Synthesis of OJJDP-sponsored Mentoring Research

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Introduction

The Office of Juvenile Justice and Delinquency Prevention (OJJDP) within the U.S. Department of Justice has a long history of providing significant programmatic funding to support mentoring initiatives for youth, dating back to funding of the Juvenile Mentoring Program in 1996. The OJJDP website provides the following overview:

Youth mentoring - a consistent, prosocial relationship between an adult or older peer and one or more youth - can help support the positive development of youth. Mentoring has been shown to improve self-esteem, academic achievement, and peer relationships and reduce drug use, aggression, depressive symptoms, and delinquent acts. Many young people have access to mentors (both naturally occurring and program supported); however, many more do not. In addition, there continues to be documented variation in both the quality of mentoring and its impact on youth outcomes.

OJJDP has long supported mentoring programs, awarding more than $834 million in grants to mentoring organizations from FY 2008 to FY 2017. OJJDP's mentoring work aims to both increase opportunities for youth to have mentors and improve the quality and impact of the mentoring they receive. Through its research, programmatic grants, training and technical assistance, and publications, OJJDP provides financial incentives and national leadership to support the delivery of high quality mentoring to a diverse and growing population of youth. The OJJDP National Mentoring Resource Center (NMRC) has been developed as a key research and practice resource for the mentoring field.

As one of the primary supporters of youth mentoring at the federal level, OJJDP values partnerships with other federal agencies, mentoring programs, and research institutions as well as direct family and youth engagement in its mentoring initiatives. OJJDP has also established a Mentoring Subcommittee of the Coordinating Council on Juvenile Justice and Delinquency Prevention to help advance mentoring collaboration across the federal government and develop deliverables in support of mentoring efforts.

As noted in this overview, OJJDP also has awarded significant funding for research on youth mentoring. An overview of these funding initiatives is provided in Table 1 . The primary purpose of this report is to provide a summary and synthesis of the original research projects (where principal investigators generally collected and analyzed data about mentoring programs) supported through these initiatives and completed to-date (i.e., have a final report as of February 2018). An overview of these 24 projects is provided in Table 2.[1] However, OJJDP has also supported research-related work and products through the National Mentoring Resource Center (NMRC). The NMRC was established in 2014 by OJJDP and has been funded through a competitive solicitation process since that time.[2] Its purpose is providing the mentoring field with comprehensive resources to advance the implementation of evidence- and research-based mentoring practices. As part of that mission, the NMRC produces a

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[1] One project, conducted by Jarjoura et al. (2013), was a listening session rather than a traditional research study; it is therefore, not included in Table 2 or the remainder of the report.
[2] Under this solicitation, OJJDP has entered into a series of cooperative agreement with MENTOR: The National Mentoring Partnership.

number of research-based products that advance understanding of effective mentoring practice. Consequently, those products are considered within this report.

Coding of Information and Findings for the OJJDP-Funded Research Projects

For purposes of facilitating extraction and later analysis of pertinent information from the final reports for each of the projects included in the synthesis, we developed a standardized coding guide. This guide drew from the CrimeSolutions scoring instrument and the Study Design and Implementation Assessment Device (DIAD; Valentine & Cooper, 2008). The major categories and subcategories of information coded for each project were as follows:

- Report identification
- Core mentoring program information
    - Background and setting
    - Program development
    - Program components and activities
    - Mentor-mentee relationships
    - Mentor-mentee matching
    - Training/orientation & supervision
- Program enhancements (if any) under study
- Description study participants and mentoring relationships
    - Mentors
    - Youths
    - Mentor-mentee relationships
- Study methodology
    - Design
    - Measurement
    - Analyses
    - Validity threats (quantitative) and trustworthiness (qualitative)
- Study findings
    - Implementation of program or enhancement
        - Levels and quality
        - Predictors
        - Associations with mentoring relationships or youth outcomes
    - Effects of mentoring programs or practices
        - Youth
        - Mentors
        - Mentoring relationships
    - Mentoring relationship characteristics
        - Predictors
        - Associations with youth outcomes

Table 1

OJJDP Solicitations Associated with Mentoring Research Projects Included in this Synthesis

Solicitation Title	Purpose of Solicitation	# Awards	Total Funds Awarded
OJJDP FY 2009 Mentoring Research Program	To support the evaluation of the effectiveness of paid versus volunteer mentors within existing delinquency prevention mentoring programs using both a process and an outcome evaluation.	1	$3,499,898
OJJDP FY 2010 Mentoring Research Best Practices	To fund research studies on juvenile mentoring that will inform the design and delivery of mentoring programs and further the understanding of evidence-based and effective practices in mentoring programs that serve at-risk youth.	3	$2,716,108
OJJDP FY 2010 Group Mentoring Research and Evaluation Program	To support evaluation of the effectiveness, implementation, and impact of the following nontraditional mentoring programs implemented by local Boys and Clubs across the country: Project Learn, Gang Prevention Through Targeted Outreach, and SMART Leaders.	1	$1,972,955
OJJDP FY 2011 Research on Best Practices for Mentoring	To support research studies that will inform the design and delivery of mentoring programs by enhancing what is understood about mentoring as a prevention strategy for youth who are at risk of involvement or already involved in the juvenile justice system.	5	$2,218,963
OJJDP FY 2012 Mentoring Best Practices Research	To enhance what is understood about mentoring as a prevention strategy for youth who are at risk of involvement or already involved in the juvenile justice system.	7	$2,862,200
OJJDP-Library of Congress 2012 Contract: Evaluation of the Mentoring Enhancement Demonstration Program	To support the evaluation of the Mentoring Enhancement Demonstration Program, a collaboration of qualified, established mentoring program sites in the implementation of advocacy and teaching roles for mentors via enhancement strategies that focus on matching youth and mentors, training for mentors, and ongoing mentor support.	1	(non-disclosed total amount)

Solicitation Title	Purpose of Solicitation	# Awards	Total Funds Awarded
OJJDP FY 2012 Community-Based Violence Prevention FIRE Program[a]	To support methodologically rigorous research and evaluation studies that inform what is understood about how communities can prevent and reduce violence involving youth, including the factors that may influence youth violence and youth violence prevention efforts, the effectiveness and cost efficiency of existing community-based violence prevention programs, and identification and evaluation of new or emerging community-based violence prevention models.	1	$500,000
OJJDP FY 2013 Mentoring Best Practices Research: Category 1: Secondary Data Analysis and Long-Term Follow-up	To support studies proposing secondary data-analysis of existing mentoring data or additional data collection to examine long-term outcomes of mentoring to enhance what is understood about mentoring as a prevention and intervention strategy for youth who are at risk of involvement or already involved in the juvenile justice system.	5	$1,496,377
OJJDP FY 2013 Mentoring Best Practices Research: Category 2: New Mentoring Research and Evaluations	To support applicants to conduct new research studies and evaluations of mentoring programs to enhance what is understood about mentoring as a prevention and intervention strategy for youth who are at risk of involvement or already involved in the juvenile justice system.	5	$2,474,398
OJJDP FY 2014 High-Risk Youth Mentoring Research: Category 1: Secondary Data Analysis and Long-Term Follow-up	To support research and evaluations to further examine how certain characteristics, components, and practices of mentoring programs can best support youth who are at particularly high risk for delinquency using secondary data-analysis of existing mentoring data or additional data collection to examine long-term outcomes of mentoring.	2	$599,808

Solicitation Title	Purpose of Solicitation	# Awards	Total Funds Awarded
OJJDP FY 2014 High-Risk Youth Mentoring Research: Category 2: New Mentoring Research and Evaluation	To support research and evaluations to further examine how certain characteristics, components, and practices of mentoring programs can best support youth who are at particularly high risk for delinquency using new research that is generalizable to additional jurisdictions with priority given to multi-site study samples with rigorous and scientifically valid methods to examine the quality of implementation, the implementation process, and outcomes.	1	$998,194
OJJDP FY 2014 Practitioner-Researcher Partnership Mentoring Children of Incarcerated Parents Demonstration Program Category 2: Evaluation	To support a practitioner-researcher partnership to develop and evaluate new mentoring practices to serve the needs of youth whose parents are incarcerated To support a multi-site evaluation that utilizes random assignment of subjects and rigorous and scientifically valid methods to examine the quality of implementation, the implementation process, and outcomes.	1	$2,499,597
OJJDP FY 2016 Practitioner-Researcher Partnership in Cognitive Behavioral Mentoring Program Category 2: Evaluation	To evaluate the design, implementation, and outcome of innovative mentoring approaches that incorporate practices informed by the research on cognitive behavioral interventions and techniques for high-risk youth, including youth in juvenile justice diversion programs, community-based alternatives, and/or on probation; detained and incarcerated youth; youth with mental health disorders; children/youth exposed to violence; youth who have been sexually exploited; tribal youth; or other routinely underserved, high-need populations.	2	$2,497,272
OJJDP FY 2017 Mentoring Research Partners Program	The goal of the program is to advance the independent evaluation activities of OJJDP-funded mentoring programs in order to improve the implementation and impact of the mentoring services OJJDP supports.	1	$149,999

[a]This solicitation/grant was not for mentoring research projects; however, one project funded through this solicitation involved a mentoring project and was included in this synthesis.

