and one-on-one interactions with the two national supervisors. These are strengths of the R&R model, yet the site directors were otherwise on their own to implement the program on the ground in their local communities. Funding for the site director positions came from the national YMCA through federal grants, and each site director was supervised by a staff person at the local YMCA. The supervisors also met regularly with the national director of R&R but supervising the site directors was only a small part of their overall responsibilities.

This context is important for understanding the complexities faced by individual site directors. For most things about the program, they were to look to the national office and other site directors to address their needs and secure the level of support that would help them thrive in their role. Yet, critical decisions about their position were made at the local YMCA, and as challenges presented themselves over the course of the five-year evaluation, many site directors faced tests of their personal resolve and capacity to do their job well. For example, about one year into the evaluation there was a disruption in some of the funding for R&R, and while the national office was able to resolve the immediate situation relatively quickly, it did introduce a level of uncertainty for the local YMCAs about the potential need to provide local resources to sustain the program. Not all of the YMCA sites were committed to that level of support for R&R and some of the sites opted to end their programs. Another example would be disparate ways that individual YMCAs responded to the global pandemic in March 2020. Some of the agencies laid off the site directors while others reassigned them to non- R&R responsibilities.

As the main conduit through which mentors and families learn about the strategies and techniques on which fundamental R&R principles are based (e.g., providing mentor training, ongoing support through conversations with the site director), site directors' interactions with the mentors and caregivers are key to increasing mentor and caregiver knowledge and use of CBT strategies with youth. For this reason, we posited that site directors' level of experience and readiness to implement CBT enhancements should play a key role in mentor uptake. As part of the implementation study, we examined both staff and program characteristics in exploring the various factors that facilitated the implementation of the enhancements as well as any factors that may have limited the initiative's progress.

Site directors' experience with the R&R program ranged from 5 months to over 10 years with an average of about 3.5 years (43 months) at the time the site directors responded to our close-out survey. Of the 22 sites that were included in our analyses, 10 sites experienced turnover (seven of the 16 CBT sites and three of six BAU sites).

While turnover is a common challenge in youth-serving agencies, these staffing changes may complicate the implementation of key practices, particularly in programs like R&R that have only one staff person. For example, staff turnover directly influenced whether and how the matches were supported because it took time for new staff to build rapport with the families and mentors to guide work with the youth. In addition, when staff left, R&R national staff were responsible to train new staff on the details of the program, share strategies, and prepare them for work with their existing caseload. When the study started in 2017, all site directors participated in an in-person training and monthly group calls with national leadership and received ongoing support to support implementation of the enhancements. That type of

immersive training works best when there are groups of new staff to train at the same time. Yet, over time there were many times that a new staff person would be hired, and a choice needed to be made to train that person one-on-one or wait for other new staff to be hired. Either option offered a less than optimal solution. Consequently, site directors who started in their position later in the initiative did not receive the same level of training and support that was provided to directors at the beginning of the study. One of the site directors explained her level of readiness when she took on the job mid-way through the initiative:

“I did not feel very prepared--my supervisor is pretty hands off. National support staff left right when I came on. In her [National Office staff's] last few weeks, she had training over zoom. I felt like I kept [being] thrown into different pieces. In my previous program we designed and changed parts, we tried to make it simple. Being handed this, I felt overwhelmed, I could not put my mark on it. It felt hard. It had tons of information.”

Not all directors had formal mental health training and a background in CBT. As part of the initiative, R&R directors at the CBT sites were expected to train mentors and support study matches in their understanding and use of CBT strategies. When the study began in 2018, all the site directors had either a background in mental health services or several years of experience as Reach & Rise site directors. As sites experienced turnover, (as noted, this was true in ten of the 22 agencies over the course of the evaluation), the new staff did not have the same level of experience with CBT as the site director they replaced. Of the 15 directors at the CBT sites who responded to the close-out survey, 7 had training in social work, 2 in counseling, 2 in education and psychology, and 1 in education, public health, political science, and conflict management, respectively. In our interviews, those directors with no background in CBT shared the additional steps they needed to take to implement the program enhancements. One director said:

“When I first started as a Reach & Rise site director for one-on-one mentoring, I had no idea about CBT. My director introduced it to me, but she did not give me much information. She gave me the manual, but I had to learn myself. Some modules on family relationships are different. I had to sit down and read through so I would be able to understand what CBT is. I had to train myself. In the google drive for site directors, they have a folder with resources. Before reading through the manual, I listened to the recording, then I went back to read it.”

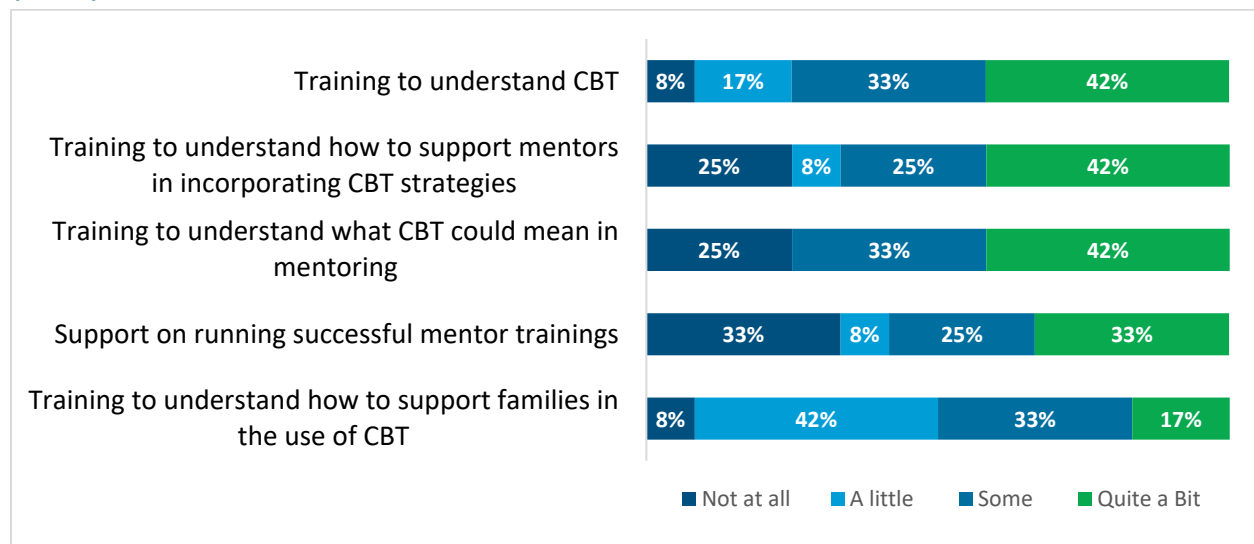
Most of the CBT site directors needed support on delivering the enhanced program activities effectively, but not all reported that the supports received were sufficient. In our close-out surveys with CBT site directors, we asked them to rate how much they needed different types of supports to deliver CBT enhancements. They responded to each item on a scale from ‘not at all’ to ‘quite a bit.’ We then asked, for each type of support, the level of support they actually *received* (using the same response set). Exhibit 35 includes only those directors who reported needing ‘some’ or ‘quite a bit’ of help in one or more areas (12 of the 15 CBT site directors). The

proportions noted in Exhibit 35 represent the extent to which they received support in those areas in which they reported needing help.

At least half of site directors reported receiving at least “some” support in all areas in which they needed help. Yet, in all the areas assessed, fewer than half reported receiving “quite a bit” of support, suggesting that supports for staff in all these areas could be improved. In particular, site directors reported needing more support than they received to run successful mentor trainings and to better support families in using CBT strategies.

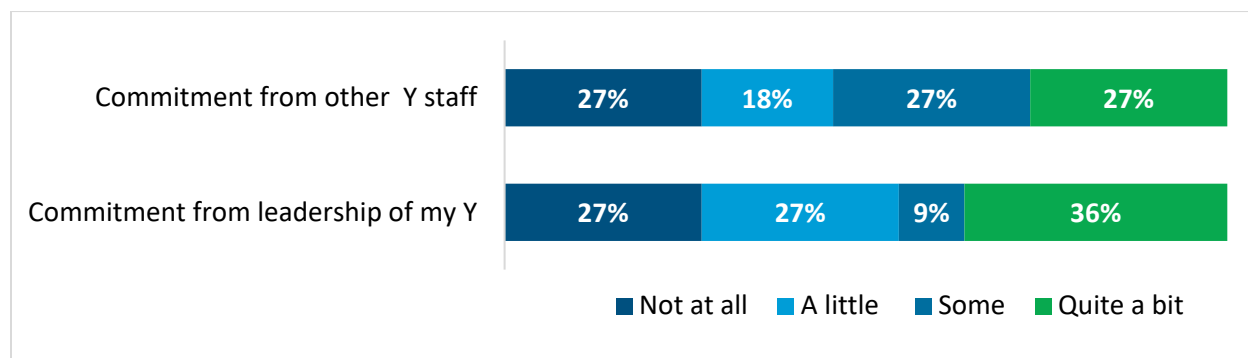
Some site directors expressed needing more support than was received from their YMCA. As noted, all Reach & Rise program sites operate through local YMCA organizations. These organizations supervise the administration of the program, provide program referrals, and provide matches with access to YMCA activities and resources. Thus, the level of support provided by YMCA leadership and staff could very well have influenced how many youth each site was able to recruit for the study and the site director’s availability to support the matches. Exhibit 36 shows that among the CBT directors who said they needed ‘some’ or ‘quite a bit’ of support from their YMCA, fewer than half (45%) received ‘some’ or ‘quite a bit’ of commitment from YMCA leadership, and just over half (54%) received that level of support from other YMCA staff.

