Document Title:	**Examining Mentoring Practices Tailored to Youth Needs, Technical Report**
Author(s):	**Manolya Tanyu, Mark Lachowicz, Carla Herrera, G. Roger Jarjoura, Thomas Keller, Sarah Schwartz**
Document Number:	**309883**
Date Received:	**December 2024**
Award Number:	**15PNIJ-22-GG-01425-MENT**

Examining Mentoring Practices Tailored to Youth Needs

Technical Report

Manolya Tanyu, Mark Lachowicz, Carla Herrera, G. Roger Jarjoura, Thomas Keller, Sarah Schwartz

Grant 15PNIJ-22-GG-01425-MENT

September 2024

American Institutes for Research® | AIR.ORG

AIR®

Advancing Evidence.
Improving Lives.

Contents

Exhibits

Abstract

Program-based youth mentoring is a popular prevention strategy. However, meta-analyses of average program-level outcomes tend to show small positive effects of mentoring on youth outcomes and variability in outcomes between programs and among individual participants within programs (DuBois et al., 2011; Raposa et al., 2019; Tolan et al., 2014). Recently, prominent mentoring scholars have called for research to uncover the individual-level benefits derived from this individualized relationship-focused preventive strategy (McQuillin et al., 2020). In this study, we addressed questions adding to this knowledge base using data collected from 1,741 mentor-mentee pairs that were part of the Mentoring Enhancement Demonstration Program (MEDP) funded by the Office of Juvenile Justice and Delinquency Prevention. The study examined five research questions:

1. Are mentors responsive to youth needs in specific domains?

2. Is mentoring tailored to presenting youth needs in specific domains associated with positive change in those domains?

3. Is mentoring tailored to presenting youth needs in specific domains associated with positive change in youth assets?

4. Are mentor characteristics and program practices associated with the use of tailored mentoring?

5. Are caregiver satisfaction and mentor-mentee relationship quality associated with the effectiveness of tailored mentoring?

To address these questions, we used descriptive and path analyses with data from multiple measures collected from mentors, youth, and their caregivers.

Introduction

Youth mentoring is a popular strategy used by programs across the country to prevent negative outcomes and build resilience. Its popularity is, in part, based on its reliance on an important ingredient in healthy development—an interpersonal bond between a young person and a caring adult (Pekel et al., 2018). Such relationships can help young people develop positive attitudes, gain social-emotional skills, and access resources to help them bounce back from the negative consequences of adverse and traumatic experiences they may have faced (Sege & Harper Browne, 2017; Tanyu et al., 2020). In fact, the relationships provided through mentoring programs can improve youth's social competence, cognitive skills, and emotional well-being (DuBois, 2021) and reduce depressive symptoms (Browne et al., 2022; Herrera et al., 2013) and problem behaviors (DuBois et al., 2011; DuBois et al., 2022; Tolan et al., 2014). As reported in the National Institute of Justice's (NIJ's) CrimeSolutions, the practice of youth mentoring has been rated *Effective* in reducing delinquency and *Promising* in "reducing the use of alcohol and drugs, improving school attendance, grades, academic achievement test scores, social skills and peer relationships." Youth mentoring has also received significant support from the federal government. Since 2008, the federal government has invested almost $1 billion to support mentoring programs in serving youth using evidence-based models (DuBois, 2022). In 2023 alone, the Office of Juvenile Justice Delinquency Prevention awarded nearly $92.5 million to increase mentoring opportunities for youth and improve the quality of mentoring they receive.[1]

Despite the popularity of mentoring, the accumulation of evidence points to relatively small positive effects for youth participants (i.e., average effect sizes of about 0.20) (DuBois et al., 2011; Raposa et al., 2019; Tolan et al., 2014). Rhodes (2020) argued that mentoring falls short of its potential because programs do not use evidence-based approaches that address the salient needs of the youth they serve. She contends that mentoring programs would achieve greater effects if, for example, mentors were trained to use proven mental health intervention strategies because so many youth have mental health needs. A recent meta-analysis indicates the results of this program-level approach, showing that programs designed to target a specific outcome have effect sizes on average twice as large as those of nonspecific, holistic programs (Christensen et al., 2020).

Other researchers have responded to the modest overall effects of mentoring by noting the challenges in evaluating a nonprescriptive, individualized intervention like mentoring with outcome measures that may not correspond to the kind of mentoring or support youth

---

[1] https://ojjdp.ojp.gov/funding

received in each case (McQuillin et al., 2020). Lyons and McQuillin (2021) emphasized the importance of recognizing the natural heterogeneity of mentoring relationships within a program and properly accounting for that mentoring feature in research designs. They illustrated in a simulation study how greater effects could be achieved if mentoring activities in a relationship were clearly specified, if those activities aligned with the needs of the mentees, and the outcomes assessed corresponded to those activities (Lyons & McQuillin, 2021). For example, a child with academic needs will likely reap stronger academic benefits from mentoring if the mentor-mentee pair has clear academic goals, the mentor supports academic growth (e.g., advocates for tutoring for the mentee), and the program provides training and support focused on achieving these academic goals (e.g., shares tips and strategies to support academic growth). This individual-level approach focuses on tailoring the mentoring activities to the needs of a particular youth and assessing the influence of mentoring based on progress or change for that specific outcome.

There is emerging evidence in support of stronger outcomes when mentors set focused goals and tailored their support around these needs (Lyons et al., 2019). However, few studies have rigorously tested whether it is more effective than mentoring without a specific focus. Even fewer have assessed the mentor, youth, match, and program characteristics that may make tailored mentoring more likely to happen or more effective when it does happen. For example, research suggests that having a background in a helping profession (e.g., counseling, teaching) may promote mentoring relationship quality and positive youth outcomes (DuBois et al., 2022; Jarjoura et al., 2018). Mentors with these backgrounds may be more attuned to youth needs and have experience implementing tailored activities that could address those needs. Having a "growth mindset" in mentoring interactions means understanding that young people can improve and develop their behavior and skills through experience. This approach can lead to mentoring that is more responsive to the needs of youth and has been linked with longer mentor-mentee matches and a lower likelihood of premature closures (Heppe et al., 2019), both of which could be associated with tailored mentoring, as mentors who have longer relationships with youth may be more likely to understand—and be responsive to—youth needs.

In addition to these mentor characteristics, several program practices may also contribute to the use of tailored mentoring. For example, matching youth with mentors who share similar interests or have skills that match youth's specific needs may help mentors tailor their interactions to those needs. Mentor training that includes discussions of mentor needs and how they may respond to youth in their interactions can contribute to general mentor efficacy (Kupersmidt et al., 2017)—which could, again, make tailored mentoring more likely.

Because mentoring is a relationship-based intervention, the quality of the mentor-mentee relationship and the level of satisfaction experienced by the mentor and mentee also have important implications for youth outcomes and could contribute to the effectiveness of tailored approaches. Mentoring research suggests that relationship quality is a key ingredient in mentoring outcomes, which describes how the mentor and mentee feel about each other (e.g., closeness), mentor approach (e.g., youth centeredness), and the duration of the match (Goldner & Ben-Eliyahu, 2021). Strong relationships are associated with more favorable youth outcomes (Bayer et al., 2015). Strong, caring relationships built on mutual trust could also provide a crucial foundation for tailored mentoring. For example, youth may be more receptive to mentors' efforts to support their growth if they trust the mentor and feel connected to them. Caregiver satisfaction may also play an important role in targeted mentoring, as caregivers are part of the social network that scaffolds the development and maintenance of the mentoring relationship (Keller, 2005). Given that caregivers typically facilitate mentors' access to their child throughout the relationship, it is important to understand how caregiver interactions with, and support for, the mentor contribute to mentoring outcomes—including those fostered through tailored mentoring. In fact, recent research suggests that the caregiver-mentor relationship can both support and hinder the success of the mentoring relationship (Parnes et al., 2023; Spencer et al., 2020).

If research can provide evidence that responsive and tailored mentoring is a promising approach, then training and supporting mentors to implement this needs-based approach could help ensure that youth in underserved and marginalized communities experience benefits in areas of need that can make a real difference in their lives.

Study Design

The current research expands the knowledge base on tailored mentoring by using a large dataset collected across a wide range of mentoring programs. We asked five questions to assess the extent to which mentors use tailored approaches in their mentoring relationships, what mentor characteristics and program practices make this approach more likely, and the potential effects of this approach.

Research Questions

Our research questions and hypotheses are presented in Exhibit 1.

Examining Mentoring Practices Tailored to Youth Needs: Technical Report

Exhibit 1. Research Questions and Hypotheses

RQ1. Are mentors responsive to youth needs in specific domains?

- Hypothesis 1: Mentors are more likely to use activities tailored to youth needs in a specific domain when matched with youth who have greater needs in that domain.

RQ2. Is mentoring tailored to presenting youth needs in specific domains associated with positive change in those domains?

- Hypothesis 2: Positive changes in a given domain will be larger when mentors use tailored activities to address the presenting need than when there is a presenting need, and mentors do not focus use tailored activities.

RQ3. Is mentoring tailored to presenting youth needs in specific domains associated with positive change in youth assets?

- Hypothesis 3: Positive changes in youth assets (e.g., self-worth, future orientation) are more likely when mentors use tailored activities aligned with youths' presenting needs.

RQ4. Are mentor characteristics and program practices associated with the use of tailored mentoring?

- Hypothesis 4a: Mentors with a background in a helping profession are more likely to use tailored activities with mentees.
- Hypothesis 4b: Mentors with higher "growth mindset" levels are more likely to use tailored activities with mentees.
- Hypothesis 4c: Mentors who receive more training are more likely to use tailored activities with mentees.
- Hypothesis 4d: Mentors matched based on similar interests are more likely to use tailored activities with mentees.
- Hypothesis 4e: Mentors matched based on their skills and their mentee's needs are more likely to use tailored activities with mentees.

RQ5. Are caregiver satisfaction and mentor-mentee relationship quality associated with the effectiveness of tailored mentoring?

- Hypothesis 5a: Tailored mentoring will be more effective when caregivers are more satisfied with their child's mentoring relationship.
- Hypothesis 5b: Tailored mentoring will be more effective in matches that are rated as higher quality (e.g., youth centeredness, youth sense of closeness).

Research Design

Our five research questions were grounded in the conceptual framework shown in Exhibit 2. We hypothesized that youth need at baseline would be associated with more frequent use of mentoring that is tailored to those needs (i.e., "tailored mentoring"), and that tailored mentoring would, in turn, reduce youth need at follow-up. In other words, we wanted to examine whether tailored mentoring is a **mediator** of the association between baseline youth need and youth need in this same area at follow-up (12 months later). We further hypothesized that mentor characteristics and program practices would be associated with the *use* of tailored mentoring, and that caregiver satisfaction and mentor-mentee relationship quality would be

Examining Mentoring Practices Tailored to Youth Needs: Technical Report

associated with the *effectiveness* of tailored mentoring (i.e., the association between tailored mentoring and youth need assessed at 12 months). That is, we wanted to examine whether mentor characteristics, program practices, caregiver satisfaction, and mentor-mentee relationship quality were **moderators** in our broader analyses.