Table 2

OJJDP-sponsored Mentoring Research Projects Included in this Synthesis

Project Title	Awardee	Funding Stream	Award Amount	Final Report Authors & Publication Year	Aims	Mentoring Program Name
Insights into Recruiting Male Mentors: Motivations, Concerns and the Role of Payment	Research Triangle Institute (RTI)	OJJDP FY 09 Mentoring Research Program	$3,499,898	Hawkins et al. (2015)	• Mentoring program practices • Implementation/process evaluation	Big Brothers Big Sisters (BBBS)-Triangle NC Region
Investigation of the Integration of Supports for Youth Thriving into a Community-Based*†	The Board of Trustees of the University of Illinois	OJJDP FY 10 Mentoring Research Best Practices	$999,907	DuBois & Keller (2017)	• Mentoring program effectiveness • Implementation/process evaluation	10 participating Big Brothers Big Sisters of America (BBBSA) affiliates
Project Research to Action in Mentoring	Curators of the University of Missouri on Behalf of the University of Missouri-St. Louis	OJJDP FY 10 Mentoring Research Best Practices	$716,301	Johnson (2014)	• Mentoring program effectiveness	Alliance for Families & Communities Affected by Incarceration (AFCAI) and Better Family Life (BFL)
Researching the Referral Stage for Mentoring in Six (6) Juvenile Justice Settings	National Mentoring Partnership, Inc.	OJJDP FY 10 Mentoring Research Best Practices	$999,900	Miller et al. (2012)	• Mentoring program practices • Mentoring program effectiveness	Varied programs
An Evaluation of Advocacy-Based Mentoring as a Treatment Intervention for Chronic Delinquency	The University of Texas at San Antonio	OJJDP FY 11 Mentoring Research Best Practices	$283,987	Karcher & Johnson (2016)	• Mentoring program effectiveness	Youth Advocate Programs, Inc. (YAP)
Investigation of the Effectiveness of a Developmental Mentoring Model as an Intervention / Prevention Strategy for Juveniles of Varying Levels of Risk Among Middle School Youth in Metro Louisville	University of Louisville	OJJDP FY 11 Mentoring Research Best Practices	$500,000	Sar & Sterrett (2014)	• Mentoring program effectiveness	Unnamed

Project Title	Awardee	Funding Stream	Award Amount	Final Report Authors & Publication Year	Aims	Mentoring Program Name
Understanding the Role of Parent Engagement to Enhance Mentoring Outcomes	The Research Foundation of SUNY, University at Albany	OJJDP FY 11 Mentoring Research Best Practices	$497,095	Kaye & Smith (2014)	• Mentoring program effectiveness	BBBS - Capital Region
Testing the Impact of Mentor Training and Peer Support on the Quality of Mentor-Mentee Relationships and Outcomes for At-Risk Youth	James Madison University	OJJDP FY 11 Mentoring Research Best Practices	$438,229	Peaslee & Teye (2015)	• Mentoring program effectiveness • Mentoring relationships	BBBS - Harrisonburg Rockingham County
Improving Relationship Outcomes Using Additional Training and Enhanced Match Support for Mentors*	Pacific Institute for Research & Evaluation (PIRE)	OJJDP FY 11 Mentoring Research Best Practices	$499,652	Courser et al. (2014)	• Mentoring program effectiveness • Implementation/process evaluation	BBBS - Kentuckiana
Future Selves, Motivational Capital, and Mentoring Toward College: Assessing the Impact of an Enhanced Mentoring Program for At-Risk Youth†	Big Brothers Big Sisters of Metro Atlanta	OJJDP FY 12 Mentoring Best Practices Research	$466,673	Brezina, Kuperminc, & Tekin (2016)	• Mentoring program effectiveness	BBBS - Metro Atlanta
Evaluation of Big Brothers Big Sisters School-Based Mentoring Program	Regents of the University of Minnesota	OJJDP FY 12 Mentoring Best Practices Research	$239,978	Beckman et al. (2017)	• Implementation/process evaluation	BBBS - Greater Twin Cities
Mentee Risks Status and Mentor Training as Predictors of Youth Outcomes†	Innovation Research and Training, Inc.	OJJDP FY 12 Mentoring Best Practices Research	$499,994	Kupersmidt, Stump, & Stelter (2017)	• Mentoring program practices	BBBSA in one of two studies and varied programs in the other study
Horizons Expand as Relationships Evolve: An investigation of personality, social-cognitive, and relationship-based predictors of positive youth mentoring outcomes	The Family Center	OJJDP FY 12 Mentoring Best Practices Research	$396,484	Reich & Hudis (2017)	• Mentoring program effectiveness	Family Center's Mentoring Program

Project Title	Awardee	Funding Stream	Award Amount	Final Report Authors & Publication Year	Aims	Mentoring Program Name
Prediction and prevention of premature closures of mentoring relationships: The study to analyze relationships (STAR Project)*†	Portland State University	OJJDP FY 12 Mentoring Best Practices Research	$499,894	Keller & Spencer (2017)	• Mentoring relationships	BBBSA (and 4 local BBBS agencies - unidentified)
Long-term Follow-up Effects of the Big Brothers Big Sisters Community-Based Mentoring Program	The Board of Trustees of the University of Illinois	OJJDP FY 13 Mentoring Best Practices Research: Category 1: Secondary Data Analysis and Long-Term Follow-up	$299,999	DuBois, Herrera & Rivera (2018)	• Mentoring program effectiveness	BBBSA and 8 affiliates (Philadelphia, PA; Rochester, NY; Minneapolis, MN; Columbus, OH; Wichita, KS; Houston, TX; San Antonio, TX; and Phoenix, AZ)
Extending a randomized trial of mentoring for youth in foster care: Evaluating intervention components, differential risk, and long-term effects on delinquency†	Portland State University	OJJDP FY 13 Mentoring Best Practices Research: Category 1: Secondary Data Analysis and Long-Term Follow-up	$299,654	Blaskeslee & Keller (2018)	• Mentoring program effectiveness	My Life
Assessing the Impact of Parental Characteristics, Parental Attitudes, and Parental Engagement on Mentoring Relationship Outcomes	Pacific Institute for Research & Evaluation (PIRE)	OJJDP FY 13 Mentoring Best Practices Research: Category 2: New Mentoring Research and Evaluations	$482,618	Courser et al. (2017)	• Mentoring program effectiveness • Mentoring program practices • Mentoring relationships	BBBS - Kentuckiana
Mentoring Best Practices Research: Effectiveness of Juvenile Offender Mentoring Programs on Recidivism	University of Cincinnati	OJJDP FY 13 Mentoring Best Practices Research: Category 2: New Mentoring Research and Evaluations	$496,165	Duriez et al. (2017)	• Mentoring program effectiveness	Several programs (Youth Advocate Program; Catholic Charities; I Dream Academy; David's Challenge; Community for New Direction; Sunlight Village Network, Inc.)