Exhibit 35. CBT Site Director Reports of Receiving Support in Areas in which they Needed Help (N=12)



Note. Responses exclude those site directors who reported they needed support in a given area *Not at All* or *A Little*.

Exhibit 36. Site Director Reports of the Extent to YMCA Staff Were Committed to the Program (N=11)



Site directors shared details about why they felt unsupported by their YMCA leadership or staff. These descriptions often suggested a lack of buy-in for the program (or study) by their colleagues. One of them said:

“My group did not support the study, and so I was given 5 matches to follow up with and told there was nothing more to do but call them every month and check on how things were going for them. I was trained about the full program but after I returned from that training was told it was not my responsibility to do any of it.”

Another director described her YMCA’s organizational culture which led to the lack of leadership support:

“I found the largest obstacles to my success as a site director had to do with my own individual YMCA. Upper-level management would continually ask why we were spending so much money per child when the sports or aquatics program only cost around \$100 a child for participation. That...line of thinking really hurt the progress of Reach & Rise® at my Association.”

A lack of leadership support and organizational culture at the YMCA were the primary reasons three directors said they were leaving their positions. One of them described the lack of support from management and staff:

“Overall, Reach & Rise® was a wonderful experience, I appreciated my Reach & Rise® supervisors and felt very supported in my role. My experience at YMCA is what made me leave the program. I very much disliked working at my YMCA. The management (especially the CEO) was not supportive of the Reach & Rise® program. I asked my “team” to assist with recruitment by providing me with names and numbers of possible mentors and mentees many times, but 80 percent of them never responded.”

Another director described the lack of communication with leadership that limited how well the director was able to support the matches in the study:

“The experience at my YMCA was terrible and the reason I am leaving the position. There was no communication between leadership and myself, and [I] was routinely left out of conversations. When our YMCA opened back up after COVID, I was not informed that we opened or were supposed to return to work.”

Program Implementation Costs

As part of the implementation study, AIR also collected information on R&R program budgets and expenditures from participating YMCA organizations. We asked for information for 2019, because this year would not only entail “start-up” time for the research (e.g., focusing mainly on recruitment and preparations for participation in the evaluation), but would also include training mentors, supervision of families and mentors, closing matches, and other activities for ongoing matches. Our questions focused on three broad areas: (1) total cash budget and what these funds were spent on; (2) in-kind donations; and (3) administrative costs including both estimates of supervisory time and administrative costs for operating in the YMCA building.

Three of the 25 participating organizations did not make any mentor-mentee matches during this period so were excluded from our cost analyses. A total of 15 of the remaining 22 organizations responded to our request. In the remaining cases, we were not able to collect this information directly from the YMCA. Thus, our study partner (YMCA of San Francisco) provided the amounts given to these organizations to support program operations. We then estimated administrative costs from the remaining CBT or BAU organizations that provided this information (i.e., we used the average administrative cost across those CBT sites providing this information for the CBT sites missing this information, and the average BAU administrative cost for the BAU sites missing this information). In six YMCA organizations, the program had closed prior to or during 2019. For those organizations, we asked for information from 2018.

Resources for the programs consisted of four main components that we asked about in the cost survey:

Funding from the National/Local YMCAs (R&R’s Program Budget). Responses suggested that most of the funding provided to the R&R program was by the national YMCA office. This funding was primarily used to support the salary and benefits of the site director. As noted, Reach & Rise® is unique from many other mentoring organizations in that, in most cases, it has only one part-time or full-time staff member (the R&R site director); and its main expense is the director’s salary. This salary varies slightly across sites depending on the cost of living and

associated salaries in the parent organization but is comparable across sites, and each site is expected to support 30 matches with this funding.

In five of the 20 YMCAs, the YMCA itself contributed to the R&R program budget, beyond what was provided by the national grant, to fund, for example, a portion of the site director's salary and fringe benefits (in two program sites) or in other cases, to fund other operating expenses. Additional operating expenses beyond the site director's salary included, for example, cell phone charges, postage, mileage, office supplies, mentor/match activities, and mentor background checks. At one program site, these funds, along with those from a local grant, helped fund an AmeriCorps*VISTA volunteer to support program operations.

Donated goods. Only four of the agencies (3 CBT and 1 BAU site) reported donated goods beyond \$100 with an average value of \$2,343. These mainly consisted of tickets for admission to local attractions and museums.

Supervisory time from the parent organization. Sites were asked to estimate the costs to supervise the R&R site director by providing the salary and benefits of their supervisor and the approximate proportion of their time that was dedicated to supervising the site director's activities. These costs ranged from \$3,107 in a site where it was reported that the supervisor spent about 5% of their time supervising the R&R site director to \$23,760 in a site where it was reported that the supervisor spent about a third of their time supervising the director. These costs were close to twice as high in the four BAU sites that provided this information (\$14,931) than in the 11 CBT sites that provided this information (\$7,958).

Administrative resources from the parent organization. Sites also estimated other administrative costs (outside of supervisory time) that the YMCAs absorbed—such as, building costs, administrative staff salaries, and supplies. Sites could provide either an itemized list of these expenses for the program (two chose this strategy), a percentage of R&R revenue that should be allocated to specific administrative costs (one chose this route), or the percentage of the YMCA's overall budget that is allocated to administrative costs, and this percentage was then allocated to the R&R budget to estimate their administrative costs (the remaining sites chose this strategy). Administrative costs ranged from \$2,801 (for a site in which the program had relatively high supervisory costs) to \$17,201 (for a site which had relatively low supervisory costs, and “building costs” were the bulk of the administrative expenses), and the average value was almost twice as high in CBT sites (\$8,725) than in BAU sites (\$4,645).

Exhibit 37 presents the estimated costs of each of the 20 R&R programs for which we have these data. These costs do not include donated goods and ranged from about \$44,346 (for a

program that funded a director for less than half the year) to \$103,309, with only four being above \$80,000.

The number of youth served (i.e., matches) also varied widely across sites, ranging from 2 to 25. None of the sites reached their 30-match capacity and only half served 10 or more matches; five sites served five or fewer. The number served was not highly associated with the site’s budget or whether the site was CBT (average = 11.13) or BAU (average = 10). For additional context, Exhibit 34 also presents the number of youth recruited for the study who were ultimately assigned to the control group (i.e., could not be served during that program year) by each site during that year.

Exhibit 37. Program Costs and Youth Served

Site	CBT or BAU site	Total Cost	NUMBER OF		COST PER MATCH		
			Recruited Controls	Matches Served	New program	Existing program, supervisory costs	Full-scale program
1	CBT	\$103,309	9	23	\$4,492	\$3,839	\$3,444
2	CBT	\$86,693	16	25	\$3,468	\$3,011	\$2,890
3	BAU	\$85,735	1	11	\$7,794	\$7,526	\$2,858
4	CBT	\$83,048	8	13	\$6,388	\$5,065	\$2,768
5	CBT	\$79,243	5	5	\$15,849	\$14,010	\$2,641
6	CBT	\$75,216	2	9	\$8,357	\$7,366	\$2,507
7	CBT	\$74,259	10	12	\$6,188	\$5,421	\$2,475
8	CBT	\$72,786	0	2	\$36,393	\$33,325	\$2,426
9	BAU	\$71,722	4	17	\$4,219	\$3,7745	\$2,391
10	CBT	\$66,464	12	14	\$4,747	\$4,258	\$2,215
11	CBT	\$64,456	4	9	\$7,162	\$6,192	\$2,149
12	BAU	\$61,050	3	8	\$7,631	\$7,051	\$2,035
13	BAU	\$59,269	3	9	\$6,585	\$6,172	\$1,976
14	CBT	\$58,761	2	10	\$5,876	\$5,004	\$1,959
15	CBT	\$58,536	5	4	\$14,634	\$12,453	\$1,951
16	CBT	\$56,362	0	3	\$18,787	\$17,046	\$1,879
17	BAU	\$48,578	3	5	\$9,716	\$8,845	\$1,619
18	CBT	\$48,146	5	11	\$4,377	\$3,584	\$1,605
19	CBT	\$47,149	0	8	\$5,894	\$5,393	\$1,572
20	CBT	\$44,346	3	19	\$2,334	\$2,187	\$1,478

Using standard calculations to estimate the cost per youth served would divide the total cost of the program (including all administrative expenses) by the number of matches served. This estimate is appropriate for calculating the cost per match for starting a new program in an organization in which the program is required to cover administrative costs. This calculation yields estimates ranging from about \$2,334 per youth for the program serving 19 matches to

\$36,393 per youth for the program serving two matches during this period. The average cost per youth across all programs was \$9,045 (CBT = \$9,663; BAU = \$7,189). Excluding the highest CBT outlier yields an overall average cost of \$7,605 per youth, with the CBT average dropping to \$7,754.