Exhibit 2. Conceptual Framework
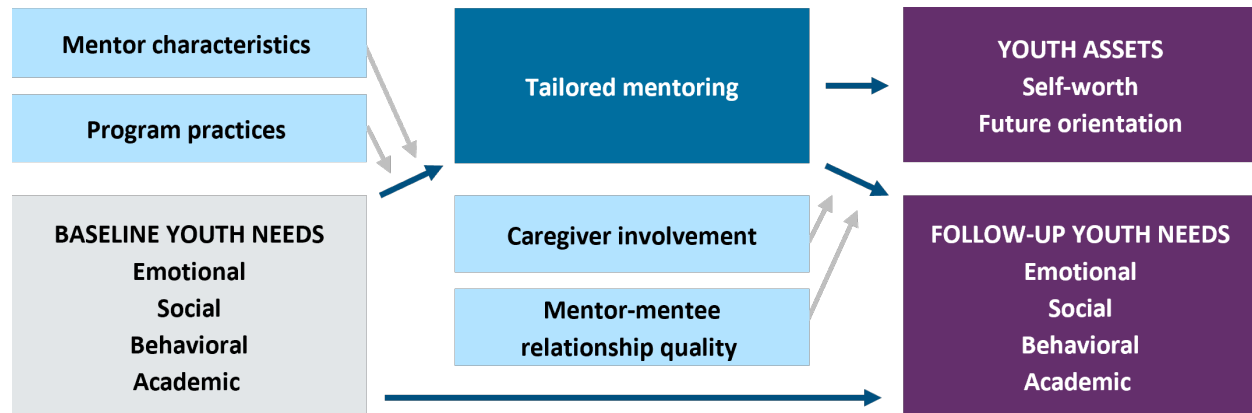
Mentoring Enhancement Demonstration Program and Evaluation Data

To answer our research questions, we used an existing dataset from the evaluation of the Office of Juvenile Justice and Delinquency Prevention (OJJDP)-funded Mentoring Enhancement Demonstration Program (MEDP). OJJDP initiated MEDP in 2012, to test the proposition, supported by a meta-analysis, that when programs encouraged and supported a teaching or advocacy role for mentors, participating youth experienced stronger benefits (DuBois et al., 2011). MEDP supported 30 mentoring programs, and 2,165 mentor-mentee matches across 12 states. The programs varied with respect to their affiliation with a national organization (e.g., Big Brothers Big Sisters, 4-H), setting (community-based or school-based), meeting format (one-on-one or group), number of participants served (less than 100 to more than 1,000), and geographic location (metropolitan, urban, rural).

The American Institutes for Research® (AIR®) and its partners conducted a rigorous evaluation of MEDP from 2012 to 2018 (see Jarjoura et al., 2018). The evaluation examined whether youth demonstrated more positive outcomes when mentors were trained and supported to incorporate teaching and/or advocacy functions into their role. Youth in the study were randomized to receive either enhanced mentoring or business-as-usual mentoring. Mentors in both groups received the program's standard training and support, with mentors in the enhancement group receiving additional training and support in taking on teaching and advocacy roles with their mentees. The AIR-led research team collected data from multiple sources during the evaluation, including surveys from mentors, youth, and caregivers. Quantitative analyses found no significant differences in youth outcomes between the enhanced mentoring group (treatment) vs. business-as-usual mentoring group (comparison) (Jarjoura et al., 2018).

However, as implied by Lyons and McQuillin (2021), this "null effect" finding may have been due, at least in part, to ignoring the heterogeneity among the mentor practices within each group.

Study Sample

The MEDP evaluation enrolled 2,165 mentor-mentee matches across 30 mentoring program sites. For our current study, we narrowed the sample to focus on youth and their associated mentors and caregivers who met the following conditions: (1) the mentor reported in the follow-up survey that they had met with their mentee two or more times during their 12-month follow-up period; and (2) the mentoring program administered baseline and follow-up surveys to caregivers as well as youth and mentors, which meant that school-based sites which did not administer surveys to caregivers were excluded. In total, 1,741 matches met these criteria for inclusion in the analyses for this study.

At the time of follow-up data collection, the matches in this study had been meeting, on average, a little under a year (344 days). Youth were, on average, 12 years old, and more than half (55%) were female. Close to half of the youth were Black (43%) followed by White (31%), Hispanic (28%), Native American (6%), Asian (2%) and other (2%). Mentors ranged in age from 18 to 77, with an average age of 30. Most were White (63%) followed by Black (20%), Hispanic (16%), Native American (4%), and Asian (4%). Less than half of the matches (45%) were same-race matches.[2]

Survey Instruments

Mentor Baseline Survey. This survey was completed by mentors when they enrolled in the study. The survey captured data on their background, their experiences leading up to becoming mentors in the program, their level of confidence in taking on the mentoring role, and their experiences with the program's preparation for the match.

Mentor Follow-Up Survey. This survey was completed by mentors 12 months after the match began (for matches that were still meeting at the 12-month follow-up) or when the match ended (if before 12 months) and captured information on the mentoring relationship with the youth, the mentors' approach to mentoring, and the training provided by the mentoring program.

Youth Baseline Survey. This survey was completed by youth prior to being matched and asked about how each youth felt about him or herself, the adults in the youth's life, relationships with the youth's caregiver(s) and peers, as well as how things were going in school, involvement in prosocial activities, and problem behaviors (e.g., conduct problems, emotional problems).

---

[2] Participants were asked to select 'all that apply'. Therefore, they could have identified themselves with more than one category.

Examining Mentoring Practices Tailored to Youth Needs: Technical Report

Youth Follow-Up Survey. This survey was completed by youth 12 months after the start of their mentoring relationship. It assessed all the constructs included in the youth baseline survey, in addition to the youth's experiences in the mentoring program and in their most recent mentoring relationship.

Caregiver Baseline Survey. This survey was completed by the youth's caregiver at study enrollment (prior to the beginning of the mentoring relationship) and included questions on the youth's background and family, individual and environmental risk factors experienced by the youth, perceptions of the need for assistance for the youth, and the youth's behavior prior to enrollment in the study in a variety of areas.

Caregiver Follow-Up Survey. This survey was completed by the caregiver 12 months after the start of the mentoring relationship. It included questions about the youth's recent behavior and experiences of the youth and caregiver in the mentoring program and the most recent mentoring relationship.

Measures

We identified several measures appropriate for addressing our research questions. These measures include scales on youth needs measured at baseline and follow-up (i.e., emotional, behavioral, social, academic), mentoring practices (i.e., focus on emotional, behavioral, social, and academic need), and supporting factors (i.e., mentor characteristics, program characteristics, caregiver satisfaction, relationship quality) that we used to address our research questions. Exhibit 3 provides an overview of the measures collected at baseline and follow-up from the youth and/or caregiver, which we identified as most closely aligned with our conceptual model and included in our analyses.

Exhibit 3. Youth Needs Measured at Baseline and Follow-Up

Measure	Items	Baseline	Follow-up
Caregiver-reported conduct problems A 5-item subscale of the Strengths and Difficulties Questionnaire (SDQ) that asked caregivers to consider their child's behavior in the last six months. (Goodman, 1997) **Response options** 0 = Not True; 1= Somewhat True; 2 = Certainly True. Scores for the five items were summed to create a total score ranging from 0 to 10.	• Often loses temper. • Generally well behaved, usually does what adults request. (reverse coded) • Often fights with other youth or bullies them. • Steals from home, school or elsewhere. • Often lies or cheats.	n = 1647 M = 2.25 SD = 2.11	n = 1276 M = 1.65 SD = 1.93

Measure	Items	Baseline	Follow-up
Caregiver-reported emotional problems A 5-item subscale of the Strengths and Difficulties Questionnaire (SDQ) that asked caregivers to report on their child's behavior in the last six months. (Goodman, 1997) **Response options** 0 = Not True; 1= Somewhat True; 2 = Certainly True. Scores for the five items were summed to create a total score ranging from 0 to 10.	• Often complains of headaches, stomachaches or sickness. • Many worries or often seems worried. • Often unhappy, depressed or tearful. • Nervous in new situations. • Many fears, easily scared.	n = 1650 M = 3.04 SD = 2.39	n = 1277 M = 2.30 SD = 2.29
Caregiver-reported peer relationship problems A 5-item subscale of the Strengths and Difficulties Questionnaire (SDQ) that asked caregivers to consider their child's behavior in the last 6 months. (Goodman, 1997) **Response options** 0 = Not True; 1= Somewhat True; 2 = Certainly True. Scores for the five items were added to create a total score ranging from 0 to 10.	• Would rather be alone than with other youth. • Has at least one good friend. (reversed) • Generally liked by other youth. (reversed) • Picked on or bulled by other youth. • Gets along better with adults that with other youth.	n = 1648 M = 2.64 SD = 2.04	n = 1276 M = 2.03 SD = 1.93
Youth-reported academic performance A 4-item measure that reflects the academic performance of the youth in the most recent grading period. (Herrera, Grossman & Linden, 2013) **Response options** 1= Not Good at All to 5 = Excellent. Each response was recoded from a 1-5 scale to a 0-4 scale to more closely reflect a measure of grade point average (GPA). We then calculated an average grade for each student across the four core academic subjects. The measure was then reverse coded so that higher ratings would indicate academic need.	How are you doing in each of these subjects? • Mathematics • Reading or Language Arts • Social Studies • Science	n = 1741 M = 1.37 SD = .85	n = 1224 M = 1.51 SD = .998

Note. N = number of non-missing responses; *M* = mean; *SD* = standard deviation.

To examine tailored mentoring, we identified a set of items in the Mentor Follow-Up survey that asked about the extent to which they had focused on specific areas of concern in their interactions with youth. We identified four items listed in Exhibit 4 for our path analyses, one for each of the four need domains (behavioral, emotional, relational, academic). We should

note that even though they are conceptualized as mediators in our model, these measures were collected at the same time as the measures of youth outcomes.

Exhibit 4. Items Used to Assess Tailored Mentoring at Follow-Up (Mediators)

Item	Follow-up
(For youth conduct problems) Single item that asked, "To what extent have you focused on this activity? Decreasing my mentee's negative behaviors (e.g., impulsive behavior, aggression, poor decision making)." **Response options** 1= Not at All to 6 = Most.	n = 1233 M = 3.52 SD = 1.36
(For youth emotional problems) Single item that asked, "To what extent have you focused on this activity? Decreasing my mentee's fears and anxieties." **Response options** 1= Not at All to 6 = Most.	n = 1232 M = 3.43 SD = 1.28
(For youth-peer relationship problems) Single item that asked, "To what extent have you focused on this activity? Strengthening my mentee's relationships with peers." **Response options** 1= Not at All to 6 = Most.	n = 1246 M = 3.76 SD = 1.14
(For youth academic performance) Single item that asked, "To what extent have you focused on this activity? Helping my mentee with academics and schoolwork." **Response options** 1= Not at All to 6 = Most.	n = 1243 M = 3.08 SD = 1.47

Note. The full response scale was: 1= Not at All, 2 = Not Very Much, 3 = A Little, 4 = Some, 5 = A lot, 6 = Most; N = number of nonmissing responses; M = mean; SD = standard deviation.

To examine the effect of tailored mentoring on youth assets, we identified two measures from our youth follow-up surveys: self-worth and future orientation (see Exhibit 5).

Exhibit 5. Youth Assets Measured at 12-Month Follow-Up

Measure	Items	Follow-up
Youth Self-Worth An 8-item measure reflects the youth perception of their own self-worth. (DuBois, 1997) **Response options** 1=Not at All True to 4=Very True. Scores for all items were averaged, with higher scores indicating a more positive self-worth.	• I am happy with myself as a person. • I am happy with the way I can do most things. • I am as good a person as I want to be. • I wish I had more to be proud of. • I sometimes think I am a failure (a "loser"). • I am the kind of person I want to be. • I like being just the way I am. • I often feel ashamed of myself.	n = 1275 *M* = 3.41 *SD* = .56
Future Orientation A 3-item measure reflects the extent to which the youth had been thinking about and planning for their future (Arnold, Nott & Meinhold, 2012): **Response options** 1=Not at All True to 4=Very True. Scores for all items were averaged, with higher scores indicating a greater focus on the future.	• I have goals for my life. • I know what I want to do for a career (or job). • I am interested in learning about careers (or jobs) I could have.	n = 1273 *M* = 3.34 *SD* = .60

Note. N = number of non-missing responses; M = mean; SD = standard deviation.