Project Title	Awardee	Funding Stream	Award Amount	Final Report Authors & Publication Year	Aims	Mentoring Program Name
Twelve-Year Professional Youth Mentoring Program for High Risk Youth: Continuation of a Longitudinal Randomized Controlled Trial†	University of Washington	OJJDP FY 13 Mentoring Best Practices Research: Category 2: New Mentoring Research and Evaluations	$496,922	Eddy et al. (2015)	• Mentoring program effectiveness • Mentoring relationships	Friends of the Children (FOTC)
Long-Term Impact of Mentoring on Juvenile Offender Recidivism and Prosocial Outcome	Baylor College of Medicine	OJJDP FY 14 High-Risk Youth Mentoring Research: Category 1: Secondary Data Analysis and Long-Term Follow-up	$299,808	Hanten, Schmidt, & Duron (2017)	• Mentoring program effectiveness	ReVision Program
Environmental and Personal Factors in a Community-Based Juvenile Offender Intervention	Baylor College of Medicine	OJJDP FY 12 Community-Based Violence Prevention FIRE Program	$500,000	Hanten & Schmidt (2017)	• Mentoring program effectiveness	ReVision Program
Cross-age peer mentoring to enhance resilience among low-income urban youth living in high violence Chicago communities.	Loyola University of Chicago	OJJDP FY 14 High-Risk Youth Mentoring Research: Category 2: New Mentoring Research	$998,194	Richards et al. (2017)	• Mentoring program effectiveness	Saving Lives, Inspiring Youth (SLIY)
Evaluation of Mentoring Initiative for System Involved Youth	Pacific Institute for Research & Evaluation (PIRE)	FY2006 Evaluation of Mentoring Initiative for System Involved Youth	$499,982	Courser & Kirk (2014)	• Mentoring program effectiveness	The Aftercare Academy (Oakland, California) The Economic Mentoring Program (Chicago, Illinois) Mentor Match (Hampton, Richmond and Winchester, Virginia) Mentor Portland (Portland, Oregon)

Project Title	Awardee	Funding Stream	Award Amount	Final Report Authors & Publication Year	Aims	Mentoring Program Name
A Comprehensive Evaluation of Boys & Girls Club Mentoring Programs	Grant Fundamentals, LLC	OJJDP FY 10 Group Mentoring Research and Evaluation Program	$1,972,955	Mentzer, Fox, & Jenkins (2015)	• Mentoring program effectiveness • Implementation/process evaluation	Boys and Girls Clubs of America

*Change in title since award

†Project has published article(s) or conference presentations.

- o Tests of mediation
  - o Tests of moderation
  - o Descriptive findings (e.g., what was done for match closures)
  - o Theory testing
  - o Other
- Author conclusions and recommendations for future research

In addition to this overall coding of the contents of each project report, each of the specific findings of the analyses that addressed the main aims of each project was coded. The information coded for each finding generally included the variables involved as well as the statistical significance, strength, and direction of the finding. Provisions also were included to capture descriptive and qualitative results as well as the pattern of more complex findings, such as tests for moderation or mediation.

If published research articles based on project data were available, these were used to supplement coding for that project. The guides used for both types of coding are available upon request as supplemental documents to this report.

Organization of This Report

In the remainder of this report, we begin by providing a descriptive summary of OJJDP-funded research on youth mentoring (limited, as noted above, to the projects shown in Table 2 for which final reports are available). The next section provides a synthetic overview of the findings of these projects. Our emphasis in doing so is on identifying key trends in results across projects. Those interested in summaries of the findings of individual projects are encouraged to consult the final technical reports for projects that are available through the [National Criminal Justice Reference Service](#). The next part of the report provides information on the research-related activities and products of the National Mentoring Resource Center. The final two sections provide conclusions as well as next steps for building on the work of the current report.

Descriptive Overview of OJJDP-Funded Research Projects on Youth Mentoring

Award Information

The bulk of the awards made for research on youth mentoring that are included in this synthesis (83%; n = 20) were made during a 4-year period from Federal FY 2010 to FY 2013. The median award amount is $498,374, with a range from $239,979 (Beckman et al., 2017) to $3,499,898 (Hawkins et al., 2015).

A number of these awards were made under the auspices of solicitations with relatively broad parameters (see Table 1). Illustratively, the Mentoring Best Practices and High-Risk Youth Mentoring Research solicitations of FY 2013 and 2014, respectively, each sought proposals within the categories of "mentoring research and evaluations" and "secondary data analysis and long-term follow-up." Other solicitations had more specific parameters, such as evaluating the effectiveness of paid mentoring or a particular programmatic initiative of OJJDP (e.g., Mentoring Initiative for System-Involved Youth).

As shown in Table 2, most of the aims of funded projects fell within four broad categories: Mentoring program effectiveness, Mentoring program practices, Mentoring relationships, and

Implementation/process evaluation. Aims concerning mentoring program effectiveness included efforts to evaluate moderators and mediators of program effects on youth outcomes.[3]

Aims focused on mentoring program practices involved investigating both existing and new or "experimental" practices. Typically the focus within these investigations was on examining the effects that different practices (e.g., mentor training) within an overall program might have on mentoring relationships and/or youth outcomes.

Aims pertaining to mentoring relationships addressed predictors of relationship quality and longevity, relationship processes, and associations between relationship characteristics and outcomes for mentored youth. Finally, aims relating to implementation or process evaluation aims were concerned with fidelity and dosage issues.[4]

Researcher Information

The most common primary disciplinary affiliation of the lead researcher on each project was psychology (25%; n = 6), followed by social work (17%; n = 4), criminal justice/criminology (13%; n = 3) and political science (13%; n = 3). The remaining affiliations included, but were not limited to, sociology, education, public health, and medicine. These varied affiliations are consistent with the multi-disciplinary nature of research on youth mentoring more generally.

Researchers generally did not have a role in designing or developing the mentoring programs that were the focus of their investigations (83%; n = 20) and where involvement was indicated their role was collaborative rather than as primary designers/developers (8%; n = 2; for 4 projects the researcher role in program development was not able to be coded). This suggests a significant level of independence between researchers and programs, which is generally desirable especially in the context of program evaluation research.

Mentoring Program Characteristics

Nearly half of the projects (46%; n = 11) were conducted with Big Brothers Big Sisters (BBBS) mentoring programs. No other program was the focus of more than 2 projects.

The most common primary aim of the programs, where this could be discerned from reports, was to enhance positive youth development (63%; n = 15); closely related aims of promoting prosocial behavior (n = 2), positive health behavior (n = 1), and youth asset development (n = 1) were also represented. Delinquency prevention, both with youth who have had involvement with the juvenile justice system (17%; n = 4) and those who have not (8%; n = 2; i.e., primary prevention) was a primary aim of 1 in 4 of the programs.

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[3] Moderators are pre-existing factors that condition or influence program effectiveness, such as a program being more or less effective for youth experiencing a particular type of risk factor like parental incarceration; mediators are intervening experiences or intermediary outcomes in pathways leading to outcomes of interest, such as gains in self-esteem for youth participating in a mentoring program contributing, in turn, to higher levels of academic achievement.

[4] Fidelity refers to the extent and quality with which a program is implemented according to plan, such as whether and how well planned mentor support contacts occur; dosage refers to the amount of program services that are received by intended beneficiaries of a program, such as the number of hours of contact that youth have with their program-assigned mentors. For additional discussion of fidelity and dosage in relation to research on mentoring interventions, see DuBois (2014).

It is not unusual for formal mentoring to be provided in conjunction with other distinct services or support activities within a program or organization. Meta-analytic findings have not indicated differential effectiveness for these types of multicomponent programs (DuBois, Holloway, Valentine, & Cooper, 2002, DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011), perhaps reflecting the challenges of implementing/delivering several distinct types of programmatic activities with fidelity (Kuperminc et al., 2005). In one-fourth of the funded projects (25%; n = 6), mentoring was provided to participating youth in conjunction with other distinct services. The additional services or supports were varied in nature and included academic tutoring/assistance (n =1), social or life skills training (n = 2), family services (n = 1), after-school program (n = 1), mental health services or counseling (n = 2), and peer outreach workers (n = 2).

About half of the programs (n = 13) were tailored to youth with specific characteristics. With the exception of BBBS, nearly all of the programs were tailored to specific youth populations. These included male youth (n = 1), youth in foster care (n= 2), youth underperforming academically (n = 2), and youth engaged in problem behavior (n = 4). It should be noted that tailoring was not inferred simply by program participant characteristics or eligibility criteria, but rather from mentoring or other program activities that were adapted or structured specifically for a particular population of youth.