Space is an ongoing expenditure for organizations whether they introduce a new program or not. Thus, it may also be informative to consider what it would cost to start the program in an existing YMCA for which space would not be an added expense for the program. The main additional costs for an existing program in this case would be the costs of the site director, basic operational costs of the program, and time from the staff person who supervises the director's work. Costs per match are slightly lower in this case, ranging from \$2,187 to \$33,325 with an average of \$8,076 across all programs.

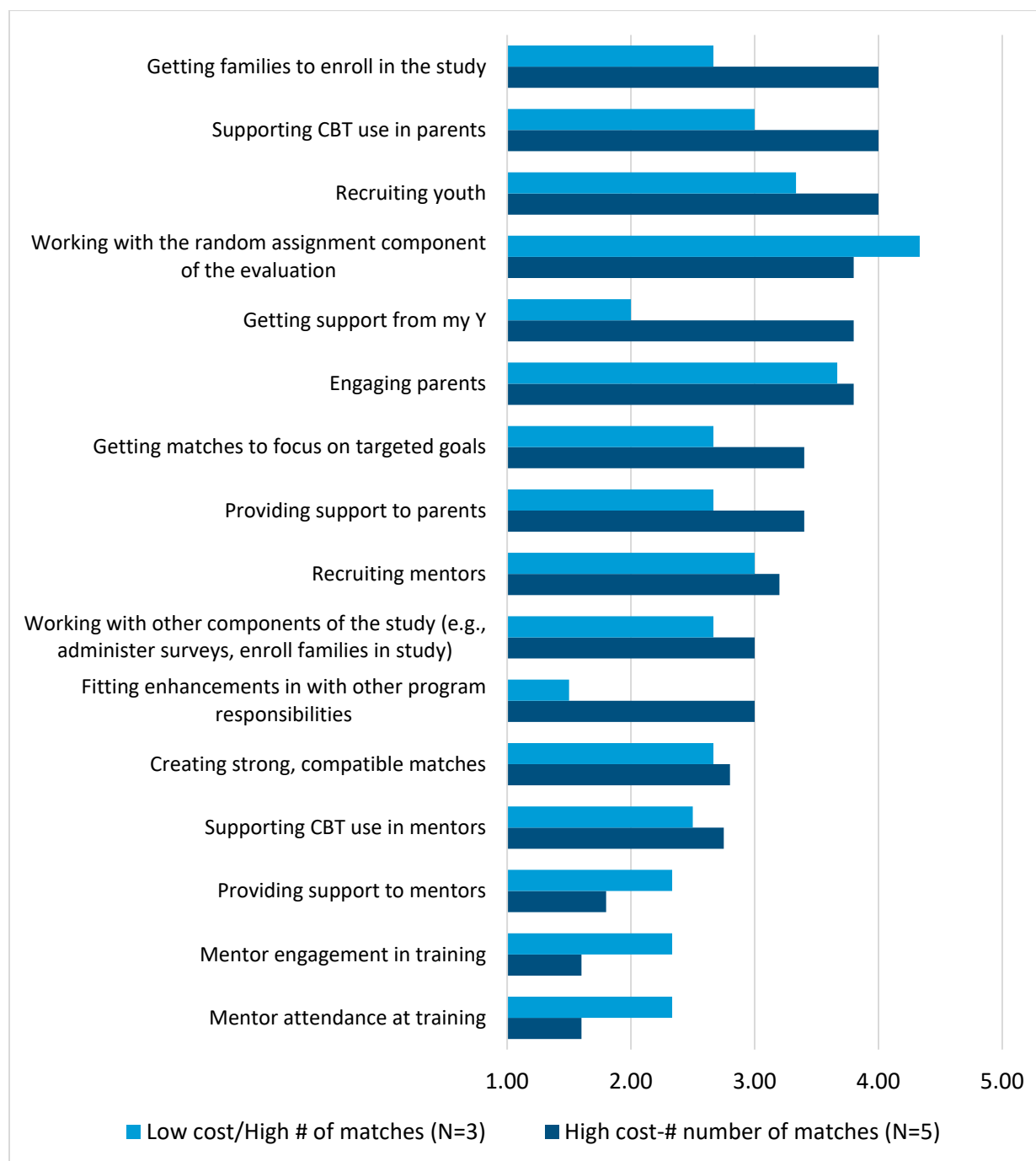
These values, however, do not reflect the staff time expended in recruiting youth who would ultimately be assigned to the control group (an average of 4.75 controls were recruited by each agency in the year of their cost assessment) and other research tasks (like survey administration, attending research meetings, documentation, etc.) which would not be undertaken in a normal program year. Nor do they reflect the fact that in another program year, youth assigned to the control group could have otherwise been served (which would have increased the number served). Other cost research on mentoring programs has highlighted the “up front” costs of the tasks leading up to the creation of a mentoring match (including recruitment and interviewing and screening potential families and mentors; Alfonso et al., 2019)—suggesting that the tasks that contribute to creating a match are significantly more costly than sustaining a match that has already been made. In fact, Alfonso et al.'s cost estimates for the “first month” of a match added to a caseload were close to 14 times the cost of the additional months of supporting that match. Thus, the efforts expended by R&R staff to recruit youth who ultimately weren't served likely inflates these cost estimates.

Another way to consider these costs is to estimate the cost per youth if all 30 slots were filled. In this case, estimates range from \$1,478 to \$3,444, with an average cost of \$2,242 (CBT = \$2,264; BAU = \$2,176). These estimates are much closer to those provided in other cost studies of community-based mentoring. For example, The Washington State Institute for Public Policy (WSIPP, 2018) estimated the cost per youth for a year of community-based mentoring services at \$2,505. The Alfonso et al. (2019) study used data from a Big Brothers Big Sisters Community-Based Mentoring program and estimated annual costs of \$3,000 and marginal costs of \$2,498 to add a mentoring match to a caseload for 12 months.

To understand why costs varied so much across the sites, we looked more closely at the five sites with the highest costs per match and the five sites with the lowest costs per match. As

expected, costs were highly dependent on the number of matches served: the five sites with the lowest number of matches also had the highest costs per match; and the five sites with the highest number of matches were among the six sites with the lowest costs. Focusing on these two sets of programs, we then explored the extent to which site directors reported experiencing challenges in several different areas (site directors from 9 of these 10 sites completed a close-out survey and were thus included in these analyses; see Exhibit 38). Site directors responded to each type of challenge on a scale from 1 to 5 (1 = Not at all, 2 = Mildly, 3 = Somewhat, 4 = Fairly, 5 = Extremely). Those site directors from the programs with the highest costs per match (and fewest matches) reported experiencing higher levels of challenges than the site directors from the programs with the lowest cost per match (and most matches) in several different areas. Most notably, they appeared to experience more challenge in getting support from their YMCA, fitting enhancements in with other program responsibilities (for those from CBT sites) and getting families to enroll in the study.

Exhibit 38. Staff Reports of Challenges among Programs with High versus Low Cost (N=9 sites)



Note. Of these 10 sites we reviewed, one site director did not complete a close-out survey.

How these costs were allocated across R&R activities. In addition to the cost data collected from YMCA agencies, AIR collected information from R&R directors on how they spent their time throughout the initiative. We collected these surveys three times a year from May 2018 to June 2021. The survey asked directors how many matches they were currently serving, how

many hours they worked in the previous week and how many of those hours were devoted to a variety of tasks. As noted, in addition to recruiting and screening participating families and the mentors who would serve them, the sites were also involved in the AIR evaluation, which asked them to engage in additional research activities (e.g., research training, meetings, data collection and sharing) as well as recruitment of youth who would ultimately be assigned to the control group. Thus, the tasks included in the time use survey were both mentoring-specific tasks (e.g., recruitment/screening mentors and families, mentor training, supervision) as well as administrative tasks and those related to conducting the research (which presumably would not be done in other program years).

As presented in Exhibit 39, almost two-fifths of staff time (39%) was devoted to “pre-match activities” including recruiting and screening mentors and families for the program, mentor training, and creating the match. Activities for supporting matches (i.e., working with parents on the CBT curriculum, supervision and support of mentors and families, hosting match activities, and tracking match progress) required close to a third (32%) of the site director’s time every week. The remainder of their time (29%) was used on administrative, research and “other” tasks (e.g., fundraising, attending conferences, committee work, travel time, attending retreats) that were likely fairly similar across sites regardless of the number of youth served.