We also identified the mentor, match, and program characteristics that were assessed either at baseline (i.e., mentor characteristics, program match practices) or at 12-month follow-up (i.e., caregiver satisfaction, relationship quality) that reflected strong potential as moderators as described in Exhibit 6.

Exhibit 6. Moderators Used in Analyses

Measure	Item(s)	Baseline	Follow-up
Mentor characteristic: ***Mentor-reported helping profession measured at baseline*** Mentors were asked to respond to one question. ***Response options*** 0=No 1=Yes.	"Do you have a job or role (paid or unpaid) for 10 or more hours a week in a "helping" profession in which you help people (either youth or adults) directly—for example, tutoring, nursing, counseling, teaching, social work, coaching?"	n = 1644 Yes = 33.2%	N/A

Measure	Item(s)	Baseline	Follow-up
Mentor characteristic: *Mentor-reported growth mindset* A 4-item scale that asked mentors about their attitudes related to having a growth mindset. *Response options* 1=Strongly disagree to 6=Strongly agree. A scale was created using factor analysis. Lower scores indicate having attitudes more in line with a growth mindset.	• The kind of person someone is, is something very basic about them and it can't be changed very much. • Everyone is a certain kind of person, and there is not much that can be done to really change that. • People can do things differently, but the important parts of who they are can't really be changed. • As much as I hate to admit it, you can't teach an old dog new tricks. People can't really change their deepest attributes.	n = 1741 *M* = .0039 *SD* = .99	N/A
Program practice: *Program-reported mentor-mentee match criteria: Interests* The program documented whether the match was based on mentor-mentee interests. *Response options* 0=No or 1=Yes.	Were the mentor and mentee matched based on shared interests?	n = 1474 Yes = 42.5%	N/A
Program practice: *Program-reported mentor-mentee match criteria: Needs/skills* The program documented whether the match was based on mentor skills matching the needs of the child. *Response options* 0=No or 1=Yes.		n = 1476 Yes = 42.9%	N/A
Relationship quality: *Program-documented match length at follow-up* At the 12-month follow-up, programs documented the length of time the mentor and mentee remained in a relationship. Scores were documented in days, calculated from the date the mentor and mentee met	The number of days the mentor and mentee remained in the mentoring relationship.	N/A	n = 1606 *M* = 344.74 *SD* = 138.68

Measure	Item(s)	Baseline	Follow-up
to the date of the youth's follow-up survey or the date the match ended (if that occurred before the youth's follow-up survey).			
Relationship quality: ***Youth-reported scale on youth centeredness*** A 6-item measure that asked youth about their perceptions of the mentoring relationship. (Jucovy, 2002) ***Response options*** 1 = Not at All True to 4= Very True. Scores for each item were averaged to create a composite with a range from 1 to 4.	• My mentor almost always asks me what I want to do. • My mentor and I decide together what we will do when we meet. • My mentor and I do things I really want to do. • My mentor is always interested in what I want to do. • My mentor and I like to do a lot of the same things. • My mentor things of fun and interesting things to do.	N/A	n = 1240 *M* = 3.41 *SD* = 0.64
Relationship quality: ***Youth-reported sense of closeness at follow-up*** Youth were asked to respond to a single item. ***Response options*** 1 = Not Close at All to 4=Very Close.	"How close do you feel to your mentor?"	N/A	n = 1212 *M* = 3.39 *SD* = 0.80
Caregiver satisfaction at follow-up A 6-item measure that reflects the parent's level of satisfaction with the mentoring relationship. **Response options** 1 = Strongly Disagree to 4 = Strongly Agree. Scores for each item were averaged to create a composite that ranged from 1 to 4.	• I am satisfied with the mentor that was chosen for my child. • I am satisfied with my level of involvement in my child's mentoring relationship. • I have input in the direction of my child's mentoring relationship. • My child feels close to his/her mentor. • I agree with the focus of my child's mentoring relationship. • My child enjoys his/her mentoring relationship.	N/A	n = 1172 *M* = 3.28 *SD* = 0.76

Notes. N = number of non-missing responses; M = mean; SD = standard deviation.

Analysis

In this section, we describe our methodological approach to investigate whether tailored mentoring is associated with reducing youth need and improving youth assets, and the extent this depends on the context of the mentor-mentee relationship, mentor characteristics and program practices. We estimated the mediation and moderation models using structural equation modeling (SEM) in R (Version 4.3.3). To control for confounding of the mediation paths, each model included youth demographic characteristics (i.e., age, race/ethnicity, gender, English as a second language, prior mentoring experience, baseline academic risk, baseline problem behavior risk, baseline peer problem risk, and baseline mental health risk) as covariates.

RQ1. Are mentors responsive to youth needs in specific domains?

For RQ1, we estimated the relationship between the effects of baseline youth needs (i.e., independent variables or "IV") on tailored mentoring. Although tailored mentoring is considered a mediator in the conceptual model presented in Exhibit 2, for RQ1, we considered it an outcome. These effects were estimated using linear regression models in which baseline need predicts the mentor's use of mentoring tailored to that specific need. Coefficients were standardized for ease of interpretation.[3]

We tested separate regression models for each of the four domains of youth need: (a) emotional, (b) behavioral, (c) social, and (d) academic. These models estimate the effects of baseline youth need on the corresponding mentor focus mediator (i.e., "IV/mediator association"). The IV/mediator association was specified as

$$Y_{1i} = \gamma_{11} * \textit{youth need at baseline} + \gamma_{1k} * \textit{vector of youth demographic characteristics} + \zeta_{1i}$$

where Y_{1i} represents the tailored mentoring (mediator) for youth *i*; γ_{11} is the association of youth need at baseline (IV) with tailored mentoring; γ_{1k} are the effects of the youth covariates (e.g., demographic characteristics); and ζ_{1i} is the error term.

The regression coefficient γ_{11} is of primary interest. A significant coefficient means that the mentor's activity focus is responsive to the specific domain of youth need tested (e.g., mentors matched with a child with higher levels of academic need are more likely to tailor their activities

---

[3] Common benchmarks for standardized regression coefficients are $0.1 - 0.29$ for small effects, $0.3 - 0.49$ for medium effects, and > 0.5 for large effects (Cohen, 1988).

around improving the child's academic skills). We expect these coefficients to be significant and *positive*, meaning that mentors are more likely to tailor their focus for youth with higher needs.

RQ2. Does mentoring that is responsive and tailored to youth needs in specific domains promote positive change in those domains?

We examined associations between baseline youth needs (IV) and follow-up youth needs (dependent variables, or "DV") via tailored mentoring (mediator). We estimated the effects of the mediator in each model using mediation analysis (Barron & Kenny, 1986; Preacher & Hayes, 2008). Using this method, we simultaneously estimate the associations between the IV and the DV, the IV and the mediator, and the mediator and the DV. This allowed us to estimate the impact of the mediator on the IV/DV association, which we refer to as the *indirect* or *mediating effect.* Essentially, the indirect effect measures the degree to which tailored mentoring mediates or explains (i.e., how or why) the association between baseline youth need and follow-up youth need (RQ2; or youth assets for RQ3).[4] In addition to the indirect effect, we estimated the *direct effect* of baseline youth need on follow-up youth outcomes, which reflects the effects of the IV on the DV through all other unmeasured mediators.

We tested separate mediation models for each of the four domains of youth need: (a) emotional, (b) behavioral, (c) social, and (d) academic. The mediation models consisted of two key components, an equation that estimates the effect of baseline youth need on the mediator (i.e., IV/mediator association previously described in RQ1), and an equation that estimates the effect of the mediator on the need at 12-month follow-up (i.e., mediator/DV association). The IV/mediator association was specified as

$$Y_{1i} = \gamma_{11} * \textit{youth need at baseline} + \gamma_{1k} * \textit{vector of youth demographic characteristics} + \zeta_{1i}$$

where Y_{1i} represents the focused mentoring (mediator) for youth *i;* γ_{11} is the association between youth need at baseline (IV) and tailored mentoring; γ_{1k} are the effects of the youth covariates; and ζ_{1i} is the error term.

The mediator/DV association was specified as

$$Y_{2i} = \gamma_{21} * \textit{tailored mentoring} + \gamma_{22} * \textit{youth need at baseline} + \gamma_{2k} * \textit{vector of youth and mentor demographic characteristics} + \zeta_{2i}$$

---

[4] In addition to the indirect effect, we estimate the *direct effect* of baseline youth need on need at follow-up, which represents the effects of the IV on the DV through all other unmeasured mediators. The *total effect* is the sum of the indirect and direct effects. A common measure of effect size for the indirect effect is as the proportion of the total effect, which quantifies the proportion of the effect of an IV on a DV that is transmitted by the mediator.

where Y_{2i} represents the youth's need at follow-up (DV) for youth *i;* γ_{21} is the association between tailored mentoring (mediator) and youth need at follow-up; γ_{22} is the association between baseline and follow-up need; γ_{2k} are the effects of the youth covariates; and ζ_{2i} is the error term.

We tested the indirect effects of youth baseline need on youth follow-up need through tailored mentoring practices ($\gamma_{11} * \gamma_{21}$). This analytic approach allowed us to understand whether mentor responsiveness to youth need at baseline was associated with lower levels of youth need at follow-up.

RQ3. Does mentoring that is responsive and tailored to youth needs in specific domains promote positive change in youth assets?

To address RQ3, we used the same analysis specifications noted in RQ2 testing separate mediation models for each of the four domains of youth need: (a) emotional, (b) behavioral, (c) social, and (d) academic. However, the outcomes for these models were youth assets (i.e., self-worth and future orientation). The mediation models were again comprised of two key components, an equation that estimated the effect of baseline youth need on the mediator (i.e., IV/mediator association), and another equation that estimated the effect of the mediator on the outcome (i.e., mediator/DV association). The IV/mediator association was specified as

$$Y_{1i} = \gamma_{11} * \textit{youth need at baseline} + \gamma_{1k} * \textit{vector of youth demographic characteristics} + \zeta_{1i}$$

where Y_{1i} represents the focused mentoring (mediator) for youth *i;* γ_{11} is the association between youth need at baseline (IV) and tailored mentoring; γ_{1k} are the effects of the youth covariates; and ζ_{1i} is the error term.

The mediator/DV association was specified as

$$Y_{2i} = \gamma_{21} * \textit{focused mentoring} + \gamma_{22} * \textit{youth need at baseline} + \gamma_{2k} * \textit{vector of youth and mentor demographic characteristics} + \zeta_{2i}$$

where Y_{2i} represents the youth asset at follow-up (DV) for youth *i;* γ_{21} is the association between targeted mentoring (mediator) and youth asset at follow-up; γ_{22} is the association between baseline need and youth asset; γ_{2k} are the effects of the youth covariates; and ζ_{2i} is the error term.

As with RQ2, we tested the indirect effects of youth baseline need on youth assets through tailored mentoring practices ($\gamma_{11} * \gamma_{21}$). This analytic approach allowed us to understand

whether mentor responsiveness to youth need at baseline was associated with greater youth assets at follow-up.

RQ4. Can mentor characteristics and program practices make focused mentoring more responsive to youth needs?