Of the programs involved in the funded projects, only the BBBS community-based and school-based mentoring programs had been previously reviewed for CrimeSolutions.gov; CrimeSolutions.gov is the National Institute of Justice's web-based clearinghouse for programs that have undergone rigorous evaluation and is co-funded by OJJDP. As explained later in this report, CrimeSolutions.gov is used by the NMRC in reviewing the evidence base for different mentoring programs. The BBBS community-based program received a rating of Effective, whereas the school-based program received a rating of Insufficient Evidence. It appears that the remaining programs associated with the funded projects for the most part had not previously been the focus of rigorous evaluations.

In three-quarters of the programs (n = 18), mentoring took place in the community at-large. There were also several programs in which mentoring occurred in the school setting (n = 1) or a community-based organization (n = 3). Only two projects involved mentoring based in a workplace (n = 1) or juvenile justice setting (n = 1) and none incorporated mentoring within a faith-based setting.

Interestingly, although mentoring programs can vary considerably in the planned or minimum expected duration of the mentoring relationships that are established, these differences to date have not been associated with variation in estimated effects on youth outcomes (DuBois et al., 2002, 2011). Reflecting the large proportion of projects conducted with the BBBS program, nearly two-thirds of the funded projects (67%; n = 15) looked at programs in which the minimum expected length of the mentoring relationship was one year. In the case of the BBBS programs, it should be noted that relationships can extend over longer periods of time, essentially until the youth ages out of the program (typically at age 18). In the remainder of the projects, minimum expectations for relationship duration were less than one year (n = 1), more than one year (n = 1), varied across multiple programs included in the research (n = 4), or unspecified (n = 3). In some programs, the youth's mentoring relationship and/or participation in the program can extend beyond the minimum expected length of the initial mentoring relationship. This was the case for all the BBBS programs, in which relationships may be supported as long as the youth remains within program age limits (typically up to age 18) and youth may be re-matched with a new mentor after their initial relationship ends. In the Friends of the Children program,

the minimum commitment of mentors was 3 years, but the program commits to the children for 12.5 years

There was weekly expected frequency of contact between mentor and youth within 9 of the projects (36%) and bi-weekly expected contact in 6 projects (24%). Expected frequency of contact was variable or unspecified within the remaining 10 projects. In comparison, with MENTOR's national program survey, a large majority of programs (80 percent) expected mentors and mentees to meet either at least once a week or two-to-three times a month.

Mentoring programs vary in the extent to which they are intentional in fostering differing types of support roles for mentors through program practices such as mentor recruitment, training, ongoing support contacts, and agency-sponsored events. Support of this nature for certain roles, most notably emotional support (e.g., caring, concern, empathy, sympathy), teaching/information provision support (explicit instruction on skills or tasks, providing information on specific topics), and advocacy (e.g., connecting youth to other supports and resources, representing or acting on behalf of the youth's interests), has been correlated with stronger estimated effects of programs on youth outcomes; DuBois et al., 2011; Tolan). To varying degrees, support for each of these roles was incorporated into programs that were the focus of the OJJDP-funded mentoring research being examined in this synthesis. In three-fourths of the projects, (n = 18), programs were intentionally designed to foster emotional support. To a lesser extent, programs also were geared toward fostering mentoring activities that involved teaching/information provision (21%; n = 5) and/or advocacy (29%; n = 7). The remaining roles of modeling (learning by observation, task rehearsal, or role playing) and acting as identification figure (exposing mentee to mentors or aspects of the mentor's life that mentees may be inspired by or seek to emulate) were supported by design in programs within 4 (17%) and 2 (8%) projects, respectively. For eight of the funded projects (33%), none of the above types of mentoring activities were coded as being supported by the program under consideration. To some extent, this may be a function of the level of detail with which programs were described in final reports of projects rather than of the programs themselves.

In a recent national survey of mentoring programs (Garringer, McQuillin, & McDaniel, 2017), approximately equal numbers of youth were reported to be served in a one-to-one or group mentoring model (about one-third of all youth served in each case), respectively, with a significant proportion also served in a model that blended the two formats. In the funded projects, a large majority of the programs provided mentoring in a one-to-one format (88%; n = 21), with a much smaller number including a group mentoring format (clearly indicated for programs in two of the projects, one of which was a study of mentoring provided within Boys & Girls Clubs, Mentzer et al., 2015, and the other of which was a comparison of one-to-one and group mentoring). The contrast with the above referenced national survey data may reflect a trend toward increased utilization of group mentoring within the field since the time period during which most projects were proposed and funded.

The mentor eligibility criteria for the programs considered in projects were difficult to discern in most instances. However, in 4 projects mentors needed to be either male (n = 2) or female (n = 2) and in two other projects mentors were exclusively high school students (n = 2).

Mentors within the programs examined generally were specified to be volunteers (63%; n = 15), although there several instances in which mentors received some form of payment (21%; n = 5). In the remaining projects, mentor volunteer versus paid status was not specified.

Provision of training and ongoing support or supervision to mentors are recommended core practices within mentoring programs for youth (Garringer, Kupersmidt, Rhodes, Stelter, & Tai, 2015). In addition to their importance from a safety and child protection perspective, research suggests that these practices can enhance the quality and longevity of mentoring relationships as well as effectiveness of the program in promoting positive youth outcomes (see, e.g., DuBois et al., 2002; Herrera, DuBois, & Grossman, 2013; Herrera, Kauh, Cooney, Grossman, & McMaken, 2008). In most of the funded projects, the report provided sufficient information to conclude that mentors had received training and/or orientation (n = 16); similarly, it was clear that programs included supervision/ongoing support for mentors in half the projects (n = 12). More detailed information regarding potentially influential considerations such as the content and amount of training provided or the frequency of supervision contacts, however, was often lacking, making it difficult to discern more specific trends in mentor training and support.

As can be seen in Table 2, several of the projects (n = 5) focused on investigating potential enhancements to mentoring programs. All of these projects were conducted with BBBS programs. The modifications tested were focused variously on enhancing mentoring relationship quality (n = 4) or longevity (n = 3) and on strengthening program effects on delinquency (n = 1) or other youth outcomes (n = 4).

Table 3 provides a more detailed overview of the potential program enhancements investigated in the five projects. Although varied in their specific features, the tested enhancements most often involved additional training provided to mentors prior to or after being paired with their mentees, modifications to the type or amount of supervision/ongoing support that mentors received, having mentors and youth engage in particular types of activities, and parent engagement activities. Notably, in all but one of the projects, program modifications involved multiple areas, with 3 of the projects making modifications in 3 or more of the areas. It seems clear, furthermore, that in all of the projects the program modifications resulted in new roles, responsibilities, or other demands for program staff and mentors.

Study Methodology

Research design and validity. All but 2 of the projects (n = 22) had primary aims of evaluating mentoring program effectiveness or the effects of mentoring program practices or modifications. About half of these projects (59%; n = 13) featured either an experimental (i.e., random assignment; n = 6) or quasi-experimental (i.e., two groups but not random assignment to groups; n = 7). The other evaluation projects utilized some type of pre-experimental design (e.g., pre- and post-test data for a single group), which is generally not regarded as a rigorous approach to establishing program effectiveness. The two projects that had aims other than program or practice evaluation (e.g., investigating mentoring relationships) utilized both quantitative and qualitative data and thus were mixed method in design. Notably, 4 of the evaluation-oriented projects also included a qualitative component and thus were arguably mixed method in design as well.

For each project, ratings were made of the extent to which there were threats to internal validity (degree to which observed associations reflect intended cause-effect relationships), external validity (degree to which findings are likely to generalize to the target population, settings, outcomes/constructs, and time frames of assessment, such as end of program participation and later points in time), and statistical conclusion validity (accuracy of conclusions drawn from statistical tests,

such as whether a relationship exists between the two variables of interest).[5] For internal validity, the majority of projects (63%) were rated as having either no identified validity threats (n = 1) or only marginal threats (n = 14). The remaining projects were for the most part rated as having moderate threats to internal validity (n = 7), although two were rated as having serious threats (n = 2). The most commonly identified threats to internal validity were attrition (63%; n = 15; attrition involves loss of study participants during the course of the study and is especially a threat to internal validity when the rate of attrition differs systematically based on factors such as treatment versus control group membership or participant demographic characteristics) and selection (58%; n = 14; in program evaluations, this threat occurs when the groups to be compared differ on factors besides the treatment). These threats are common within applied research and, in the context of the funded projects, may reflect specific challenges such as locating and contacting "higher risk" families for follow-up assessments and ensuring group equivalence when random assignment is not feasible.