Exhibit 39. Staff Allocation of Time by Tasks

Task	% of hours	Number of hours (in 40-hour work week)
Pre-match Activities		
Recruiting/screening youth	16.4%	6.6
Recruiting/screening mentors	14.1%	5.6
Mentor training	3.1%	1.2
Matching	5.6%	2.3
Supporting Matches		
Supervision/support of mentors	10.5%	4.2
Supervision/support of youth/parents	10.6%	4.2
Working with parents on CBM curriculum	0.6%	0.2
Match activities hosted by R&R	1.8%	0.7
Tracking progress of individual matches	8.5%	3.4
Administrative Tasks		
Research-related administrative tasks	6.4%	2.5
R&R or YMCA administrative tasks	14.7%	5.9
Other	7.9%	3.1

Notes. Values represent averages for the 20 sites for which we collected cost information during the year for which we collected the cost surveys. Nineteen sites had between one and three time points of data for the year of their cost survey. One site did not report time-use information during that year. In this case, we used time-use data from the previous year.

How site directors used their time did not vary extensively across CBT and BAU sites. Collapsing across the three different categories, CBT site directors spent the biggest proportion of their time (41% versus 39% for BAU) on pre-match activities, followed by supporting matches (36% versus 31% for BAU), and administrative tasks (24% versus 31% for BAU).

Chapter 5. Discussion and Conclusion

The Reach & Rise[®] evaluation was an opportunity to test an approach to strengthening the effectiveness of youth mentoring programs. Drawing on research suggesting the benefits of mentoring relationships and the effectiveness of cognitive behavioral therapy, or CBT, this study was designed to examine whether supporting mentors' and caregivers' use of CBT strategies could lead to improvements in how youth feel, think, and behave. If effective, this innovative "CBT mentoring" approach could be leveraged to support many youth who experience adversities affecting their mental health and well-being.

The goal of the evaluation was to rigorously examine: (1) whether and in what ways CBT mentoring, as delivered by the YMCA's Reach & Rise[®] mentoring program benefits youth; (2) whether CBT-related enhancements to this program model strengthen youth benefits; (3) how these benefits are yielded; and (4) the strength of the program's implementation. These broad goals contributed to the following questions:

Did R&R Improve Youth Outcomes?

Impact analyses support the following findings:

The study found impacts in youth-reported delinquency and substance use, but did not detect differences in arrest. These findings echo Tolan et al.'s (2008) meta-analysis which supported mentoring's effects in both delinquency and substance use across several evaluations. Other reviews and meta-analyses of mentoring program evaluations also have reported generally positive (albeit mixed) findings more specifically related to substance use (Dunn et al. 2012; Thomas et al., 2011, 2013; Tolan et al., 2014). Studies on CBT also support it as an effective approach for treating delinquency-related behaviors including substance use, aggression, and anger expression (Hoogsteder et al., 2015; Van Vugt et al., 2016; Windsor et al., 2015; Magill & Ray, 2009; Irvin et al., 1999). Thus, having a caring adult deliver components of CBT in the context of a supportive relationship may be particularly effective at fostering benefits related to delinquency, including substance use. Given the young age of the youth involved in this study and the relatively low level of previous substance use reported at baseline, these results reflect more on substance use *prevention* rather than a *reduction* in use. Understanding whether CBT-infused mentoring may also contribute to the cessation of substance use or decreasing the severity of substance use disorders will be an important next step for researchers.

We did not, however, detect significant impacts in arrest—as reflected in both caregiver reports and arrest records obtained for 70% of the sample. These results are perhaps surprising given

impacts on both self-reported delinquency and substance use. Impacts on arrest have also been reported in other evaluations of mentoring programs (Bry, 1982; Munson & McMillen, 2009; DuBois et al., 2022), and a recent meta-analysis supported decreases in recidivism for mentored youth (DuBois, 2022). The young age of the youth participating in the study, with half of the youth 11 years old or younger, as well as the timing of the study, with over a third of youth participants potentially experiencing the lockdown resulting from the COVID-19 pandemic may have contributed to our lack of findings in this important area. Although, it is important to note that the DuBois et al. (2022) study followed youth during a similar period and found impacts in parent-reported arrests. The youth in the DuBois et al. (2022) study were, however, slightly older and followed for a longer period (18 months) than the youth in this study which may have contributed to this difference in findings.

School and family connectedness were also improved for Reach & Rise® youth. Improvements in school connectedness were experienced by youth in the R&R group despite the COVID disruptions discussed below, which affected the way many participating youth attended school over the course of the study. Close to half of the matches in the study focused at least one of their goals on academic improvements, which may have contributed to this finding.

Similarly, matches across both BAU and CBT programs were asked to focus one of their goals on strengthening family relationships, which may have contributed to improvements in family connectedness for R&R youth. A recent RCT of Big Brothers Big Sisters community-based mentoring also found positive impacts in family relationships (DuBois et al., 2022). In contrast, we were not able to detect measurable benefits of program involvement on parenting behavior and stress (as reported by parents) in this study.

The CBT enhancements to the R&R program model included engaging caregivers in the use of CBT strategies, and we hypothesized this would contribute to better (i.e., more positive) outcomes for youth. As we saw in the path analyses, exposure of caregivers to the CBT enhancements did contribute to greater use of the CBT strategies with their children, which in turn was associated with more positive youth outcomes. However, as discussed below, this component of the intervention was not implemented with strong fidelity, and caregivers reported fairly low use of the CBT strategies during interactions with their child. Perhaps youth-reported improvements in family dynamics relied in large part on the focus of the mentor in working with the mentee on strengthening family relationships.

We did not detect impacts in other assessed areas including emotional well-being, social and problem-solving skills, and peer relationships. A lack of findings in these areas is unexpected. Other studies and reviews of CBT (e.g., Keles & Idsoe, 2018; Rasing et al., 2017), youth mentoring (Erdem et al., 2016; Keller & Pryce, 2012; Herrera et al., 2013; King et al., 2021;

Browne et al., 2022; DeWit et al., 2016) and CBT-infused mentoring (e.g., Jent & Niec, 2009) have reported benefits in various measures of well-being and mental health indicators including internalizing and depressive symptoms.

A review of the larger initiative may help shed light on this pattern of findings. Among youth assigned to the treatment group, 31% did not experience a meaningful mentoring relationship. This includes those who were never matched, due in part to recruitment challenges and staffing difficulties, as well as those for whom a match was initiated but did not become a sustained mentoring relationship. Decrements in well-being (e.g., due to disappointment at not being matched, counter to expectations) may have been present in this group in a way that decreased average outcomes across the R&R group (see discussion in DuBois et al., 2022, which noted a similar pattern of findings). In fact, past research has underscored the importance of relationship quality (Browne et al., 2022, Keller & Pryce, 2012; Haft et al., 2019) and consistent mentoring in generating positive social and emotional outcomes (Karcher, 2005; Grossman & Rhodes, 2002).

Our analyses did not detect impacts on goal setting behavior although setting and working on goals as part of the mentoring relationship is a key component of both the larger program and the CBT enhancements. Given that 27% of mentors reported not working with their mentees on goal setting, many youth may not have explicitly worked with their mentors on the achievement of goals.

The study's timing also may have contributed to a lack of findings in these areas. The mentoring relationships for about 36% of youth in the R&R group took place, at least in part, after the beginning of the COVID-19 pandemic lockdown (i.e., March 2022). During the lockdown, matches were not allowed to meet in person and the YMCAs closed for several months (some indefinitely). Meeting virtually and not having access to the YMCA's resources even after the lockdown ended may have affected the quality of relationships that developed through the initiative. In addition, increases in depression and anxiety in adolescents across the U.S. during the COVID-19 pandemic (Hawes et al., 2021), may have affected the ability of mentoring to make a difference in important areas including life satisfaction, depressive symptoms, happiness, and hope for the future.

Youth's experiences during the COVID pandemic may have also affected our ability to gauge impacts in other outcomes. For example, the disciplinary experiences included in our measure of school misbehavior (i.e., detention, suspensions) likely did not occur or were less frequent during remote learning for both groups of youth, which may have diminished impacts in these areas. This timing may have similarly affected peer relationships in that, for most youth, interactions with peers were much less frequent during the COVID lockdown.

Did Exposure to Enhanced Program Practices Make a Difference in Program Impacts?

The current study did not find support for significant differences in youth outcomes between programs implementing the BAU model and those implementing the CBT enhancements. Our findings are similar to other recent studies testing research-based enhancements to youth mentoring and yielding mixed effects (Peaslee & Teye, 2015; Jarjoura et al., 2018; Courser et al., 2014). In those other studies, the lack of strong differences between program models may have been due to several factors including participant uptake of enhancements, including elements like additional training after the match is made (Peaslee & Teye, 2015; Jarjoura et al., 2018; Courser et al., 2014), and staff buy-in for the enhancements (DuBois & Keller, 2017; Jarjoura et al., 2018). Importantly, our analyses did support links between *receiving* the enhancements, implementing CBT practices on the ground, and yielding stronger and more effective mentoring relationships. Thus, when programs were able to implement the CBT enhancements and support their use by mentors and parents, youth benefited.

To what extent were the program model and the enhancements implemented with fidelity?