To address RQ4, we examined the degree to which moderating variables contributed to the IV/mediator (i.e., mentor characteristics and program practices) associations between baseline need and the use of tailored mentoring and the mediator/DV (i.e., caregiver involvement and mentor-mentee relationship quality) associations between the use of tailored mentoring and follow-up need. We estimated the effects of each moderator separately to account for correlations among the moderators.[5]

To test Hypotheses 4a and 4b, we added the moderating effect of mentor characteristics to the model. Specifically, we added the mentor characteristic variable to the IV/mediator equation, as well as the product of the mentor characteristic variable and the IV (i.e., "interaction coefficient"). We specify this as

> $Y_{1i} = \gamma_{11}$ * *youth need at baseline* + γ_{12} * *mentor characteristics* + γ_{13} * *(youth need at baseline * mentor characteristics)* + γ_{1k} * *vector of youth and mentor demographic characteristics* + ζ_{1i}

where Y_{1i} represents targeted mentoring (mediator) for youth *i;* γ_{11} is the association between youth need at baseline (IV) and tailored mentoring; γ_{12} is the effect of the mentor characteristic (moderator); γ_{13} is the interaction between the IV and the moderator; γ_{1k} are the effects of the youth covariates; and ζ_{1i} is the error term.

The interaction coefficient γ_{13} is of primary interest. A significant interaction coefficient in this model would mean that the association between baseline youth need and the use of tailored mentoring, in part, depends on the presence or absence of a given mentor characteristic.

To test Hypothesis 4c, 4d, and 4e, we repeated the same analyses described above and replaced the mentor characteristic variable with the program practice variables.

---

[5] Correlations among the moderators were mentor-mentee matching on interests and skills and needs (0.33), hours training and matching on needs and skills (0.13), and hours training and mentor growth mindset (0.11).

Examining Mentoring Practices Tailored to Youth Needs: Technical Report

RQ 5. Can caregiver involvement and mentor-mentee relationship quality make responsive and tailored mentoring more effective?

We then analyzed our models with the addition of variables potentially moderating the association between tailored mentoring and youth need at follow-up—namely, caregiver satisfaction and quality of the mentor-mentee relationship (i.e., length of relationship, youth centeredness, youth closeness). We estimated the effects of each moderator separately to account for correlations among the moderators.[6]

To test Hypothesis 5a, we assessed the moderating effect of caregiver satisfaction. Specifically, we added the caregiver satisfaction variable to the mediator/DV equation and the product of the caregiver satisfaction variable and the mediator (i.e., interaction coefficient). We specify this as

Y_{2i} = γ_{21} * tailored mentoring + γ_{22} * youth need at baseline + γ_{23} * caregiver satisfaction + γ_{24} * (tailored mentoring * caregiver satisfaction) + γ_{2k} * vector of youth and mentor demographic characteristics + ζ_{2i}

where Y_{2i} represents youth need at follow-up (DV) for youth *i;* γ_{21} is the association between tailored mentoring (mediator) and youth need at follow-up; γ_{22} is the association between baseline and follow-up need; γ_{23} is the effect of caregiver satisfaction (moderator); γ_{24} is the interaction between the mediator and the moderator; γ_{2k} are the effects of the youth covariates; and ζ_{2i} is the error term.

The interaction coefficient γ_{24} is of primary interest. A significant interaction coefficient means the association between tailored mentoring and youth need at follow-up, in part, depends on caregiver satisfaction.

To test Hypothesis 5b, we assessed the moderating effect of mentor-mentee relationship quality for models previously described for RQs 2–3. Specifically, we added the mentor-mentee relationship quality variable to the mediator/DV equation and the product of mentor-mentee relationship quality variable and the mediator (i.e., interaction coefficient). We specify this as

Y_{2i} = γ_{21} * tailored mentoring + γ_{22} * youth need at baseline + γ_{23} * relationship quality + γ_{24} * (tailored mentoring * relationship quality) + γ_{2k} * vector of youth and mentor demographic characteristics + ζ_{2i}

---

[6] The strongest correlations among the moderators were between youth centeredness and youth closeness (r = 0.66), caregiver satisfaction and youth centeredness (r = 0.41), caregiver satisfaction and youth closeness (r = 0.36), and length of relationship and youth closeness (r = 0.23).

Examining Mentoring Practices Tailored to Youth Needs: Technical Report

where Y_{2i} represents the youth need at follow-up (DV) for youth i, γ_{21} is the association of tailored and responsive mentoring (mediator) with youth need at follow-up, γ_{22} is the association of baseline and follow-up need, γ_{23} is the effect of the measure of relationship quality (moderator), γ_{24} is the interaction of the mediator and the moderator, γ_{2k} are the effects of youth covariates, and ζ_{2i} is the error term.
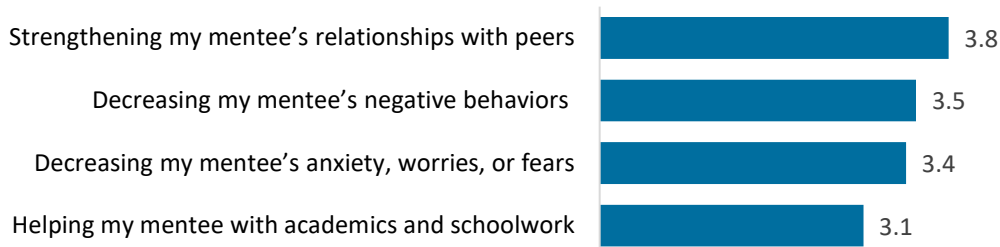
As with Hypothesis 5a, the interaction coefficient γ_{24} is of primary interest. A significant interaction coefficient means that the measure of relationship quality (i.e., youth closeness, youth centeredness, length of relationship) influences the association between mentor responsiveness and youth need at follow-up.

Findings

RQ1. Are mentors responsive to youth needs in specific domains?

Regardless of youth needs, mentors were primarily focused on activities and interactions to help their mentees feel happier and better about themselves. They were least focused on helping with academics and schoolwork (see Exhibit 7).

Exhibit 7. Mentor report of what they focused on in their interactions with mentee

Strengthening my mentee's relationships with peers	3.8
Decreasing my mentee's negative behaviors	3.5
Decreasing my mentee's anxiety, worries, or fears	3.4
Helping my mentee with academics and schoolwork	3.1

Note. We asked, "To what extent have you focused on the following in your meetings with your mentee? Response options ranged from 1=Not at All to 6=Most.

We found that most youth come to mentoring programs without elevated emotional or behavioral problems. Yet, a substantial proportion of youth in our study were experiencing challenges that met or surpassed "clinical levels" analogous to clinical diagnoses of problems, as determined in research using the SDQ scales.[7] One in four youth started their mentoring relationship with clinical levels of conduct (24%) or emotional problems (27%); and 11 percent met or exceeded clinical levels of need in both areas. More than one quarter (29%) of the youth had peer relationship problems. In the general population, these clinical levels of need are only

---

[7] https://www.sdqinfo.org/py/sdqinfo/c0.py

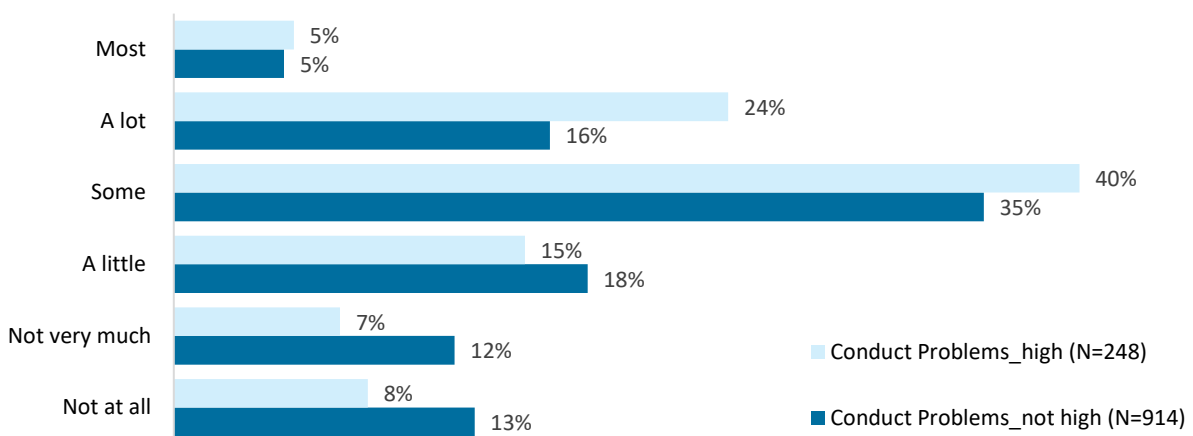Examining Mentoring Practices Tailored to Youth Needs: Technical Report

present in about 10 percent of young people. In addition, 19 percent of the youth came with high levels of academic need, that is a GPA below 2.0.

Our analyses suggest that mentors tailored their mentoring to youth needs in three of the four need domains. Youth conduct problems at baseline were associated with mentor focus on reducing negative behaviors ($\beta = 0.128$, $SE = 0.03$, $p < .001$). Youth emotional problems were associated with mentor focus on reducing anxiety, worries, or fears ($\beta = 0.13$, $SE = 0.03$ $p < .001$). Low grades were associated with mentor focus on academics and schoolwork ($\beta = 0.067$, $SE = 0.028$ $p < .05$) at baseline. This was not the case for the peer problems domain—mentors were not more likely to focus on strengthening mentee's relationships with peers when matched with youth experiencing problems with peers ($\beta = 0.024$, $SE = 0.017$, $p > .05$). It should be noted that the magnitudes of the significant effects were small; no effect size was greater than 0.15 standard deviations.
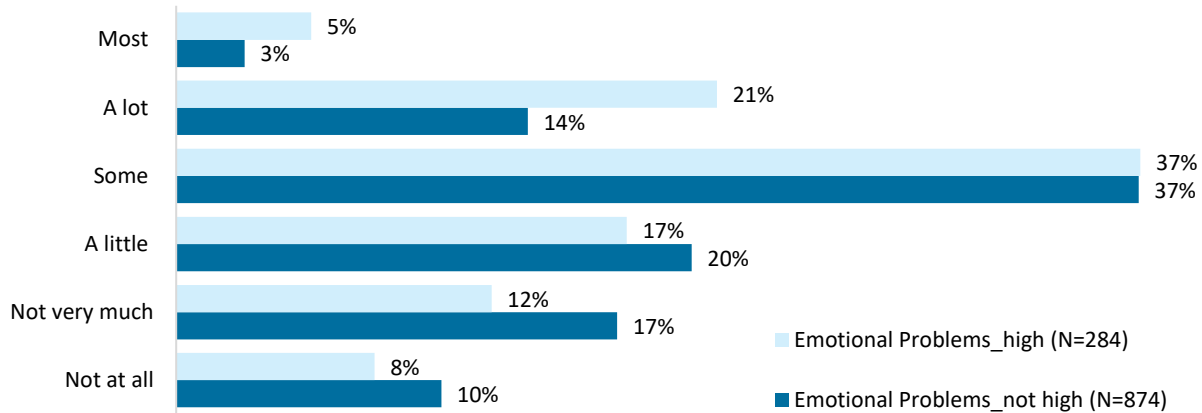
Most mentors matched with youth with high needs tailored their activities to those needs infrequently (see Exhibit 8). Less than one third (29%) of those matched with mentees with high levels of conduct problems or peer problems focused "a lot" or "most" on addressing that need. Similarly, a little over one in four (26%) mentors matched with a child with high emotional need were focused "a lot" or "most" on decreasing their mentee's anxiety, worries, and fears. Of those matched with youth with high academic needs, 22 percent of mentors focused "a lot" or "most" on addressing that need.