The proportion of projects rated as having either no or only marginal identified threats to external validity was somewhat smaller (46%; n = 4 no threats; n = 7 marginal threats), with all the remainder rated as having moderate threats to this form of validity. The most common threats to external validity within projects were not testing for differences in findings (e.g., program effects) across participants or settings (83%; n = 20; i.e., moderator analyses) and, in the context of program evaluation studies, not testing the extent to which effects on youth outcomes were consistent over time (e.g., several months or, ideally, years after program participation had concluded). The broader evaluation and prevention literature has similarly emphasized a need for greater attention to participant subgroup and setting-level variation in program effectiveness as well as greater attention to follow-up studies of effectiveness (Flay et al., 2006).

Finally, for statistical conclusion validity, half the projects were rated as having marginal threats (50%, n = 12), with the remainder having ratings of no (n = 1), moderate (n = 8), or serious (n = 3) threats. The most common threat to this type of validity was lack of consistency of intervention implementation across participants (71%; n = 17). When implementation falls below a threshold required for impact for a significant proportion for participants in a program evaluation, for example, study analyses may fail to detect an effect of the intervention due to lack of sufficient implementation fidelity. The next most common threat to statistical conclusion validity was and low statistical power (42%; n = 10). DuBois and Silverthorn (2005) similarly observed that many evaluations of mentoring programs appeared to lack the sample sizes necessary for sensitivity to detecting their effects on youth outcomes, especially given that these are likely to be of modest size or magnitude.

Ratings were also made of the methodological rigor of the qualitative components of studies where applicable, along each of the following four recognized dimensions of "trustworthiness" for qualitative

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[5] Internal validity is the degree to which observed associations reflect intended cause-effect relationships, such effects of program participation on an outcome. External validity involves the degree to which findings are likely to generalize to the target population, settings, outcomes/constructs, and timeframes of assessment, such as periods of time after program participation has ended. Statistical conclusion validity refers to the accuracy of conclusions drawn from statistical tests, such as whether a relationship exists between the two variables of interest. For further discussion of these differing types of validity, see Shadish, Cook, & Campbell (2002).

Table 3

Overview of Potential Enhancements Tested in OJJDP-Funded Projects

Project	Brief Description of Potential Enhancement(s)	Enhancement Areas				
		Staff training and support	Mentor training	Mentor-youth activities	Match support/ supervision	Other
Investigation of the Integration of Supports for Youth Thriving into a Community-Based Mentoring Program (DuBois & Keller, 2017)	Integration of adapted Step-It-Up-2-Thrive model materials and activities within community-based mentoring relationships in the Big Brothers Big Sisters (BBBS) community-based mentoring (CBM) program	• initial and mid-project in-person training for staff • individual coaching and support for Implementation Liaison at each agency	• one session training on the intervention model • training in use of rubrics for tracking development of goal setting/pursuit skills	• group activities and individual match activity/discussion guides	• staff briefings for parents on aspects of the model	• brief orientation to the model for mentor, parent, and youth at initial match meeting • 12 month anniversary meeting for mentor, youth, parent, and match support specialist
Understanding the Role of Parent Engagement to Enhance Mentoring Outcomes (Kaye & Smith, 2014)	Parent Engagement Model (PEM) designed to engage parents in mentoring and increase mentors' cultural understanding of families served by the program, implemented within the BBBS program		• Energizing the Connection (ETC) mentor training		• match support for mentors on enhanced topics	• orientation and handbook for parents • biannual family events as opportunities for the youth, mentor, and parent to come together • monthly parent post cards for each enhancement topic
Testing the Impact of Mentor Training and Peer Support on the Quality of Mentor-Mentee Relationships and Outcomes for At-Risk Youth (Peaslee & Teye, 2015)	Additional training for mentors, peer support for mentors, or both additional training and peer support within BBBS CBM and SBM programs.		• initial and ongoing web-based training modules delivered within the first 6 months of the match (training portion of the enhancement)		• informal monthly support for mentors from peer mentors with at least 6 months of mentoring experience (peer support portion of the enhancement)	

Project	Brief Description of Potential Enhancement(s)	Enhancement Areas				
		Staff training and support	Mentor training	Mentor-youth activities	Match support/ supervision	Other
Improving Relationship Outcomes Using Additional Training and Enhanced Match Support for Mentors (Courser et al., 2014)	Additional training and support opportunities for mentors in the BBBS CBM program		• orientation training for mentors • 3 core training workshops within the 1st 9 month focusing on skills for communicating and working with diverse youth • Supplemental topical trainings		• bimonthly structured opportunities for mentor networking and peer support • match support and case management	• monthly newsletter and resources
Future Selves, Motivational Capital, and Mentoring Toward College: Assessing the Impact of an Enhanced Mentoring Program for At-Risk Youth (Brezina et al., 2016)	The Mentoring Towards College (MTC) program added to the BBBS CBM program			• mentoring activities based on curriculum designed to support academic success and college access, delivered through a combination of activity guides, workshops and seminars	• customized action plan for youth, developed by match support specialist and delivered by mentor	

Note. The information provided for each project is based on content of the final technical report for the project and thus may not be comprehensive.

research results (Lincoln & Guba, 1985): credibility, transferability, dependability, and confirmability.[6] Each type of validity was rated on a three point scale: No, Somewhat, or Yes. Of the five relevant projects, either 2 or 3 received the lowest rating of "No" for each type of validity. Likewise, no more than 1 project received the highest rating of "Yes."

Measures. Nearly all projects (n = 23) included measures of one or more potential youth outcomes. Most commonly included were measures falling into the following domains: psychological or emotional (n = 19), school/academic (n = 19), problem behavior (n = 19), social relationships (n =13). Less common were measures in the domains in the areas of community involvement and prosocial behavior (n = 3), employment (n = 3), and physical health (n = 2). All of these studies with outcome measures included measures in at least two of the aforementioned domains and a substantial number (n = 9) included measures within four or more of the domains. The diversity of outcomes assessed and frequency with which multiple domains of outcomes were measured within the same project are consistent with the diversity of outcomes that mentoring has shown evidence of being able to influence, with youth in a given sample often showing impacts across multiple domains (see, e.g., DuBois et al., 2002, 2011; Eby 2008; Tolan et al., 2014).

Most, but not all studies (75%; n = 18) included measures of mentoring relationships such as their quality or duration. Other types of measures included in projects included measures of mentor characteristics beyond basic demographic information (n = 8), risk and protective factors not likely to be influenced by mentoring, but which may, for example, moderate its effects (n = 9), and program implementation (n = 11).

The most common source for measures was youth self-report surveys, with about 3 in 4 projects making use of this type of measures (79%; n = 19). Surveys of mentors were also utilized in more than half of the projects (58%; n = 14). Records obtained from mentoring programs (42%, n = 10) and other sources such as schools and the juvenile justice system (n = 8) were utilized relatively less often.

Ratings of the quality of the measures utilized in the studies, with respect to reliability (extent to which a measure produces the same results repeatedly when expected to do so) and validity (extent to which a measure assesses what it is intended to measure), were made on a 4-point scale: Excellent, Adequate, Below Average, or Insufficient Information. The measures used in about three-quarters of the projects received ratings of either Excellent (n = 3) or Adequate (n = 9), whereas ratings for the remaining projects were split evenly between Below Average (n = 3) or Insufficient Information (n = 3).

Participating youth. The sample sizes of youth varied considerably across projects, from less than 100 in a few instances to several thousand in a few projects at the other end of the continuum. For the most part, though, samples were in the neighborhood of a few hundred youth.

The most commonly included age groups of youth were children ages 8 to 10 (n = 12), older children ages 11 to 12 (n = 15), early adolescents ages 13-14 (n = 16), and middle adolescents ages 15 to 17 (n = 15). Smaller numbers included children age 7 or younger (n = 3) or older adolescents ages 18 to 21 (n=18). Information regarding the racial or ethnic group membership and socioeconomic

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[6] Credibility refers to the degree of confidence in the "truth" of research findings. Transferability involves the extent to which findings have applicability to other contexts. Dependability involves the degree to which findings are consistent and could be repeated. Finally, confirmability refers to the extent to which the findings of a study show neutrality, such as not being shaped by bias, motivation, or interest on the part of the researchers.

backgrounds of youth was not reported consistently, with approximately one-third of project reports including limited or no information of this nature. For the remaining projects, Latinx, African-American/Black, and White youth were each included in nearly all study samples. American Indian or Alaskan Native youth were reported as included in the study samples for only three projects.