The study supports several conclusions related to the implementation of both the broad R&R program and the CBT-related enhancements:

The R&R mentoring model was implemented as intended across both BAU and CBT sites; however, mentors and caregivers varied in their reports of receiving program supports. For example, close to half (45%) of the mentors and one third of caregivers (27%) reported speaking with their site director less than monthly (with monthly communication expected by the program). Staff turnover, which occurred in 11 sites over the course of the initiative may have contributed to these findings. In addition, even for consistent staff who make every effort to contact participants, contacts with both families and mentors are, in large part, driven by participants. If they don't respond to site director efforts (e.g., by returning calls), apart from closing a match, staff are left with few options. Staff, in fact, reported that connecting with caregivers was one of the most challenging aspects of their work.

In addition, although all matches were expected to have at least one goal for the youth to work on and document it in the youth growth plan at the beginning of the match, as noted, just over a quarter (27%) of the mentors reported that they did not have a goal set for their mentee, and half of the caregivers reported that the mentor was not helping their child achieve a goal (17%) or they did not know if the mentor was working toward a goal (33%). When they did have a goal, however, most mentors talked about these goals with their site director frequently; and when mentors reported greater exposure to the CBT strategies through program staff

(including the review of the youth’s growth plan), they were significantly more likely to report working with their mentee around goals.

The CBT enhancements to the R&R program model were developed as planned; however, they were not implemented consistently. Many CBT mentors reported that the program provided them with training, materials and resources, that staff provided them with ideas on how to implement CBT strategies, and that the tools developed as part of the enhancements helped them use CBT strategies. As expected, mentors in the CBT group reported higher levels of these supports and provision of these tools. They also felt more knowledgeable and prepared to apply CBT strategies than mentors in the BAU group. Yet, many mentors reported that they did not experience these supports. For example, more than a quarter of the CBT mentors reported that their agency did not help them use CBT principles with their mentee, and close to one third of them said their training did not focus on CBT principles. Some mentors may have been unfamiliar with the specific terminology used in our surveys—several site directors highlighted their conscious efforts to use simpler, more relatable terminology with mentors when discussing CBT strategies. Yet, staff reports across a number of items suggested at least some variability in implementation of the enhancements with the mentors.

From interviews with site directors, it was clear they used creative ways to make the enhancements more relatable to their participants—for example, changing when they provided caregivers with the workbook and using check-in tools in a way that allowed conversations to flow more smoothly. These changes affected implementation fidelity but likely increased participant uptake. This tension between implementing a program with fidelity and being responsive to the needs of program participants is a common tension faced by programs when testing out new practices (see Castro et al., 2004, for a discussion). Thus, despite contributing to implementation variability, this kind of responsiveness undoubtedly leads to innovation and refinement of practices in a way that can ultimately improve the intervention.

Mentors in the CBT group reported that some strategies were easier to use than others and thus were more frequently used in their interactions with their mentee. Celebrating success, creating new habits, and getting the mentee to stop and think about his/her behavior were the most frequently used CBT strategies. They were also among the most frequently discussed with the site directors during their monthly check-in meetings. Mood mapping, journaling, and whole health check-ups were three strategies that the mentors tried the least frequently and found the most difficult to implement. Mentors are likely to use strategies they can easily apply and encourage their mentee to use during their mentoring interactions, and some strategies may not apply to all mentees. For example, journaling may not be a useful activity for a mentor who is typically engaged in physical or outdoor activities with their mentee and those who believe their mentee would not be interested in this type of reflection. Future studies should

explore how mentors' use of specific strategies may align with youth needs and strengths and how this alignment (or misalignment) affects relationship quality, match length and ultimately youth outcomes.

What Factors were Challenging in Implementing the Enhancements?

Several take-aways are evident from our analyses:

The enhanced tools designed to support mentors' and caregivers' use of CBT strategies were difficult to use and led to inconsistent implementation. As part of the enhancements to the R&R program model, a 2-hour CBT-focused training module was added to the existing pre-match mentor training, existing match support tools were augmented with more targeted questions on the use of CBT strategies, and a caregiver handbook was developed that included worksheets for caregivers to practice CBT strategies at home with their child. While all CBT sites included the additional module in the mentors' training prior to their being matched, some site directors noted that the module was content heavy and included less interaction than the other modules—interaction which would have helped mentors understand how to use CBT principles during their mentoring activities. Site directors felt that their ability to help mentors understand and apply CBT strategies was imperative in determining whether and how well mentors applied those principles to their match interactions. This suggests that although pre-match training may help prepare volunteer mentors for a CBT-focused mentoring approach, once the mentors are matched, the role of the site directors in providing ongoing guidance and support may be vital in helping the mentors use what they've learned during match interactions. In addition, site directors shared that the components that were added to the youth growth plan and monthly check-in tools made it difficult for them to navigate their communications with the mentors and caregivers during their monthly check-ins. Thus, they adapted the terminology requested in these tools and/or used the tools inconsistently.

Programs developing or enhancing tools that are meant to guide staff interactions with clients should ensure that these tools and resources are designed with staff input to ensure ease of use, cultural relevance, and ultimately, the potential for long-term use. Involving site staff who have experience and understanding of the participants and communities being served in the development of these tools will increase not only their contextual relevance but also staff buy-in.

Educating and engaging caregivers in reinforcing CBT strategies at home was the CBT enhancement with the weakest implementation fidelity. An important component of the initiative was the support of caregiver engagement in the use of CBT strategies at home in the day-to-day life of the young person. The hope was that this would increase the likelihood that caregivers would reinforce cognitive, emotional, and behavioral changes initiated through the

mentoring relationship. This program component reflected previous research highlighting the importance of parent engagement in the CBT process (Albano & Kendall, 2002; King et al., 2005).

Most caregivers received the workbook developed as an enhancement to caregiver support, but only a few read the entire workbook, used the worksheets in the workbook, and found the exercises useful. Although fewer than half of the caregivers talked about the CBT strategies with their program staff, those who learned about CBT from the site director found these ideas and tips useful in supporting their child's development. And, as we found in our outcome analyses, when caregivers were exposed to the CBT enhancements, they were more likely to use them with their children, and those children were more likely to report more positive outcomes, specifically related to connections with others and social emotional factors.

Significant barriers for site directors in engaging caregivers were both the limited contact program staff were able to achieve with them and challenges they faced in encouraging them to use the workbook materials they shared with them. Several site directors felt that the workbooks were not structured in a way that helped caregivers easily identify how to use them, and some felt uncomfortable handing busy caregivers a big folder to use. A takeaway for future programming is the importance of carefully considering potential cultural/contextual barriers that may prevent families from fully using program tools and resources and the value of creating culturally sensitive, contextually relevant approaches that have been vetted by site staff to educate and engage caregivers. For example, site directors suggested conducting workshops and group events to help caregivers understand CBT principles and strategies and practice ways they could use these strategies at home. In addition, caregivers suggested the use of technology in receiving this information rather than a folder they received in their initial meeting with the site director.

The strength of YMCA leadership and commitment to Reach & Rise® was not uniform across all agencies, which had implications for implementation quality. A unique feature of the R&R program is its connections with the local YMCA program and its operations through the YMCA facility. The partnership is intended to increase the financial and operational sustainability of the R&R program through such supports as mentor and youth recruitment as well as access to YMCA facilities and activities for the matches. Many site directors expressed limited support from YMCA leadership (e.g., limited access to YMCA facilities and activities, lack of office space and supplies for the site director), which they believed created barriers to implementation quality. With limited YMCA operational and financial support, several study sites closed or lost their site director to turnover over the course of the initiative, and program sites struggled to maintain or recruit staff with the required qualifications due to budget cuts.

Support from the Reach & Rise® national office may have strengthened the support received by site directors. Yet, there were ultimately reductions in the level of national support available over the course of the initiative. Many site directors reported that they needed support and guidance in CBT implementation. While most directors felt they received support in the areas they needed help with, at least a quarter reported receiving ‘none’ or only ‘a little’ support in their specific areas of need. Program costs, which relied for the most part on the number of matches served, were also associated with support from the broader program. When YMCA support was high, the program recruited and served more matches than when support was low. Supports included, for example, allowing the site director to use YMCA networking events to recruit mentors, providing access to technology and supplies, and allowing matches to meet at Y facilities. These findings highlight the important role of the sponsoring or umbrella organizations that houses the program in supporting staff with the financial, material, and professional development resources they need to enable programs to deliver their services as expected.

Study Limitations

In this section, we identify limitations that we needed to address in our analyses.

1. When cases were enrolled into the study, they were assigned study IDs that were to follow them through all stages of data collection. When the data were all collected and processed, we found that for 59 cases (about 10% of the analysis sample) we could not reliably link baseline and follow-up surveys for either the youth or the caregiver. We conducted sensitivity analyses and found that the results were similar when we removed those cases, so we opted to report results for the full sample in this report.
2. At the start of the evaluation, each site could opt to administer surveys in an online version or using a paper version of the same instrument. We envisioned that within each site the mode of administration would not vary within or between cases. Yet, for a number of sites, the research team played a key role in the administration of the follow-up surveys, and because we were not able to travel from site to site, we needed to be flexible in how follow-up surveys were administered. Once the pandemic hit, there were additional barriers to administering surveys in person. We were concerned that the differences in administration mode from baseline to follow-up may have had an adverse effect on the various measures. We conducted sensitivity analyses to were able to rule out the possibility that there was undue influence on the results due to mode.
3. As we noted above, many of the outcome measures focused on behaviors that would have changed due to pandemic restrictions faced by all youth and families. Thus, for the portion of the sample that completed the follow-up surveys after the start of the

pandemic, we may have been measuring changes in outcomes that were because of the pandemic rather than a reflection of the impact of mentoring. We conducted sensitivity analyses and found that the results were similar when we excluded cases with follow-up data collection after the start of the pandemic, so we opted to report results for the full sample in this report.