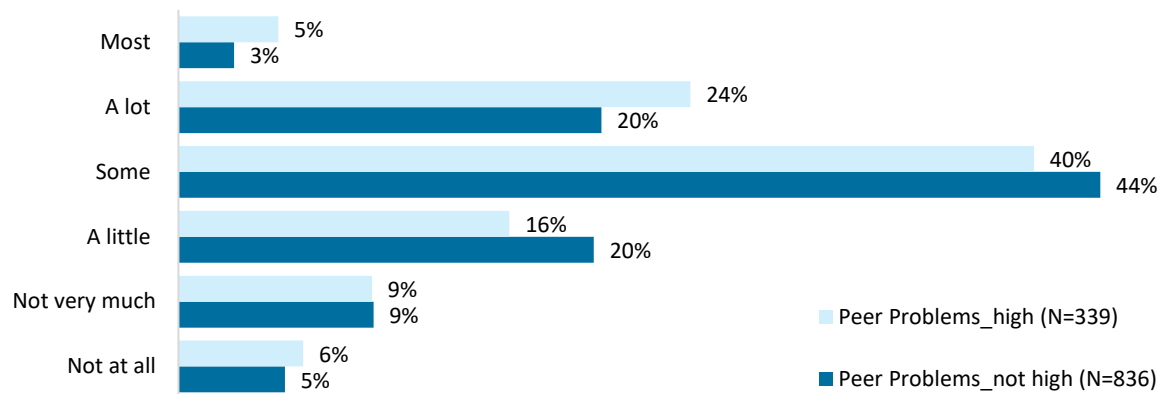## Exhibit 8. Mentor report of what they focused on

Focus on Reducing Negative Behavior

Horizontal bar chart showing mentor focus by category:
- Most: 5% (Conduct Problems_high), 5% (Conduct Problems_not high)
- A lot: 24% (Conduct Problems_high), 16% (Conduct Problems_not high)
- Some: 40% (Conduct Problems_high), 35% (Conduct Problems_not high)
- A little: 15% (Conduct Problems_high), 18% (Conduct Problems_not high)
- Not very much: 7% (Conduct Problems_high), 12% (Conduct Problems_not high)
- Not at all: 8% (Conduct Problems_high), 13% (Conduct Problems_not high)

Legend: Conduct Problems_high (N=248); Conduct Problems_not high (N=914)

Focus on Reducing Anxiety, Worries, Fears

	Emotional Problems_high (N=284)	Emotional Problems_not high (N=874)
Most	5%	3%
A lot	21%	14%
Some	37%	37%
A little	17%	20%
Not very much	12%	17%
Not at all	8%	10%

Focus on Strengthening Relationships with Peers

	Peer Problems_high (N=339)	Peer Problems_not high (N=836)
Most	5%	3%
A lot	24%	20%
Some	40%	44%
A little	16%	20%
Not very much	9%	9%
Not at all	6%	5%

Focus on Academics and Schoolwork

	Academic Need-high (N=223)	Academic need_not high (N=975)
Most	7%	5%
A lot	15%	13%
Some	22%	24%
A little	18%	19%
Not very much	19%	20%
Not at all	18%	19%
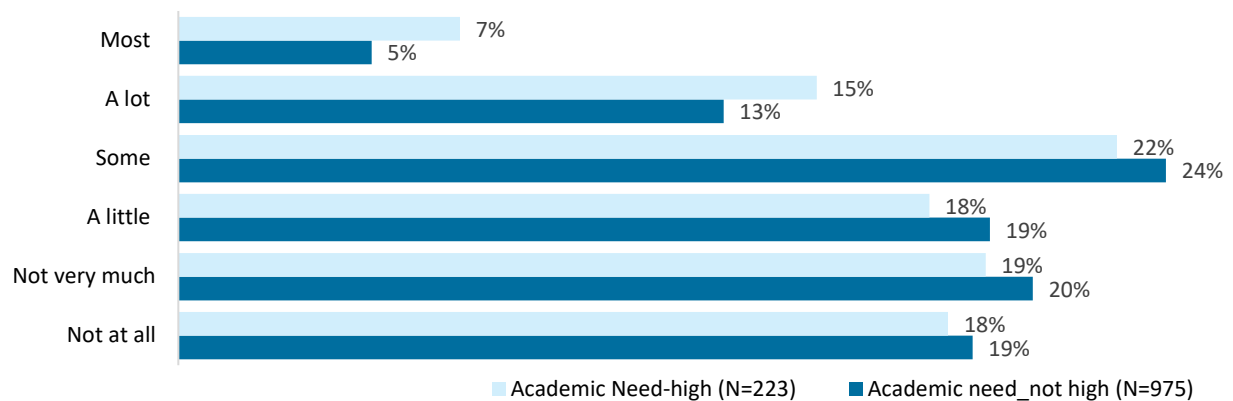
Note. The high-needs group represents those youth whose SDQ scores in conduct, emotional, and peer problems were over the documented clinical levels and those youth whose overall GPA was below 2.00.

Examining Mentoring Practices Tailored to Youth Needs: Technical Report

RQ2. Does mentoring that is responsive and tailored to youth needs in specific domains promote positive change in those domains?

Tailored mentoring significantly mediated youth need at baseline and at follow-up in two of the domains we tested, conduct problems and academic difficulties. However, in the case of conduct problems, the direction of the indirect effect was not in the hypothesized direction. Thus, our hypotheses were supported only in the academic domain.

Our analyses suggested that tailored mentoring resulted in less academic need at follow-up (β = -0.08, SE = 0.032, p < .05). However, tailored mentoring was associated with more conduct problems at follow-up (β = 0.104, SE = 0.03, p < .001) and was not associated with either emotional problems (β = 0.033, SE = 0.029, p > .05) or peer relationship problems at follow-up (β = -0.022 SE = 0.054, p > .05).

Tailored mentoring partially mediated[8] the path from baseline youth conduct problems to follow-up conduct problems with a relatively small effect size (see Exhibit 9; β = 0.013, 95% CI = [0.005 – 0.022]). The indirect effect of tailored mentoring represented less than 1% of the total association between baseline conduct problems and follow-up conduct problems. Although mentors focused more on tailored activities when matched with youth with more conduct problems at baseline, youth conduct problems increased at follow-up.

Exhibit 9. Path diagram depicting the mediation of conduct problems at baseline on conduct problems at follow-up via focused mentoring
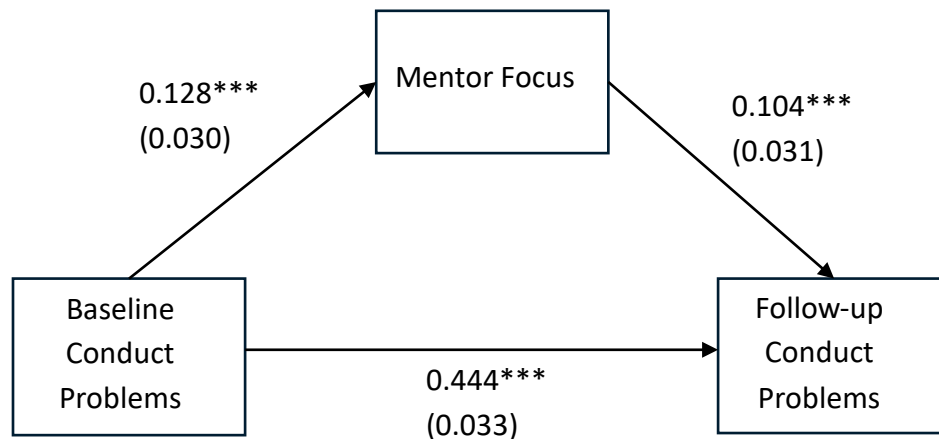

Tailored mentoring partially mediated the path from baseline academic need to follow-up academic need (see Exhibit 10). As with conduct problems, the effect size was small (β = -0.006,

---

[8] An effect is considered partially mediated when the indirect and direct effects are both significantly different from zero, meaning a portion of the total effect is transmitted via the mediator as well as by other unmeasured mediators. An effect is considered fully mediated when the indirect effect is significantly different from zero but the direct effect is not significant, meaning the total effect is transmitted entirely through the measured mediator.

95% CI = [-0.015 – -0.004]); the indirect effect of tailored mentoring represented less than 1 percent of the total effect of baseline academic need on follow-up academic need. The indirect effect was in the expected direction. Specifically, mentors used more tailored mentoring with youth with more academic need at baseline, and their tailored mentoring reduced academic need at follow-up.

Exhibit 10. Path diagram depicting the mediation of academic need at baseline on academic need at follow-up via tailored mentoring
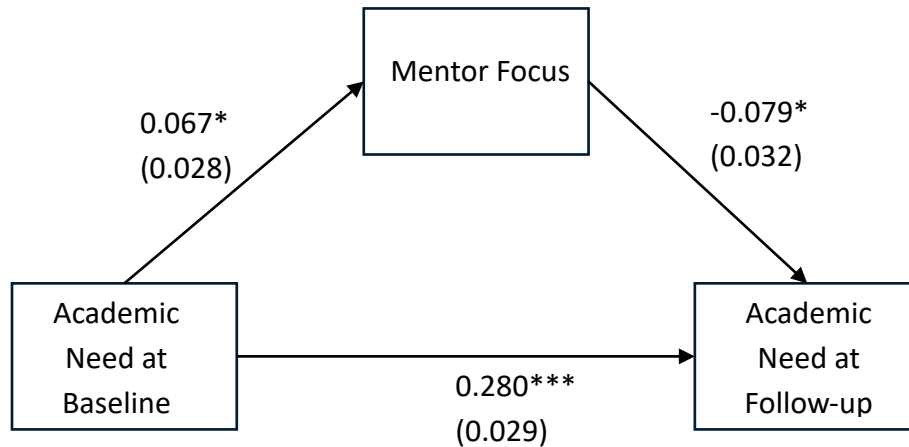

Although results suggested that mentors used more tailored mentoring with youth who had more emotional problems at baseline, the evidence did not support an indirect effect of tailored mentoring on emotional problems at follow-up (β = 0.004, 95% CI = [-0.003 – 0.012]; Exhibit 11). This is primarily due to a lack of association between tailored mentoring and emotional problems at follow-up. In other words, the tailored mentoring experienced by youth with greater emotional problems did not translate to less emotional need at follow-up.

Exhibit 11. Path diagram depicting the mediation of emotional problems at baseline on emotional problems at follow-up via tailored mentoring
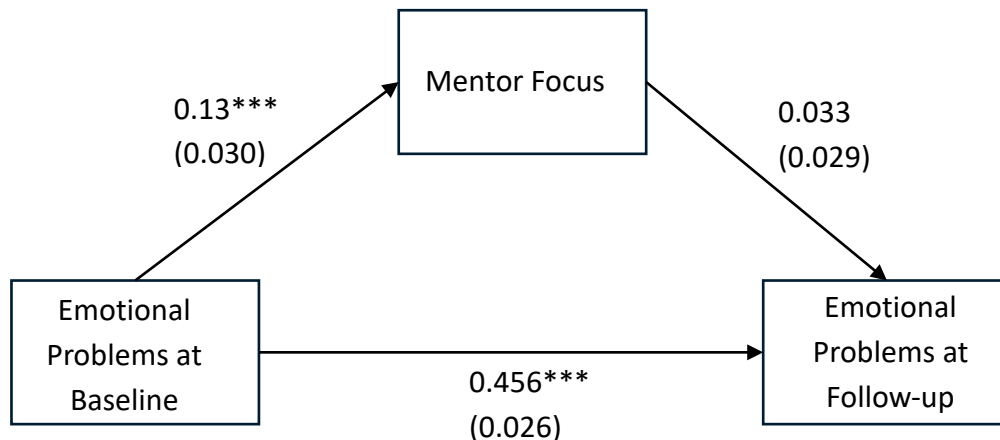
Finally, results suggested that tailored mentoring was not a noteworthy mechanism for peer problems (β = -0.0004, 95% CI = [-0.005 – 0.002]; Exhibit 12). Specifically, mentors did not use more tailored mentoring to youth with more peer problems at baseline, and tailored mentoring was not associated with fewer peer problems at follow-up.