Based on the descriptions provided in reports, the risk status of youth included in the studies was rated in each of the following areas: contextual (having to do with the youth's current life circumstances and environment), processual (having to do with the youth's relationships with parents, peers, or others), individual (having to do with the youth's behavior or other characteristics), and historical (having to do with experiences taking place earlier in the youth's development). These were each rated on a 4-point scale: None, Low, Moderate, and High. Information was lacking to arrive at a rating of overall processual risk in all of the project reports and similarly for historical risk for all but 2 projects. Among 17 projects for which ratings of contextual risk exposure were feasible, the youth involved in these studies were rated as having moderate (n = 7) or high (n = 10) level of risk. For individual risk with ratings of risk (n = 9), projects received ratings of low (n = 4), moderate (n = 2), or high (n = 3) risk.

Specific risk factors also were coded as present when applicable to at least half of the sample. For contextual risk, the factors most frequently were present were low family socioeconomic status (n = 9), single-parent home (n = 7), and parent incarceration (n = 5), involvement in the juvenile justice system (n = 4), and involvement in the child welfare system (n = 3). No single individual risk factor was reported as present for more than two projects. Those applicable to youth within one or two of the projects included learning disability, intellectual/developmental disability, poor social skills, low academic achievement, truancy/absenteeism, and delinquent behavior.

Characteristics of mentors and mentoring relationships. For projects where information about the age of mentors involved in the research was provided, similar numbers included mentors within each of the following age ranges: 18-21 (n = 8), 22-29 (n = 9), 30-54 (n = 9), 55 and older (n = 9). Four projects included younger teen-age mentors. About two-thirds of projects (n = 17) provided information about the race and ethnicity of mentors involved in the research. A majority of these projects (n = 11) reported that Latinx, African-American, and White mentors were all included in the research. The socioeconomic backgrounds of mentors may also be a significant consideration (Deutsch, 2014). However, this information was not provided in the majority of reports (n = 17).

Information about mentoring relationships, such as their composition (e.g., same vs. cross-race/ethnicity) and frequency of contact, was included inconsistently and in varying formats across projects, making it difficult to discern trends in this area. Information regarding the proportion of mentoring relationships that ended prematurely -- that is, before the minimum expected or desired duration – was the information reported most consistently. These data typically indicated that substantial percentages of relationships did not reach established program milestones. For example, more than one-third of relationships typically ended prior to one-year in studies of BBBS community-based programs in which the minimum volunteer time commitment is one-year. Research suggests that program benefits for youth may be dependent to a significant extent on mentoring relationships reaching these types of benchmarks (see, e.g., Grossman, Chan, Schwartz, & Rhodes, 2012; Grossman & Rhodes, 2002).

Findings of OJJDP-Funded Research Projects on Youth Mentoring

Overall, 2,388 distinct findings from the funded research projects were coded. The number of coded findings ranged from 7 to 522 across projects, with an average of 108.55 coded findings (SD = 127.42).

Mentoring Program Effectiveness[7]

Overall effects of mentoring program participation. Seven projects, 3 using randomized control designs and 4 using a quasi-experimental design (QED), examined effects of mentoring program participation on youth outcomes in intent-to-treat analyses (i.e., all youth in the treatment group were analyzed regardless of the extent or quality of mentoring that they received in the program under study). Among the 131 tests of program effects in these studies, 26 were significant (i.e., at least $p < .10$, two-tailed)[8]. All but one of these findings was in a direction of superior outcomes for mentoring program participants; each of the randomized control trials and one of the QED studies (Karcher & Johnson, 2017) reported multiple significant findings.

Three of these projects examined outcomes over significant periods of time: the first 6 years of participation in the Friends of the Children Program (Eddy et al., 2017), which targets youth at high-risk for poor outcomes and begins when children are in kindergarten and continues through grade 12, up to 2 years after participating in My Life (Blakeslee & Keller, 2018), a mentoring program for youth in foster care, and approximately 20 years after participating in the BBBS community-based mentoring program (DuBois et al., 2018). The fourth (Karcher & Johnson, 2016) examined effects of receiving advocacy-oriented mentoring for youth involved in the juvenile justice system at the end of service provision, which typically lasted from 4 to 6 months. Illustrative outcomes with significant differences favoring mentoring program participants include arrest as a juvenile, lifetime smoking, and grit (self-reported consistency and perseverance in pursuit of goals) in the case of BBBS, parent-report measures of externalizing problems, school behavior, and strengths in the case of FOTC, and self-reported self-determination skills, involvement in post-secondary education or training, and days spent in jail in the case of the My Life mentoring program, and connectedness to friends, teachers, and school, expectations for attending college, and self-reported misconduct in the advocacy-oriented mentoring program for those with juvenile offenses. Although not systematically coded, the direction of non-significant findings in these studies appears to be predominantly in a favorable direction (i.e., better outcomes for mentored youth). The remaining two projects were QED evaluations of mentoring for youth with juvenile system involvement (Duriez et al., 2017; Hanten & Schmidt, 2017) and reported non-significant findings on recidivism/re-offending, the only outcome tested.

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[7] We do not consider results from single-group pre-post designs in this section due to the serious threats to internal validity that are posed by factors such as maturation (developmental changes) and history (intervening events other than the program) when utilizing these types of designs as a basis for causal inferences regarding program effects (Shadish et al., 2002).

[8] Statistical significance indicates that there is enough evidence that a relationship observed in the data are unlikely to be due to chance. A p-value of less .10 indicates that the probability the result obtained was due to chance is less than 10%. A criterion of $p < .10$ was used instead of the more conventional $p < .05$ both in the interest of identifying potentially important trends for further investigation and because this threshold was utilized in the majority of reports.

Several projects also reported qualitative findings related to youth outcomes associated with mentoring. Interviews with mentees participating in a Boys and Girls Club of America (BGCA) group mentoring program (Mentzer et al., 2015) revealed that mentees believed that the program provided a good opportunity for them to learn positive social skills. Mentees also identified the BGCA clubs as a place where they had good friends. Similarly, preliminary analyses of photo documentaries from a near-peer mentoring program in Chicago (Saving Lives, Inspiring Youth; Richards et al., 2017) revealed that participants considered their mentoring relationships provided safe spaces. Courser and Kirk (2014) also reported staff impressions of both short- and long-term improvement in the youth's communication skills. Finally, in Kaye and Smith (2014), parents discussed ways in which mentoring impacted their children, including improvements in the child's ability to talk to the parent. Taken together, these qualitative findings suggest types of outcomes that may be especially important to consider when evaluating varying modalities and contexts of mentoring (for example, social competence and peer support in the case of group mentoring and after-school program settings) as well as the potential value of less commonly utilized sources of outcome data (e.g., photovoice, staff ratings)

Moderation. All but one of the seven projects that tested overall effects of mentoring program participation reported results of moderator analyses (i.e., tests of whether estimated effects differed as a function of baseline variables). The moderators examined included youth demographic characteristics such as gender, race/ethnicity, and age, measures of contextual circumstances in the youth's life such as family income and living in an urban neighborhood, and measures of the youth's adjustment or functioning such as involvement in problem behavior and assessed risk for re-offending. Overall, findings generally did not indicate significant moderation of program effects (8 out of 190 tests); there were no consistent patterns to these results within or across studies, suggesting they may well reflect chance associations. One project (Duriez et al., 2017) reported descriptive data consistent with stronger effects of mentoring of recidivism for parole sample sites with higher scores on a measure of mentoring quality, but associated tests of significance were not reported (most likely due to the small number of sites; n = 3) and a similar pattern was not apparent across probation sample sites.

Mediation. No studies tested for mediation of the effects of mentoring program effectiveness.