Conclusion

This report provides documentation of the benefits of a researcher-practitioner partnership. Beginning in 2016, the implementing agency and the evaluation partner took a full year for planning and then launched the evaluation after a joint training event for each of the site directors. Through ongoing collaboration, the pieces were in place for strong program implementation and a rigorous evaluation. In terms of strengths, the R&R sites carried out the pre-match training for all mentors and provided the targeted level of ongoing support to youth, caregivers, and mentors. For the evaluation, the research team worked in collaboration with R&R staff to develop the data collection instruments and achieved high response rates for all study participants.

R&R seeks to develop and sustain what they call the “therapeutic mentoring relationship” for youth. By training mentors on developing rapport and building trust with their mentees, this may lead to a bond between the mentor and mentee that is beneficial even if the mentor does not adopt the CBT strategies. Through the development and attainment of goals, as outlined in the growth plans established at the start of the mentoring relationship, the program intentionally targets outcomes such as family connectedness, school connectedness, and reductions in problem behaviors like delinquency and substance use. This evaluation found evidence that R&R participants were more likely to achieve these targeted outcomes than youth who did not have access to the program. Yet, incorporating CBT enhancements did not appear to significantly improve youth outcomes. Given the nature of the existing R&R model, it is likely the CBT enhancements were not different enough from the BAU model to contribute to even better outcomes.

The evaluation, however, also highlighted several challenges with the implementation of the program. Fidelity to a program model is tricky when there are as many sites as was the case in this initiative. Despite the level of support provided at the national level for all the sites, there was variability in support by leadership at the local YMCA. Each R&R program was led by one primary staff person (i.e., the site director), and several sites experienced turnover in this position. The sites also expressed different levels of buy-in for the use of random assignment in determining receipt of services. That the data collection phase lasted four years meant that

these complicating factors could reappear at various times. And, of course, the global pandemic was disruptive in ways that could not be anticipated.

Analyses presented in this report are focused on assessing the effectiveness of the enhanced R&R model. The dataset we have compiled, however, is rich in details from the perspective of each of the key stakeholder groups: youth, caregivers, mentors, and staff. In many ways, the results presented here are just the beginning of the story that could be told. There is an opportunity for further exploration of staff experiences implementing the program, mentors' use of the CBT strategies, youth and parent perceptions of the program, and the dynamics of the mentoring relationships. Future analyses with these data can address a number of important questions in these areas both for R&R and the broader mentoring field.

References

- Alfonso, Y. N., Johnson, S. L., Cheng, T., Jones, V., Ryan, L., Fein, J., & Bishai, D. (2019). A marginal cost analysis of a Big Brothers Big Sisters of America youth mentoring program: New evidence using statistical analysis. *Children and Youth Services Review*, 101, 23-32.
- Albano, A. M., & Kendall, P. C. (2002). Cognitive behavioural therapy for children and adolescents with anxiety disorders: Clinical research advances. *International Review of Psychiatry*, 14, 129–134. Barrett, P. M., Dadds, M. R., & Rapee, R. M. (1996). Family treatment of childhood anxiety: A controlled trial. *Journal of Consulting and Clinical Psychology*, 64(2), 333.
- Anastopoulos, A. D., Langberg, J. M., Eddy, L. D., Silvia, P. J., & Labban, J. D. (2021). A randomized controlled trial examining CBT for college students with ADHD. *Journal of Consulting and Clinical Psychology*, 89(1), 21–33. <https://doi.org/10.1037/ccp0000553>.
- Asarnow JR, Berk M, Hughes JL, Anderson NL. The SAFETY Program: a treatment-development trial of a cognitive-behavioral family treatment for adolescent suicide attempters. *J Clin Child Adolesc Psychol*. 2015;44: 194-203.
- Asarnow, J. R., Hughes, J. L., Babeva, K. N., & Sugar, C. A. (2017). Cognitive-behavioral family treatment for suicide attempt prevention: a randomized controlled trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, 56(6), 506-514.
- Aseltine Jr, R. H., Dupre, M., & Lamlein, P. (2000). Mentoring as a drug prevention strategy: An evaluation of Across Ages. *Adolescent & Family Health*.
- Bayer, A., Grossman, J. B., & DuBois, D. L. (2015). Using volunteer mentors to improve the academic outcomes of underserved students: The role of relationships. *Journal of Community Psychology*, 43(4), 408-429.
- Biglan, A., Van Ryzin, M. J., & Hawkins, J. D. (2017). Evolving a more nurturing society to prevent adverse childhood experiences. *Academic Pediatrics*, 17(7), S150-S157.
- Browne, R., Jarjoura, G. R., Keller, T. E., Tanyu, M., Herrera, C., & Schwartz, S. E. Mentoring and depressive symptoms of youth: Examining prospective and interactive associations with mentoring relationship quality. *American Journal of Community Psychology*.
- Castro, F. G., Barrera, M., & Martinez, C. R. (2004). The cultural adaptation of prevention interventions: Resolving tensions between fidelity and fit. *Prevention science*, 5(1), 41-45.

- Cavell, T., & Elledge, L. (2014). Mentoring and prevention science. In D. L. DuBois, & M. J. Karcher (Eds). *Handbook of Youth Mentoring, 2nd Edition* (pp. 29-42). Thousand Oaks, CA: SAGE Publications.
- Centers for Disease Control and Prevention (2020). Youth risk behavior survey data summary & trends report 2007–2017.
- Christensen, K. M., Hagler, M. A., Stams, G. J., Raposa, E. B., Burton, S., & Rhodes, J. E. (2020). Non-specific versus targeted approaches to youth mentoring: A follow-up meta-analysis. *Journal of youth and adolescence, 49*(5), 959-972.
- Cook, B. L., Barry, C. L., & Busch, S. H. (2013). Racial/ethnic disparity trends in children's mental health care access and expenditures from 2002 to 2007. *Health Services Research, 48*(1), 129-149.
- Courser, M., Shamblen, S., Thompson, K. T., Young, L., Hamilton-Nance, S., Hutchins, M., & Wilbon, M. (2014). Improving relationship outcomes using additional training and enhanced match support for mentors, final report. Rockville, MD: U.S. Department of Justice.
- Cuijpers, P., van Straten, A., & Warmerdam, L. (2007). Behavioral activation treatments of depression: A meta-analysis. *Clinical Psychology Review, 27*, 318–326.
- DeWit, D. J., DuBois, D., Erdem, G., Larose, S., & Lipman, E. L. (2016). The role of program-supported mentoring relationships in promoting youth mental health, behavioral and developmental outcomes. *Prevention Science, 17*(5), 646-657.
- Dorsey, S., Briggs, E. C., & Woods, B. A. (2011). Cognitive-behavioral treatment for posttraumatic stress disorder in children and adolescents. *Child and Adolescent Psychiatric Clinics, 20*(2), 255-269.
- DuBois, D. L., Portillo, N., Rhodes, J. E., Silverthorn, N., & Valentine, J. C. (2011). How effective are mentoring programs for youth? A systematic assessment of the evidence. *Psychological Science in the Public Interest, 12*, 57–91. doi:10.1177/1529100611414806
- DuBois, D. L., Herrera, C., Rivera, J., Brechling, V., & Root, S. (2022). *Randomized controlled trial of the effects of the Big Brothers Big Sisters Community-Based Mentoring Program on Crime and Delinquency: Interim report of findings*. Chicago: University of Illinois Chicago.
- DuBois, D. L., & Keller, T. E. (2017). Investigation of the integration of supports for youth thriving into a community-based mentoring program. *Child Development, 88*(5), 1480-1491.

- Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology, 41*(3–4), 327–350.
- Eddy, L. D., Anastopoulos, A. D., Dvorsky, M. R., Silvia, P. J., Labban J. D., & Langberg, J. M. (2021). An RCT of a CBT Intervention for Emerging Adults with ADHD Attending College: Functional Outcomes, *Journal of Clinical Child & Adolescent Psychology*. <https://doi.org/10.1080/15374416.2020.1867989>
- Erdem, G., DuBois, D. L., De Wit, D., & Lipman, E. L. (2016). Mentoring relationships, positive development, youth emotional and behavioral problems: Investigation of a mediational model. *Journal of Community Psychology, 44*, 464-483.
- Grossman, J. B., & Rhodes, J. E. (2002). The test of time: Predictors and effects of duration in youth mentoring relationships. *American journal of community psychology, 30*(2), 199-219.
- Grossman, J. B., Resch, N., & Tierney, J. P. (2000). Making a Difference: An Impact Study of Big Brothers. *Big Sisters (Re-issue of 1995 Study)*.
- Haft, S. L., Chen, T., LeBlanc, C., Tencza, F., & Hoeft, F. (2019). Impact of mentoring on socio-emotional and mental health outcomes of youth with learning disabilities and attention-deficit hyperactivity disorder. *Child and adolescent mental health, 24*(4), 318-328.
- Hart, M. J., Sung, J., McQuillin, S. D., & Schleider, J. L. (2021). Expanding the Reach of Psychosocial Services for Youth: Untapped Potential of Mentor-Delivered Single Session Interventions.
- Herrera, C., Kauh, T. J., Cooney, S. M., Grossman, J. B., & McMaken, J. (2008). High school students as mentors: Findings from the Big Brothers Big Sisters school-based mentoring impact study. Retrieved October 5, 2008.
- Herrera, C., DuBois, D., & Grossman, J. (2013a). *The role of risk: Mentoring experiences and outcomes for youth with varying risk profiles*. New York: A Public/Private Ventures project distributed by MDRC.
- Hoogsteder, L. M., Stams, G. J. J., Figge, M. A., Changoe, K., van Horn, J. E., Hendriks, J., & Wissink, I. B. (2015). A meta-analysis of the effectiveness of individually oriented cognitive behavioral treatment (CBT) for severe aggressive behavior in adolescents. *The Journal of Forensic Psychiatry & Psychology, 26*(1), 22-37.
- Irvin J. E., Bowers, C. A., Dunn, M. E., & Wang, M. C. Efficacy of relapse prevention: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 67*, 563–570. doi: 10.1037/0022-006X.67.4.563.

- Jent, J. F., & Niec, L. N. (2009). Cognitive behavioral principles within group mentoring: A randomized pilot study. *Child & family behavior therapy, 31*(3), 203–219.
- Karcher, M. J., Nakkula, M. J., & Harris, J. (2005). Developmental mentoring match characteristics: Correspondence between mentors' and mentees' assessments of relationship quality. *Journal of Primary Prevention, 26*(2), 93-110.
- Kupersmidt, J. B., Stump, K. N., Stelter, R. L., & Rhodes, J. E. (2017). Predictors of premature match closure in youth mentoring relationships. *American Journal of Community Psychology, 59*, 25–35.
- Jarjoura, G. Roger, Tanyu, Manolya, Forbush, Janet, Herrera, Carla, & Keller, Thomas E. (2018). Evaluation of the Mentoring Enhancement Demonstration Program: Technical Report. Final Report submitted to the U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention. Available at the National Criminal Justice Reference Service.
- Keller, T. E., & Pryce, J. M. (2012). Different roles and different results: How activity orientations correspond to relationship quality and student outcomes in school-based mentoring. *Journal of Primary Prevention, 33*, 1, 47-64.
- Kerr, D. C., & King, C. A. (2014). Youth with mental health needs. In D. L. DuBois, & M. J. Karcher (Eds). *Handbook of Youth Mentoring, 2nd Edition* (pp. 325-40). Thousand Oaks. CA: SAGE Publications.
- King, C. A., Gipson, P. Y., Arango, A., Lernihan, D., Clark, M., Ewell Foster, C., ... & Stone, D. (2021). LET's CONNECT Community Mentorship Program for Adolescents with Peer Social Problems: A Randomized Intervention Trial. *American journal of community psychology, 68*(3-4), 310-322.
- King, C. A., Arango, A., Kramer, A., Busby, D., Czyn, E., Foster, C. E., ... & YST Study Team. (2019). Association of the youth-nominated support team intervention for suicidal adolescents with 11-to 14-year mortality outcomes: secondary analysis of a randomized clinical trial. *JAMA psychiatry, 76*(5), 492-498.
- King, N. J., Heyne, D., & Ollendick, T. H. (2005). Cognitive-behavioral treatments for anxiety and phobic disorders in children and adolescents: A review. *Behavioral Disorders, 30*(3), 241-257.
- Haft, S. L., Chen, T., LeBlanc, C., Tencza, F., & Hoeft, F. (2019). Impact of mentoring on socio-emotional and mental health outcomes of youth with learning disabilities and attention-deficit hyperactivity disorder. *Child and adolescent mental health, 24*(4), 318-328.

- Karcher, M. J. (2005). The effects of developmental mentoring and high school mentors' attendance on their younger mentees' self-esteem, social skills, and connectedness. *Psychology in the Schools, 42*(1), 65-77.
- Keles, S., & Idsoe, T. (2018). A meta-analysis of group cognitive behavioral therapy (CBT) interventions for adolescents with depression. *Journal of adolescence, 67*, 129-139.
- King, N. J., Heyne, D., & Ollendick, T. H. (2005). Cognitive-behavioral treatments for anxiety and phobic disorders in children and adolescents: A review. *Behavioral Disorders, 30*(3), 241-257.
- Kupersmidt, J. B., Stump, K. N., Stelter, R. L., & Rhodes, J. E. (2017). Predictors of premature match closure in youth mentoring relationships. *American Journal of Community Psychology, 59*(1-2), 25-35.
- Latessa, E.J. (2006). Effectiveness of cognitive behavioral interventions for youthful offenders. In B. Glick (Ed.), *Cognitive Behavioral Interventions for At-Risk Youth* (pp. 14-1–14-18). Kingston, NJ: Civic Research Institute; Andrews, D., Bonta, J., & Hoge, R. (1990).
- Magill M. & Ray. L. A. (2009). Cognitive-behavioral treatment with adult alcohol and illicit drug users: A meta-analysis of randomized controlled trials. *Journal of Studies on Alcohol and Drugs, 70*(4), 516–527.
- Marino, C., Santinello, M., Lenzi, M., Santoro, P., Bergamin, M., Gaboardi, M., ... & Perkins, D. D. (2020). Can mentoring promote self-esteem and school connectedness? An evaluation of the mentor-UP project. *Psychosocial Intervention, 29*(1).
- Medeiros, R. (2016). Handling missing data in Stata: Imputation and likelihood-based approaches. StataCorp LP; 2016 Swiss Stata Users Group Meeting. Available at: <http://www.stata.com/meeting/switzerland16/slides/medeiros-switzerland16.pdf>
- McQuillin, S. D., & Lyons, M. D. (2021). A national study of mentoring program characteristics and premature match closure: The role of program training and ongoing support. *Prevention Science, 22*(3), 334-344.
<https://link.springer.com/article/10.1007/s11121-020-01200-9>
- McQuillin, S. D., Straight, G. G., & Saeki, E. (2015). Program support and value of training in mentors' satisfaction and anticipated continuation of school-based mentoring relationships. *Mentoring & Tutoring: Partnership in Learning, 23*(2), 133-148
- Mier C, Ladny RT. Does self-esteem negatively impact crime and delinquency? A meta-analytic review of 25 years of evidence. *Deviant Behavior. 2018;39*(8):1006-1022.

- Ogundele M. O. (2018). Behavioural and emotional disorders in childhood: A brief overview for paediatricians. *World journal of clinical pediatrics*, 7(1), 9–26.
<https://doi.org/10.5409/wjcp.v7.i1.9>
- Oshri A, Carlson MW, Kwon JA, Zeichner A, Wickrama KK. Developmental growth trajectories of self-esteem in adolescence: associations with child neglect and drug use and abuse in young adulthood. *J Youth Adolesc*. 2017;46(1):151-164.
- Pearson, F., Lipton, D., Cleland, C., & Yee, D. (2002). The effects of behavioral/cognitive-behavioral programs on recidivism. *Crime and Delinquency*, 48(3), 476-496.
- Peaselee, L., & Teye, A. C. (2015). Testing the impact of mentor training and peer support on the quality of mentor-mentee relationships and outcomes for at-risk youth, final report. Rockville, MD: U.S. Department of Justice.
- Planey, A. M., Smith, S. M., Moore, S., & Walker, T. D. (2019). Barriers and facilitators to mental health help-seeking among African American youth and their families: A systematic review study. *Children and Youth Services Review*, 101, 190-200.
- Raposa, E. B., Rhodes, J., Stams, G. J. J., Card, N., Burton, S., Schwartz, S., ... & Hussain, S. (2019). The effects of youth mentoring programs: A meta-analysis of outcome studies. *Journal of youth and adolescence*, 48(3), 423-443.
- Rasing, S. P., Creemers, D. H., Janssens, J. M., & Scholte, R. H. (2017). Depression and anxiety prevention based on cognitive behavioral therapy for at-risk adolescents: a meta-analytic review. *Frontiers in psychology*, 8, 1066. <http://dx.doi.org/10.3389/fpsyg.2017.01066>
- Rhodes, J. E. (2002). Stand by me: *The risks and rewards of mentoring today's youth*. Cambridge, MA: Harvard University Press; DuBois, D. L., & Karcher, M. J. (Eds.). (2005). *Handbook of youth mentoring*. Thousand Oaks, CA: Sage.
- Rubin, D. B. (1987). *Multiple imputation for nonresponse in surveys*. New York: John Wiley & Sons.
- Sass, D.A., & Karcher, M.J. (2013). Analyses of the contribution of case managers to mentor support and match outcomes. In Herrera, DuBois & Grossman (Eds.), *The role of risk: Mentoring experiences and outcomes for youth with varying risk profiles* (pp. 120-125). New York, NY: Public/Private Ventures project distributed by MDRC.
- Scaccia, J., Cook, B., LaMont, A., Wandersman, A., Castellow, J., Katz, J., & Beidas, R. (2015). A practical implementation science heuristic for organizational readiness: R=MC2. *Journal of Community Psychology*, 43(4), 484–501.