Exhibit 12. Path diagram depicting the mediation of peer problems at baseline on peer problems at follow-up via tailored mentoring
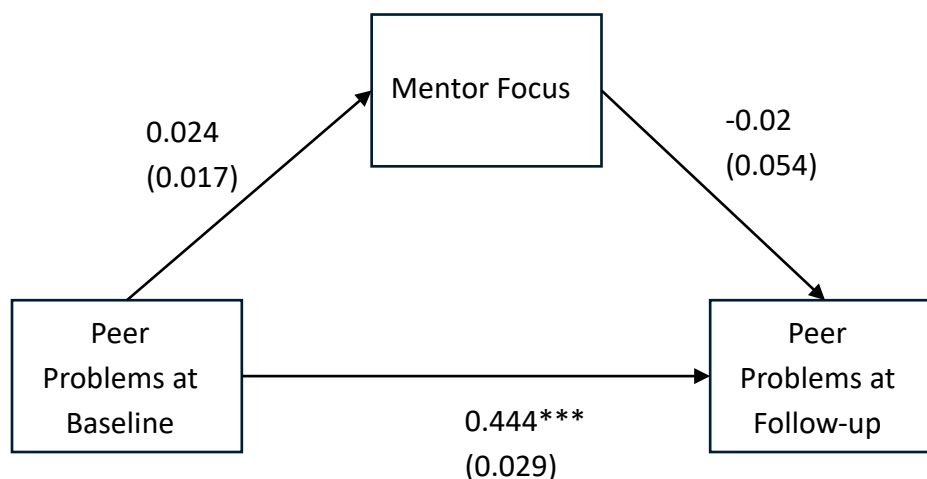

RQ3. Does mentoring that is responsive and tailored to youth needs in specific domains promote positive change in youth assets?

Our analyses suggested that tailored mentoring was associated with youth assets in two domains: (1) Mentoring tailored to youth *conduct* problems was associated with reduced self-worth, and (2) mentoring tailored to youth academic needs was associated with increases in youth's future orientation.

As expected, all four baseline youth-need domains were negatively associated with youth self-worth at follow-up, where the strongest direct effect was for conduct problems (β = -0.183, *SE* = 0.033, $p < .001$; Exhibit 13). However, only mentoring focused on conduct problems was significantly associated with self-worth at follow-up (β = -0.073, *SE* = 0.033, $p < .05$). The negative direction of this effect means that mentors tailoring their interactions to youth's conduct problems was associated with a lower sense of self-worth in their mentees. Although the magnitude of the association was small (< 0.100), the finding was contrary to our study hypotheses.

Exhibit 13. Path diagram depicting the mediation of conduct problems at baseline on self-worth at follow-up via tailored mentoring
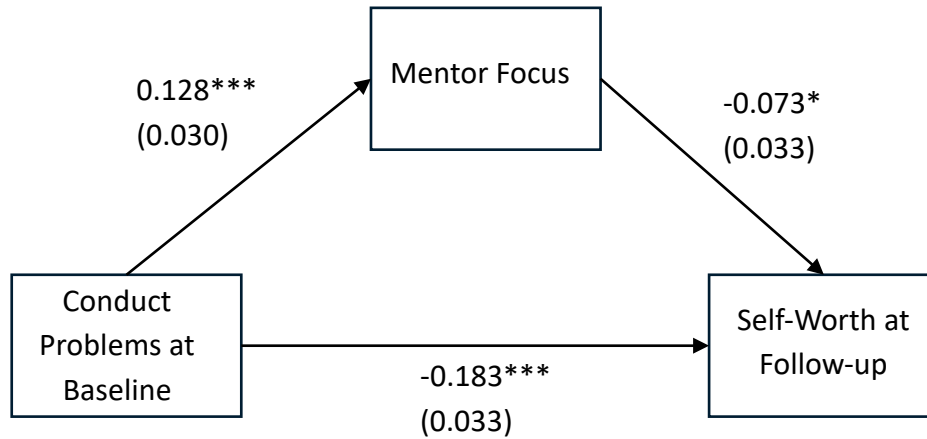
Mentor focus on providing academic support for youth with academic needs was positively associated with future orientation (β = 0.005, 95% CI = [0.001 – 0.015]), which was in the hypothesized direction (see Exhibit 14). That is, youth with academic needs at baseline had mentors who were more likely to tailor their activities to those needs, and this increased focus was associated with increased future orientation at follow-up. The indirect effects were small in magnitude—both indirect effects accounted for less than 1 percent of the respective total effects on future orientation.

Exhibit 14. Path diagram depicting the mediation of baseline academic need on follow-up future orientation via tailored mentoring
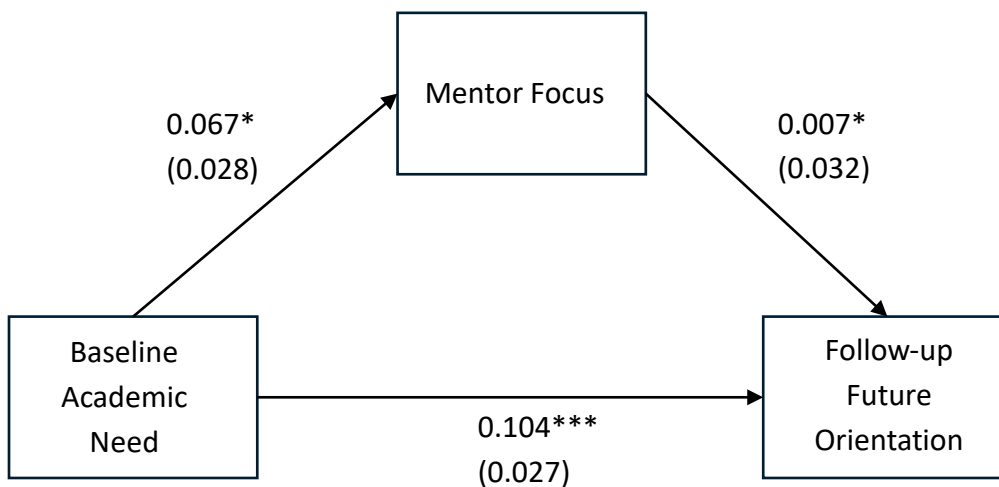
RQ4. Can mentor characteristics and program practices make mentors more responsive to youth needs?

Analyses supported one moderating influence of program characteristics, and none of the mentor characteristics had a significant moderating effect. Specifically, results suggest matching mentors and mentees based on *shared interests* is meaningfully associated with the link between baseline peer relational need and the use of tailored mentoring. When mentors and mentees were matched based on shared interests, mentors were more likely to engage in activities that were tailored to peer relational need ($\beta = 0.136$, $SE = 0.058$, $p = .02$). Exhibit 15 illustrates this moderating effect, in which mentors *not* matched with their mentees on similar interests were slightly less likely to use tailored mentoring in response to peer relational needs (i.e., negative association between baseline need and mentor focus). Still, when matched on interests, mentors were more likely to tailor their activities to improving peer relations. This moderating influence was not evident for conduct problems ($\beta = -0.053$, $SE = 0.052$, $p = .31$), academic need ($\beta = -0.04$, $SE = 0.104$, $p = .70$), or emotional problems ($\beta = 0.085$, $SE = 0.056$, $p = .13$).

Exhibit 15. Conditional associations of baseline peer problems and mentor focus for mentors and mentees matched based on shared interests.
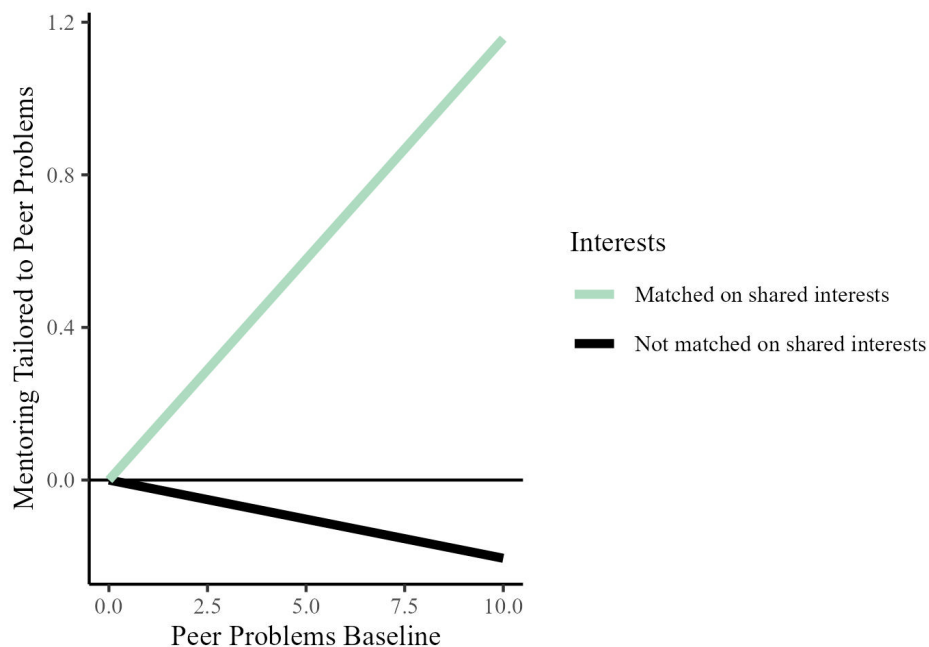
RQ5. Are caregiver satisfaction and mentor-mentee relationship quality associated with the effectiveness of tailored mentoring?

Analyses supported one moderating influence of mentor-mentee relationship quality and no moderating influence of caregiver satisfaction. Specifically, results suggest mentoring focused on academic problems is more likely to be associated with lower academic need at follow-up when *youth-reported closeness is high* (β = -0.098, *SE* = 0.043, *p* = .023). Exhibit 16 shows the moderating effect of youth closeness at low / below average (-1 standard deviation), average, and high / above average (+1 standard deviation) levels. At low levels of closeness, tailored mentoring was associated with slightly higher academic problems at follow-up. However, at high levels of youth closeness, tailored mentoring was associated with lower levels of academic need at follow-up. This moderating influence was not evident for mentoring tailored to conduct problems (β = 0.007, *SE* = 0.078, *p* = .963), emotional problems (β = -0.025, *SE* = 0.060, *p* = .679), or peer problems (β = 0.019, *SE* = 0.056, *p* = .735).

Exhibit 16. Conditional associations of mentor focus and academic need at follow-up at different levels of youth-reported closeness.
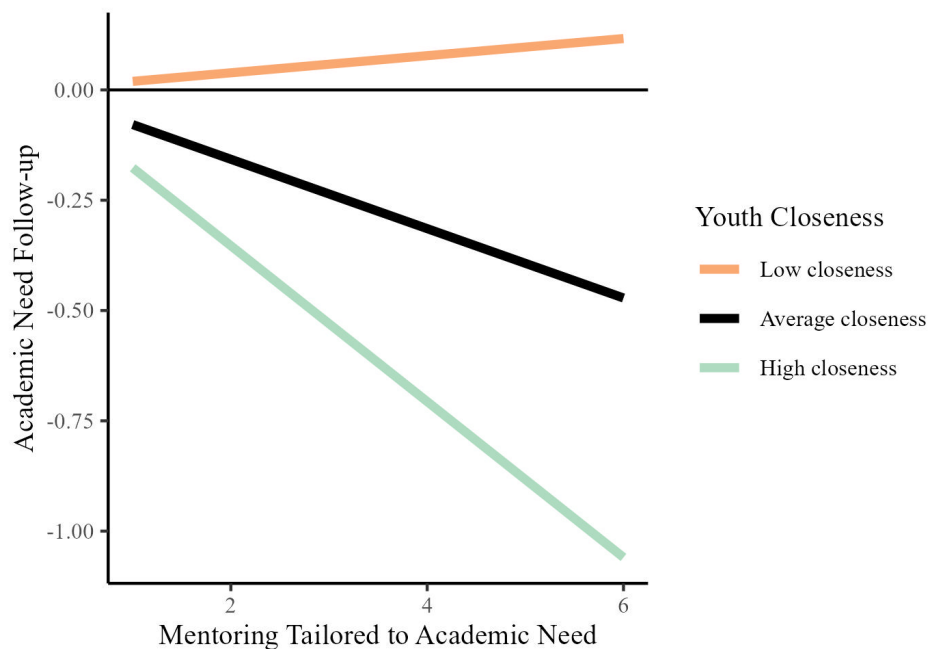
Note. SD = standard deviation.