Mentoring Program Practices

Experimental tests of potential enhancements to mentoring programs. Five projects, four of which used randomized control designs and one of which used a quasi-experimental design, examined effects of potential enhancements to existing mentoring programs (see Table 3). Of 127 tests of effects of the potential enhancements on mentoring relationships and youth outcomes, 6 were statistically significant. These latter statistically significant findings were all in the direction favoring the enhancements. In research examining the impact of mentor training and peer support on mentoring relationship and youth outcomes, for example, Peaslee and Teye (2015) found that the mentor receiving peer support from a more experienced mentor was associated significantly with longer mentoring relationship duration and a reduced risk of early closure (i.e., relationship ending prior to minimum program expectation of at least one year). It should be kept in mind, however, that only a small percentage of results were statistically significant. Thus, for the most part, enhancements did not show evidence of improving mentoring relationships or youth outcomes. Furthermore, the significant findings

that were obtained could be attributable, at least in part, to chance factors that can lead individual findings to reach statistical significance when a large number of tests is conducted.

Levels and correlates of exposure to potential enhancements. Three of the studies reported on measures that address how much mentors and youth were exposed to the enhancements under investigation. Levels of exposure were categorized as very low (less than 25% of mentors or youth), low (25-50%), moderate (51-75%), and high (more than 75%). Using these thresholds, levels of exposure to planned enhancements ranged from very low (mentor support meetups) to moderate (mentor trainings) in Courser et al. (2014), from very low (all 6 thriving support activities) to moderate (at least 2 of the 6 activities) in DuBois and Keller (2017), and very low (mentor training utilization) to moderate (mentor coaching utilization) in Peaslee and Teye (2015).

Each of these studies also examined predictors of variations in exposure to enhancements as well as whether these variations were related to mentoring relationship or youth outcomes. Youth and mentor demographic characteristics and indices of match composition (e.g., same-race or cross-rate) generally did not predict variations in enhancement exposure. DuBois and Keller (2017) found, not surprisingly, that premature match endings (either within the first six months or after this point but prior to one year) were predictive of less exposure to enhancements. Courser and colleagues (2014) similarly found that slower progression to match closure was associated with greater likelihood of the mentor participating in at least one of the post-match enhancement trainings that were part of the enhancement condition. These findings may, to some extent, reflect not only fewer opportunities to partake in enhancement activities within mentoring relationships of shorter duration, but also the enhancement activities contributing to greater longevity of matches (Courser et al., 2014).

Overall, few significant findings emerged in the analyses examining indices of exposure to enhancements as a predictor of mentoring relationship and youth outcomes. Courser and colleagues (2014), for example, found that among mentors in the enhancement condition, extent of participation in enhancement trainings or support activities generally failed to show association with measures of either mentoring relationship quality or youth outcomes. DuBois and Keller (2017) did find that youth in the enhancement condition who were exposed to at least 2 of the 6 types of thriving support activities being tested in their mentoring relationships showed greater improvement in their reported levels of support from adults for thriving relative to a matched group of youth in the standard BBBS mentoring condition.

Moderation. Only one project (Brezina et al., 2016), an investigation of the effects of adding the Mentoring Toward College (MTC) program to the standard BBBS community-based program, tested moderators of the effects of mentoring program enhancements. Looking at gender of the youth as a moderator, results indicated that the enhancement was effective for males, but not females, with respect both to fostering differing types of mentor-mentee interactions, including discussions of academics and work on life skills, as well as with respect to influencing youth problem behavior involvement (measures of aggressive behavior, school delinquency, and general delinquency) and victimization. Interestingly, however, for grade point average, effects of the enhancement for males were significant in the direction of worsening academic performance relative to males receiving standard BBBS programming.

Mediation. No projects tested mediation of the effects of mentoring enhancements in intent-to-treat analyses. DuBois and Keller (2017), however, did find test and find support for a mediational model in which receiving and responding positively (i.e., finding helpful or enjoyable) to at least 3 of the 6 types

of thriving support activities increased adult support for thriving which, in turn, promoted greater youth thriving and, finally, reduced problem behavior (conduct problems and delinquent behavior). Findings thus suggested both that improvements in adult support for youth thriving served as an intervening process through which the thriving enhancements being investigated were able to contribute to gains in youth thriving and that this increased thriving was a pathway or process that contributed to reduced problem behavior.

Correlational studies of mentoring program practices and characteristics. Five projects examined mentoring program practices or characteristics (e.g., community- vs. school-based) as predictors of mentoring relationship and/or youth outcomes using a correlational study design. About one-third of these analyses yielded significant associations (14 of 37 findings). Mentor training emerged as a significant correlate of mentoring relationship or youth outcomes in each of the 4 projects in which it was examined (Courser et al., 2014, 2017; Kupersmidt et al., 2017; Miller et al., 2012). Miller and colleagues, for example, found that among programs serving youth referred from juvenile justice settings, those that reported providing training to mentors also reported a greater percentage of mentees as reaching their personal goals. Similarly, Kupersmidt et al. (2017) found that program reports of alignment with Standards for Training in the *Elements of Effective Practice for Mentoring* (Garringer et al., 2015) were predictive of greater average match length. Findings were not entirely consistent in this area, however. Courser et al. (2017), for example, found that having a mentor who had received training was not related significantly to change on any of a wide range of youth outcome measures.

Of further note, Kupersmidt et al. (2017) found that program report of practices aligned with EEPM standards for recruitment, screening, and relationship closure, considered separately, was not a significant predictor of average match length. Other analyses looking at total numbers of such practices did show associations with match duration. These results could suggest that different practices each made small, but cumulative contributions to prediction of match duration, but alternatively they also could be attributable to the aforementioned association of mentor training with match duration.

In the only project to look at moderation or mediation involving program practices and characteristics, Kupersmidt et al. (2017) found that having specific goals for the children of incarcerated parents (COIP) youth population was not associated with any mentoring relationship or youth outcomes, but that having specialized mentor training and additional funding was differentially predictive of some outcomes for COIP. COIP from programs that reported having specialized training for this population, for example, had longer matches and greater mentor-reported mentoring relationship quality than their counterparts in programs not reporting this type of training. Having additional funding for serving COIP also was predictive of longer match length for this population of youth.

Mentoring Relationships

The funded studies also variously examined predictors of mentoring relationship quality and longevity, mentoring relationship processes, and associations between mentoring relationship characteristics and outcomes for mentored youth. Findings from some of these analyses are addressed in preceding sections (e.g., mentoring program practices as predictors of mentoring relationship quality or duration) and will not be considered again in this section.

Predictors of mentoring relationship quality and longevity. Four projects (Courser et al., 2017; Keller & Spencer, 2017; Kupersmidt et al., 2017; Peaslee & Teye, 2015) examined predictors of

mentoring relationship quality or duration. Predictors examined included youth and mentor demographic characteristics, expectations of mentor and parent for the match, match composition (e.g., same- or cross-gender), and indices of youth functioning or risk status prior to start of the relationship. Kupersmidt et al. (2017) found that numerous indices of youth vulnerability or risk status predicted greater likelihood of a premature ending of the mentoring relationship. These included being a child with an incarcerated parent, being in foster care, being from an immigrant family, having a physical disability, reporting greater delinquent behavior, court involvement, and lower self-esteem. Several of these factors, particularly those pertaining to family risk and problem behavior, predicted premature match closure independent of one another, a pattern that is consistent with a cumulative pattern of potential influence. Independent of other predictors, the likelihood of premature match closure was substantially greater for youth who were middle school age (11–14) and high school age (14.1–19) in comparison to those who were elementary school age (6-10.9).

In their qualitative study, Keller and Spencer (2017) explored in-depth the contribution of youth and relationship characteristics to match closure with a number informative results. Their findings, for example, point toward the importance of both the mentor-youth experience and the network of relationships surrounding the match. More specifically, they found that matches ended when mentors and youth did not feel a shared sense of connection, even when the relationships surrounding the match (i.e. the mentor-parent, mentor-MSS, and parent-MSS relationships) were strong. Conversely, even in matches in which the mentor-mentee dyad was able to form a connection, such connections were difficult to sustain when there were disruptions in the other relationships surrounding the dyad. Interestingly, among the common disruptions in the parent-mentor relationships (reported in 53% of matches sampled) were negative judgements and deficit-based views of the parent on the part of the mentor and mentors' negative responses to instability in youth's lives (e.g. inability to connect with youth due to phone disconnections and frequent moves led mentors to be frustrated and end relationship). Challenges in the parent-MSS relationship (31% of matches) and mentor-MSS relationships (42% of matches sampled) were also frequently evident, however, underscoring the researchers' emphasis on the overall network of relationships surrounding the match.