- Pinto, J. K. & Slevin, D. P. (1988). Critical success factors across the project life cycle: Definitions and measurement techniques. *Project Management Journal*, 19(3), 67-75.
- Sourk, M., Weiler, L. M., & Cavell, T. A. (2019). Risk, support, and reasons for wanting a mentor: Comparing parents of youth in community versus school-based matches. *Children and Youth Services Review*, 99, 156-164.
- Stelter, R. L., Kupersmidt, J. B., & Stump, K. N. (2018). Supporting mentoring relationships of youth in foster care: Do program practices predict match length? *American Journal of Community Psychology*, 61(3-4), 398-410. <https://doi.org/10.1002/aicp.12246>
- Sudhir, P. M. (2015). Cognitive behavior therapy with adolescents. In M. Mehta & R. Sagar R. (Eds.), *A practical approach to cognitive therapy for adolescents* (pp. 21-42). India: Springer.
- Sun, M., Rith-Najarian, L. R., Williamson, T. J., & Chorpita, B. F. (2019). Treatment features associated with youth cognitive behavioral therapy follow-up effects for internalizing disorders: A meta-analysis. *Journal of Clinical Child & Adolescent Psychology*, 48(sup1), S269-S283. <http://dx.doi.org/10.1080/15374416.2018.1443459>
- Tolan, P. H., Henry, D. B., Schoeny, M. S., Lovegrove, P., & Nichols, E. (2013). Mentoring programs to affect delinquency and associated outcomes of youth at risk: A comprehensive meta-analytic review. *Journal of Experimental Criminology*. Advance online publication. doi:10.1007/s11292-013-9181-4;
- Tierney, J. P., Grossman, J. B., & Resch, N. L. (1995). *Making a difference. An impact study of Big Brothers Big Sisters*. Philadelphia: Public/Private Ventures; Tolan, P. H., Henry, D. B., Schoeny, M. S., Lovegrove, P., & Nichols, E. (2013). Mentoring programs to affect delinquency and associated outcomes of youth at risk: A comprehensive meta-analytic review. *Journal of Experimental Criminology*. Advance online publication. doi:10.1007/s11292-013-9181-4
- Trzesniewski KH, Donnellan MB, Moffitt TE, Robins RW, Poulton R, Caspi A. Low self-esteem during adolescence predicts poor health, criminal behavior, and limited economic prospects during adulthood. *Dev Psychol*. 2006;42(2):381.
- Weiler, L. M., Boat, A. A., & Haddock, S. A. (2019). Youth risk and mentoring relationship quality: The moderating effect of program experiences. *American Journal of Community Psychology*, 63(1-2), 73-87.
- Weisz, J. R., Weiss, B., Han, S. S., Granger, D. A., & Morton, T. (1995). Effects of psychotherapy with children and adolescents revisited: A meta-analysis of treatment outcomes studies. *Psychological Bulletin*, 117, 450-468.

- Wintersteen, M. B., Mensinger, J. L., & Diamond, G. S. (2005). Do gender and racial differences between patient and therapist affect therapeutic alliance and treatment retention in adolescents? *Professional Psychology: Research and Practice*, 36(4), 400–408. <https://doi.org/10.1037/0735-7028.36.4.400>
- WSIPP (2018). *Mentoring: Community-Based (taxpayer costs only)*. Washington State Institute for Public Policy.
- Whitney, D. G., & Peterson, M. D. (2019). US national and state-level prevalence of mental health disorders and disparities of mental health care use in children. *JAMA pediatrics*, 173(4), 389-391.
- Windsor, L. C., Jemal, A., & Alessi, E. J. (2015). Cognitive behavioral therapy: a meta-analysis of race and substance use outcomes. *Cultural Diversity and Ethnic Minority Psychology*, 21(2), 300.
- Van Vugt, E., Lanctot, N., & Lemieux, A. (2016). Can institutionalized adolescent females with a substantiated history of sexual abuse benefit from cognitive behavioral treatment targeting disruptive and delinquent behaviors? *Criminal justice and behavior*, 43(7), 937-950.
- Vázquez, A. L., & Villodas, M. T. (2019). Racial/ethnic differences in caregivers' perceptions of the need for and utilization of adolescent psychological counseling and support services. *Cultural Diversity and Ethnic Minority Psychology*, 25(3), 323.
- Watson H. J, Rees C. S. (2008). Meta-analysis of randomized, controlled treatment trials for pediatric obsessive-compulsive disorder. *Journal of Child Psychology and Psychiatry*, 49, 489–498.

About the American Institutes for Research

Established in 1946, with headquarters in Arlington, Virginia, the American Institutes for Research® (AIR®) is a nonpartisan, not-for-profit organization that conducts behavioral and social science research and delivers technical assistance to solve some of the most urgent challenges in the U.S. and around the world. We advance evidence in the areas of education, health, the workforce, human services, and international development to create a better, more equitable world. The AIR family of organizations now includes IMPAQ, Maher & Maher, and Kimetrica. For more information, visit [AIR.ORG](https://www.air.org).



AIR® Headquarters

1400 Crystal Drive, 10th Floor
Arlington, VA 22202-3289
+1.202.403.5000 | [AIR.ORG](https://www.air.org)

Child, Youth & Family Support Center (CYFSC) Questionnaire

Name: _____ Current Position: _____

Email address: _____ Phone Number: _____

Name of CYFSC: _____ Locations Served: _____

DIRECTIONS: To the best of your knowledge, please fill out the questions below. Thank you for your help.

1. Referral Questions

- a) Explain how youth are **referred** into CYFSCs?
- b) Please describe your **intake** procedure.
- c) Describe any concerns you have regarding how youth are referred into to CYFSCs.
- d) How is youth progress data collected (groups attended, case management)?
- e) See chart on the last page and confirm current use of **intake tools**, add others as necessary.

2. Program Questions

- a) List all **groups or services** are offered (TARGET, TIC generally, ART, what other group)?
- b) Explain how youth are **referred** into services offered within the CYFSC?
- c) Who runs these groups?
- d) Do facilitators rotate when they lead the group? If so, how often and who decides?
- e) What data do they collect on each group?

3. Consent Questions

- a) Can you describe your consent procedures at intake?
- b) What is the process for gaining parental consent?
- c) At what point(s) are you in contact with parents?
- d) Is the point of guardian contact different for kids in foster care?

e) Do you have written intake policies (e.g., handbook)?

4. Trauma Informed Care (TIC) Questions:

- a) Who is your intended population for TIC? In other words, which youth are given services?
- b) Please list any inclusion criteria for those receiving TIC below:
- c) Do you have exclusion criteria? That is, please describe individuals that are **not** allowed to participate in TIC?
- d) Describe how staff are trained in TIC?
- e) Explain whether you believe your agency is able to serve your intended TIC population? If not, why not (e.g., wait lists are too long, not enough resources, not enough trained staff, etc.)?
- f) Are there any other concerns you have about how TIC is being implemented in your agency?
- g) Have TIC services recently changed? If yes, please describe how.
- h) Do you expect TIC services to change in the future? If so, when and why?
- i) If applicable, describe gender specific TIC services.
- j) If applicable, describe cultural specific TIC services.

5. Policy Questions:

- a) What new **policies, procedures, or strategies** are going into effect this year that could impact your CYFSC or the services offered?
- b) Are there any future **changes planned** as relates to TIC services offered and/or which youth will receive these services?
- c) Please describe any **concerns** you have with the change in policies as mentioned above.

Thank you for your time.

Correlation Table

	TARGET~Y	Gender e	evercomp	timeout	recprior	hisp	black	otherr~e	age
TARGETONLY	1.0000								
Gender	0.0484	1.0000							
evercomp	-0.0218	-0.0040	1.0000						
timeout	0.0328 -	0.1029	0.0581	1.0000					
recprior	-0.0496	0.1464 -	0.0937	0.0243	1.0000				
hisp -	0.0073 -	0.0081	0.0265	-0.0378	-0.0372	1.0000			
black	-0.0711	0.0722 -	0.0428	-0.0395	0.1361	-0.5279	1.0000		
otherrace	0.0333 -	0.0986	0.0233	0.0697 -	0.0863	-0.1734	-0.1522	1.0000	
age	-0.0210	0.0677 -	0.0165	0.0607	0.1892	-0.0125	-0.0167	-0.0078	1.0000