Discussion and Limitations

Program-based youth mentoring is a popular practice that provides access to caring and supportive adults for youth in marginalized communities. Yet many questions remain about the key ingredients of effective mentoring. By supporting further analysis of a rich dataset representing 30 programs across the United States, this study responded to NIJ's strategic challenge to translate research knowledge to practice.[9]

In his critical review of youth mentoring research, DuBois (2021) prompted researchers "to gain a deeper and more complete understanding of the specific mechanisms through which mentoring relationships influence youth outcomes in areas such as delinquent behavior" (p. 3). This study responded to this call, going beyond analytic designs and methods that assume all youth should demonstrate change or improvement in the same domains, regardless of their baseline needs and regardless of the content of the mentoring intervention. By doing so, we demonstrated the heterogeneity of needs and responses in mentoring—a highly individualized intervention.

In a recent blog post,[10] McQuillin (2021) encouraged researchers to study the elements of program-based relationships so we can better "engineer" the mentoring relationship and enhance training and supports in ways that can make the biggest difference for individual matches. This study adds to this growing narrative, encouraging programs to consider a more tailored and responsive role for mentors.

We found that mentors were generally responsive to youth needs. Mentors matched with youth with higher needs at baseline were more likely to report tailoring their mentoring activities in all but one assessed area of need (peer problems). Among youth with high levels of need in a particular area, about one quarter of their mentors (22%–29%) focused on addressing that need to a considerable degree ("a lot" or "most"). These findings suggest that some mentors were inclined to be responsive to academic, emotional, and conduct issues that may have come to their attention. Peer problems were the exception, perhaps because mentors did not have the opportunity to observe their mentees around their peers or may have felt that a different approach would be more effective in addressing these challenges.

Our study yielded mixed findings on the effectiveness of tailored mentoring, depending on the type of youth need. More specifically, tailored mentoring was associated with gains for

---

[9] https://nij.ojp.gov/about/strategic-challenges-and-research-agenda
[10] https://www.evidencebasedmentoring.org/are-supportive-relationships-enough-the-great-debate-continues/

Examining Mentoring Practices Tailored to Youth Needs: Technical Report

youth with high academic needs but was not associated with improvements for youth with conduct problems. Similarly, with regard to youth assets, we found improvements in future orientation when mentors tailored their activities to support youth academics and schoolwork, whereas self-worth declined when mentors tailored their activities to the youth's misbehavior. It may be important to consider how tailored mentoring in different domains might require very different mentor skills and, at the same time, be perceived very differently by mentees. For example, volunteer mentors may be better equipped to provide academic support to their mentees than to address conduct problems. In addition, mentees may perceive a focus in the academic realm as supportive and less a reflection of *themselves*. In contrast, they may experience conversations about their misbehavior as unsupportive or threatening, which may harm the developing mentoring relationship and be counterproductive in shaping their behavior.

Given links we found between tailored mentoring and increases in conduct problems, program support may be particularly essential for mentors working with youth facing these challenges. Targeted support may help mentors avoid the "fixing reflex" often used by mentors when trying to change their mentee's behavior, which may hurt youth's sense of well-being and relationship quality (McQuillin, 2022). Effectively taking a tailored approach requires several steps, which are important for mentoring programs to consider as they outline essential practices for targeted mentoring. First, mentors must understand the needs of their mentees—what needs are not only most evident but are most important to address according to both the youth and their caregivers? Mentors also have to decide whether to try to address those needs, and if so, what strategies to use. Then, to be effective, mentors need to implement those strategies in ways that not only address the youth's needs but also support the growth of the mentoring relationship. Programs can help with all these steps through training and support offered both before and during the match.

In some cases, focusing activities on something other than the clearest presenting need may be most effective. For example, youth who experience behavioral challenges may also struggle with low self-esteem, academic challenges, or peer difficulties. Focusing on improving their behavior may not be addressing these underlying challenges. Program staff are key in helping mentors understand where to focus, what activities might be most effective, when to shift that focus, and when just having fun or being a supportive presence in the youth's life may be the best approach. Regardless of approach, mentors should recognize the importance of youth voice. That is, youth should always play a key role in determining what goals to focus on in their relationship (Bowers, 2022), and mentors should be attuned to youth signals that their approach may need adjusting (Pryce et al., 2022). Future research should help outline the program practices that make a difference and the contexts and activities in which mentors

Examining Mentoring Practices Tailored to Youth Needs: Technical Report

learn about youth needs and through which mentors feel comfortable providing input and feedback to address those needs.

In our analyses, the only factor associated with the likelihood of tailored mentoring was matching based on interests. None of the mentor characteristics was linked to the use of a tailored approach, but tailored mentoring was more likely when programs made matches based on common mentor and mentee interests. Interestingly, this finding pertained only to a focus on peer problems, the one area in which mentors generally did not tailor their focus according to need. Studies have suggested that having shared interests is key in creating longer lasting mentoring relationships (Raposa et al., 2019) and yielding stronger impacts (DuBois et al., 2011). Perhaps being able to connect with youth through shared interests makes it more likely that mentors engage with the youth's peers to both see and understand youth needs and respond to those needs in a tailored way. Other program practices will be important to explore in future research. For example, what kinds of support help mentors effectively use tailored mentoring? Does sharing information about youth needs early in the relationship make mentors more likely to take a tailored approach? What types of training might be needed to ensure that mentors use tailored mentoring in ways that strengthen relationship quality?

We found evidence that relationship quality was an important ingredient in effective tailored mentoring. The link between tailoring activities to youth's academic needs and improvements in grades was stronger when youth reported feeling closer to their mentors. Youth closeness is an important indicator of relationship strength and has been linked to strength of outcomes in studies (e.g., Herrera et al., 2007). Tailored mentoring may have the best chance of being effective in the context of a strong, trusting relationship. Other researchers have similarly argued that there may be a "sweet spot" in the balance between developing a close relationship with youth and targeting interactions in ways to address youth need (Lyons et al., 2019).

Limitations

Although our study provides insights for practice, limitations in design and methodology should be considered when making inferences about the validity and applicability of the findings. In addition, we note challenges that will need to be addressed in future research studies, especially those using secondary data analyses.

Research design. Although we had access to a rich dataset of surveys collected from mentors, youth, and their caregivers, the MEDP study was not originally designed to address research questions about mentoring approaches tailored to youth needs. The MEDP data included baseline assessments of the presenting needs of youth in the academic, behavioral, and emotional domains and the characteristics of mentors as they entered the program. However,

all remaining variables in the model, including those for tailored mentoring and youth outcomes, were measured concurrently at the 12-month follow-up survey. More specifically, in the 12-month follow-up survey, caregivers were asked to report on their child's last 6 months of conduct, emotional, and peer relationship problems. Mentors were asked to report on how much the practices they used in their interactions with their mentees in the 12-month mentor follow-up survey but without a specific time reference. Without temporal separation between when mentors reported their practices and our outcome assessment, it is impossible to determine whether the tailored mentoring preceded (in time) the observed outcomes. In other words, because youth outcomes and tailored mentoring were both measured at the same time point, our analyses could not assess whether tailored mentoring *caused*—or was caused by our youth outcomes at 12 months.

Another design issue is that, in this study, we defined "tailored mentoring" as mentoring focused on a specific presenting need. For example, for youth with relatively high scores on conduct problems at baseline, "tailored mentoring" was defined as focusing mentoring activities specifically on addressing disruptive behavior. Yet, given that youth often come to their programs with multiple needs, many mentors of these youth may have focused on a different area of need or tried to address the presenting problem by focusing on underlying causes, for example, by improving the youth's self-esteem, changing the youth's thought processes, or helping the youth find an activity they enjoyed. These may be considered tailored approaches, even if not as explicitly focused on the specific presenting need we targeted. Our study did not explore these other types of tailored mentoring but found that mentors spent a good deal of their time simply trying to make their mentees feel happier—an approach that may have been successful for many youth. It is instructive that mentoring research rarely includes "happiness" measures, illustrating the common mismatch between the intervention focus and the outcomes prioritized in research. In this study, we investigated tailored mentoring in only four domains. Future studies should continue to explore tailored mentoring in other domains and in relationships longer than 12 months. Perhaps mentors take different approaches to address their mentees' needs as their relationship continues to grow in a second year and beyond.

Measures used. Because our analyses relied on measures collected in the MEDP study, we had to identify those with the best fit with our conceptual model. In each analysis, our indicator of tailored mentoring was a single item asking how much the mentor focused on the relevant need or behavior. However, the items were closely aligned with presenting needs (e.g., decreasing my mentee's negative behaviors--impulsive behavior, aggression, poor decision-making; helping my mentee with academics and schoolwork), these measures may not be ones we would select if we planned to address these research questions when the surveys were

developed. We do not know mentors' strategies for addressing the presenting issue or whether they implemented those strategies in their interactions with their mentees. Although we tried to link specific mentoring practices with needs and outcomes, these single items may not have been sufficient.

Similarly, our selection of potential moderating factors was limited to variables available in the dataset. Our narrow focus on a few mentor characteristics, program practices, and mentoring relationship dimensions may have missed other important factors that influence the success of tailored mentoring, which may explain the small effects our analyses detected. Future research should consider a wider array of mentor attributes, practices, and program features to identify the most critical elements for achieving positive outcomes. Our analyses were also limited to self-report data, and we relied on caregiver reports of youth needs and outcomes in the behavioral, emotional, and relational domains. The SDQ is a valid and widely used measure asking caregivers to report their observations of the youth's behaviors in the last six months (Goodman, 1997; Goodman & Goodman, 2009; He et al., 2013) Yet, it may not have accurately reflected the *mentor's* observations during their interactions with their mentee and decision to focus on the behavior. That is, perhaps only about a quarter of mentors focused most of their interactions on a given need because that need simply may not have been apparent to them during their interactions. Future research should include mentor observations of youth needs and outcomes in these domains to better understand whether mentors indeed decided to focus on the domain because they observed that specific need.

Programs in our sample. The MEDP study included 30 programs that varied in size, geographic location, youth served, and program practices experienced by mentors and youth. However, they shared a common focus on friendship-based mentoring and did not target youth with specific needs. While these programs focus on supporting youth through a caring and positive relationship, they do not represent the full diversity of mentoring programs in the U.S., such as those that may specifically focus on youth mental health needs. Research on other program types will contribute to our research and practice knowledge and provide a more nuanced understanding of the effectiveness of tailored mentoring.

Conclusions

In our sample, a substantial proportion of youth had elevated presenting needs, and mentors were more likely to tailor their interactions when youth came to their relationship with needs in behavioral, emotional, and academic domains. Tailored mentoring was linked with greater improvements than mentoring that was not tailored when mentees had academic needs, but not when they were experiencing emotional or peer relationship problems and was associated with a negative effect on conduct problems. It is possible that volunteer mentors may be better equipped to provide academic support to their mentees than to address conduct problems. Mentees may perceive a focus in the academic realm as supportive, and less a reflection of themselves. In contrast, they may experience conversations about their misbehavior as unsupportive or threatening, which may be counterproductive in shaping their behavior. Considering the promising effects in academics, programs may want to encourage mentors to tailor their interactions to support academics and schoolwork. Considering the negative association of tailored mentoring with conduct problems, programs may want to be cautious when working with youth with behavioral needs. Programs might review their key program components to enhance intentionality in recruiting, matching, training and supporting mentors to be more focused on tailoring their interaction to youth needs to achieve stronger outcomes. However, programs should also be guided by the core essence of mentoring, which can only thrive in the context of a supportive and nurturing connection between mentor and mentee.

References

Arnold, M. E., Nott, B. D., & Meinhold, J. L. (2012). The positive youth development inventory. Corvallis, OR: Oregon State University 4-H Youth Development Program.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182. https://psycnet.apa.org/doi/10.1037/0022-3514.51.6.1173

Bowers, E. (2022). Goal setting and support. In C. Herrera & M. Garringer (Eds.), *Becoming a better mentor: Strategies to be there for young people.* MENTOR: National Mentoring Partnership.

Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

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. https://doi.org/10.1002/jcop.21693

Browne, R.K., Jarjoura, R., Herrera, C., Tanyu, M. Keller, T., & Schwartz, S. (2022). Mentoring and depressive symptoms of youth: Examining prospective and interactive associations with mentoring relationship quality. *American Journal of Community Psychology*, *70*(2), 291-304. https://doi.org/10.1002/ajcp.12608

Cavell, T. A., Spencer, R., & McQuillin, S. D. (2021). Back to the Future: Mentoring as means and end in promoting child mental health. *Journal of Clinical Child and Adolescent Psychology, 50*(2), 281–299. https://doi.org/10.1080/15374416.2021.1875327

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. https://doi.org/10.1007/s10964-020-01233-x

DuBois, D. L. & Neville, H. A. (1997). Youth mentoring: Investigation of relationship characteristics and perceived benefits. *Journal of Community Psychology*, *25*(3), 227-234. https://doi.org/10.1002/(SICI)1520-6629(199705)25:3%3C227::AID-JCOP1%3E3.0.CO;2-T

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*(2*)*, 57-91. https://doi.org/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. https://doi.org/10.25417/uic.20767438.v1

DuBois, D. (2021). Mentoring Programs for Youth: A Promising Intervention for Delinquency Prevention, May 26, 2021. https://nij.ojp.gov/topics/articles/mentoring-programs-youth-promising-intervention-delinquency-prevention.

Goldner, L., & Ben-Eliyahu, A. (2021). Unpacking Community-Based Youth Mentoring Relationships: An Integrative Review. *International Journal of Environmental Research and Public Health*, *18*(11), 5666. https://doi.org/10.3390/ijerph18115666

Goodman R. (1997). The strengths and difficulties questionnaire: a research note. *Journal of Child Psychology and Psychiatry, 38*(5) 581–586. https://doi.org/10.1111/j.1469-7610.1997.tb01545.x

Goodman A., Goodman R. (2009). Strengths and difficulties questionnaire as a dimensional measure of child mental health. *Journal of the American Academy of Child and Adolescent Psychiatry, 48*(4), 400–403. https://doi.org/10.1097/chi.0b013e3181985068

He, J. P., Burstein, M., Schmitz, A., & Merikangas, K. R. (2013). The Strengths and Difficulties Questionnaire (SDQ): The factor structure and scale validation in U.S. adolescents. *Journal of Abnormal Child Psychology*, *41*(4), 583–595. https://doi.org/10.1007/s10802-012-9696-6

Herrera, C., Grossman, J. B., Kauh, T. J., Feldman, A. F., & McMaken, J. (2007). Making a difference in schools: The Big Brothers Big Sisters school-based mentoring impact study. *Public/Private Ventures*. https://ppv.issuelab.org/resources/574/574.pdf

Herrera, C., Grossman, J. B., & Linden, L. L. (2013). Staying on track: Testing higher achievement's long-term impact on academic outcomes and high school choice. New York, NY: A Public/Private Ventures project distributed by MDRC. https://www.mdrc.org/sites/default/files/staying_on_track_testing_higher_achievement.pdf

Herrera, C., DuBois, D. L., & Grossman, J. B. (2013). The role of risk: Mentoring experiences and outcomes for youth with varying risk profiles. New York, NY: A Public/Private Ventures project distributed by MDRC. http://eric.ed.gov/?id=ED544233

Keller, T.E (2005). A systemic model of the youth mentoring intervention. *Journal of Primary Prevention, 26*, 169–188. https://doi.org/10.1007/s10935-005-1850-2

Keller, T. E., Drew, A. L., Herrera, C., Clark-Shim, H., & Spencer, R. (2023). Do program practices matter for mentors?: How implementation of empirically supported program practices is associated with youth mentoring relationship quality. *Journal of Community Psychology*, *51*(8), 3194-3215. https://doi.org/10.1002/jcop.23019

Kupersmidt, J. B., Stelter, R. L., Rhodes, J. E., & Stump, K. N. (2017). Enhancing mentor efficacy and preparedness through web-based pre-match training. *The Journal of Nonprofit Education and Leadership*, *7*(3). https://psycnet.apa.org/doi/10.1002/jcop.23019

Jarjoura, G. R., Tanyu, M., Forbush, J., Herrera, C., & Keller, T.E. (2018). Evaluation of the Mentoring Enhancement Demonstration Program: Technical report. American Institutes for Research. https://www.ojp.gov/pdffiles1/ojjdp/grants/252167.pdf

Jucovy, L. (2002). Measuring the Quality of Mentor-Youth Relationships: A Tool for Mentoring Programs. https://www.ojp.gov/ncjrs/virtual-library/abstracts/measuring-quality-mentor-youth-relationships-tool-mentoring

Lau, W. S. Y., Zhou, X., & Lai, S. M. K. (2017). The development of mentoring-relationship quality, future-planning style, and career goal setting among adolescents from a disadvantaged background. *PsyCh Journal, 6*(1), 76–82. https://onlinelibrary.wiley.com/doi/10.1002/pchj.152

Lee, K., Kim, M. J., Park, T. H., & Alcazar-Bejerano, I. L. (2015). Effects of a ubiquitous mentoring program on self-esteem, school adaptation, and perceived parental attitude. *Social Behavior and Personality: An International Journal, 43*(7), 1193-1208. https://doi.org/10.2224/sbp.2015.43.7.1193

Lyons, M. D., McQuillin, S. D., & Henderson, L. J. (2019). Finding the sweet spot: Investigating the effects of relationship closeness and instrumental activities in school-based mentoring. *American Journal of Community Psychology, 63(1–2), 88–98.* https://doi.org/10.1002/ajcp.12283

Lyons, M. D., & McQuillin, S. D. (2021). It's not a bug, it's a feature: Evaluating mentoring programs with heterogeneous activities. *Child & Youth Care Forum, 50*(6), 1131-1145. https://doi.org/10.1007/s10566-021-09609-1

McQuillin, S. D., Lyons, M. D., Clayton, R. J., & Anderson, J. R. (2020). Assessing the impact of school-based mentoring: Common problems and solutions associated with evaluating nonprescriptive youth development programs. *Applied Developmental Science*, *24*(3), 215-229. https://psycnet.apa.org/doi/10.1080/10888691.2018.1454837

McQuillin, S. D. (2022). Effective conversations about behavior change. In C. Herrera & M. Garringer (Eds.), *Becoming a better mentor: Strategies to be there for young people.* MENTOR: National Mentoring Partnership.

Parnes, M. F., Herrera, C., Keller, T. E., Tanyu, M., Jarjoura, G. R., & Schwartz, S. E. (2023). Formal youth mentoring relationships in the context of risk: What is the role of caregiver–mentor collaboration? *Journal of Community Psychology*, *51*(8), 3309-3327. https://doi.org/10.1002/jcop.22990

Pekel, K., Roehlkepartain, E. C., Syvertsen, A. K., Scales, P. C., Sullivan, T. K., & Sethi, J. (2018). Finding the fluoride: Examining how and why developmental relationships are the active ingredient in interventions that work. *American Journal of Orthopsychiatry, 88*(5), 493–502. https://doi.org/10.1037/ort0000333

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879-891. http://dx.doi.org/10.3758/BRM.40.3.879

Pryce, J., Deane, K., & Gilkerson, L. (2022). Attunement in mentoring relationships. In C. Herrera & M. Garringer (Eds.), *Becoming a better mentor: Strategies to be there for young people.* MENTOR: National Mentoring Partnership.

Rhodes, J (2020). *Older and wiser: New ideas for youth mentoring in the 21st century*. Harvard University Press.

Raposa, E. B., Rhodes, J., Stams, G., Card, N., Burton, S., Schwartz, S., Sykes, L., Kanchewa, S., Kupersmidt, J., & Hussain, S. (2019). The effects of youth mentoring programs: A meta-analysis of outcome studies. *Journal of Youth and Adolescence, 48(3), 423–443.* https://doi.org/10.1007/s10964-019-00982-8

Raposa, E. B., Ben-Eliyahu, A., Olsho, L. E., & Rhodes, J. (2019). Birds of a feather: Is matching based on shared interests and characteristics associated with longer youth mentoring relationships? *Journal of Community Psychology*, *47*(2), 385-397. https://doi.org/10.1002/jcop.22127

Sege, R. D., & Harper Browne, C. (2017). Responding to ACEs with HOPE: Health outcomes from positive experiences. *Academic Pediatrics, 17*(7), S79–S85. https://doi.org/10.1016/j.acap.2017.03.007

Spencer, R., Gowdy, G., Drew, A. L., McCormack, M. J., & Keller, T. E. (2020). It takes a village to break up a match: A systemic analysis of formal youth mentoring relationship endings. *Child & Youth Care Forum, 49*(1), 97–120. https://doi.org/10.1007/s10566-019-09520-w

Silke, C., Brady, B., & Dolan, P. (2019). Relational dynamics in formal youth mentoring programmes: A longitudinal investigation into the association between relationship satisfaction and youth outcomes. *Children and Youth Services Review, 104,* 104343. https://doi.org/10.1016/j.childyouth.2019.05.020

Tanyu, M., Spier, E., Pulizzi, S. Rooney, M., Sorenson, I., Fernandez, J. (2020). Improving education outcomes for students who have experienced trauma and/or adversity. *OECD Education Working Papers*, No. 242, OECD Publishing, Paris, https://doi.org/10.1787/54d45980-en.

Tolan, P. H., Henry, D. B., Schoeny, M. S., Lovegrove, P., & Nichols, E. (2014). Mentoring programs to affect delinquency and associated outcomes of youth at risk: A comprehensive meta-analytic review. *Journal of Experimental Criminology,10*(2), 179–206. http://dx.doi.org/10.1007/s11292-013-9181-4

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), 323–330. http://dx.doi.org/10.1037/cdp0000255

About the American Institutes for Research®

Established in 1946, the American Institutes for Research® (AIR®) is a nonpartisan, not-for-profit institution that conducts behavioral and social science research and delivers technical assistance both domestically and internationally in the areas of education, health, and the workforce. AIR's work is driven by its mission to generate and use rigorous evidence that contributes to a better, more equitable world. With headquarters in Arlington, Virginia, AIR has offices across the U.S. and abroad. For more information, visit AIR.ORG.

26167_09/24