Mentoring relationship quality and longevity as predictors of youth outcomes. Surprisingly, examination of mentoring relationship quality and longevity as predictors of youth outcomes received significant attention in only two projects (Courser et al., 2017; DuBois et al., 2018). Notably, in the DuBois et al. (2018) follow-up study of the participants in the 1990's Public/Private Ventures randomized control trial of the BBBS community-based mentoring program, having a BBBS relationship of one-year or longer duration was a significant predictor of both greater likelihood of post-secondary attendance and fewer total arrests as an adult. In other analyses based on survey data collected from approximately 30% of the original sample, a report of having had a BBBS mentoring relationship of at least one year in duration to whom the respondent felt close was a predictor of a lower likelihood of a juvenile arrest as well as less reported stealing, greater reported grit, emotional, psychological, and social well-being, and self-rated health during adulthood, and less lifetime use of alcohol. There also were several other outcomes in both sets of analyses from this study (e.g., person offenses, employment) that did not exhibit other associations with the mentoring relationship measures. In tests of moderation, having a one year or longer BBBS relationship was found to be a differentially strong predictor of greater likelihood of post-secondary attendance, lower likelihood of a property offense, and

fewer total offenses among racial/ethnic minority group members. In some instances, the pattern of moderation took the form of the one-year relationship measure predicting poorer outcomes among certain subgroups, such as greater likelihood property and person offenses among White participants.

Research Activities of the National Mentoring Resource Center

Funded by a cooperative agreement from OJJDP, The National Mentoring Resource Center (NMRC) was launched in January 2014. It is intended to serve as a comprehensive and reliable resource for mentoring tools, program and training materials as well as to facilitate access to no-cost training and technical assistance. While accessible to the general public, the primary audience for the National Mentoring Resource Center is youth mentoring practitioners looking for support in more deeply incorporating evidence-based practices to support positive youth outcomes.

The Research Board of the NMRC is comprised of researchers who have expertise in areas that are representative of the diversity in youth mentoring practice with regard to program models, settings for implementation, and specific populations and outcomes of interest. The primary role of the Research Board is to assess and report on the evidence that bears on the effectiveness of different mentoring programs, practices, and resources that are intended to promote positive youth outcomes, particularly those relevant to prevention of delinquent behavior, victimization and juvenile justice system involvement.

The NMRC Research Board's work summarized in the following sections includes reviews completed as of June 2018 in the following categories: mentoring programs, mentoring practices (components of programs, such as mentor training), mentoring resources (specific tools to implement different practices), and mentoring models and special populations. The Measurement Guidance Toolkit, an ongoing project of the NMRC, is also described. A description of the review process for programs, practices, and resources can be found here.

Program Reviews

One of the main activities of the NMRC Research Board is to review the research about rigorously evaluated mentoring programs to rate their currently demonstrated level of effectiveness. These reviews are conducted using the standards and protocols of CrimeSolutions.gov, a resource developed by the Office of Justice Programs.

Programs are rated for effectiveness in one of three categories:

- **Effective**: Program has **strong** evidence that it achieves justice-related goals when implemented with fidelity.
- **Promising**: Program has **some** evidence that it achieves justice-related goals when implemented with fidelity.
- **No effects**: Program has strong evidence that it did not achieve justice-related goals (or had harmful effects).

The listing of each reviewed program on the NMRC website includes its effectiveness classification along with a link to the accompanying profile of the program and its evidence base on CrimeSolutions.gov. Also included are Insights for Practitioners. These commentaries highlight key takeaways, program design considerations, and implementation tips. More information about the program review methodology can be found at CrimeSolutions.gov.

Table 4 below summarizes the results of reviews of 29 programs completed by the NMRC to date (as of June 2018). The NMRC site also includes reviews of 16 additional mentoring programs that were completed prior to the creation of the NMRC.

Of the 29 programs reviewed by the NMRC, 2 were rated as Effective, 16 as Promising, and 11 as No Effects. A majority of the evaluations (93%) used randomized controlled trials (RCTs). The majority of programs (79%, n=23) reviewed by the NMRC to date have involved one-to-one mentoring relationships. About half of these programs (52%, n=15) provide mentoring in school-based setting, while the other half do so in a community-based setting. About 31% of reviewed programs use undergraduate or graduate students as mentors, 14% use high school students, and 55% use adult mentors. Furthermore, in 55% of reviewed programs, mentoring is provided as have multi-component program.

Both effective programs were based on a 1-1 community-based mentoring model, and both targeted a specific population of youth (youth in foster care in one instance and racial/ethnic minority youth assessed as being at high risk of negative outcomes in the other). In the promising category were a mix of community- and school-based mentoring programs, predominantly involving 1-1 mentoring relationships, although one of the promising programs used a group mentoring format. Although most programs in the effective and promising categories were in urban (or suburban settings), this can be considered to be a function of the majority of programs being reviewed from urban or large suburban areas.

Table 4

Summary of NMRC Program Reviews

Program	Review Outcome	Geographic Setting	Youth Characteristics	Mentor Characteristics	Program Characteristics	Evaluation Methodology	Findings
A Stop Smoking in Schools Trial (ASSIST) Program	No effects	Not Specified	Youth 12-13 years Drug and Alcohol Prevention	Program organizer, health promotion specialists, health promotion trainers, peer supporters	School-based mentoring 2 days, followed by 10-14 weeks of peer supported informal conversations	Randomized controlled trial	No significant difference between intervention group and control group for odds of smoking in the last week, at 2 years post-intervention
Achievement Mentoring Program (AMP)	Promising	Urban	Youth 14-15 Students At-Risk of Academic Failure; Minority Students	Volunteer unpaid mentors from school faculty and staff	School-based 1-1 mentoring Mentors provided with training Weekly mentor-youth meetings (15-20 minutes) for 5 months followed by monthly meetings over the next academic year Other components: Academic tutoring and assistance	Randomized controlled trial	Significant impact on discipline referrals, negative school behavior, performance in mathematics and language arts, and other self-reported outcomes; No significant impact on student absences, grade point averages, or decision-making efficacy
An E-mentoring Program for Secondary Students with Learning Disabilities	Promising	Urban	High School Students (10th-12th Grade) Students At-Risk of Academic Failure; Students with mild learning disabilities	Unpaid college student volunteers	School-based 1-1 mentoring Mentors provided with 6 hours of training Matches meet weekly for 12 weeks Other components: Self-advocacy/Empowerment; Visiting College Campuses	Randomized controlled trial	Significant improvement in transition competency, social connectedness, and self-determination; No significant differences on outcome measures of career/educational goals, academic connectedness, and familial connectedness

Program	Review Outcome	Geographic Setting	Youth Characteristics	Mentor Characteristics	Program Characteristics	Evaluation Methodology	Findings
Better Futures Program	Effective	Not Specified	Youth 16-18 years, in foster care or with mental health concerns	Volunteer graduate and undergraduate students	Community based 1-1 mentoring 10-month program including 4-day, 3-night summer institute on university campus, one-on-one bimonthly peer-coaching session, 5 mentoring workshops with peer coaches/professionals, plus additional self-advocacy and self-empowerment components.	Randomized Controlled Trial	Significant improvements in self-determination, mental health empowerment, transition planning, career self-efficacy, hope, barriers to education, postsecondary preparation, and transition planning; no significant effect on WOL or mental health recovery
Brief Instrumental School-Based Mentoring Program	No Effects	Urban	Middle School Students (Grades 6-7) Students At Risk of Academic Failure	Undergraduate and Graduate Students	School-based 1-1 mentoring 45 minutes, 1x/week for 8 weeks Program based on Brief Mentoring Model (Spencer and Rhodes, 2005); Motivational Interviewing (Miller and Rollnick, 2002)	Randomized controlled trial	Significant increase in students' math grades and life satisfaction; No significant effect on students' English, reading, or science grades, measures of school connectedness, tardiness, or school absences
Brief Instrumental School-Based Mentoring Program–Revised	Promising	Urban	11-14 Youth at risk of academic failure	Undergraduate and graduate students Not paid	School-based 1-1 mentoring Mentors provided with training Mentors meet weekly with youth (45 minutes) for 8 weeks Other components: Social/personal skills training/classes (e.g., interpersonal problem solving, coping); Academic tutoring and assistance Program based on Brief Mentoring Model (Spencer and Rhodes, 2005); Social-Cognitive Theory (Bandura, 1997); Cognitive-Dissonance Theory (Draycott and Dabbs, 1998); Theory of Motivational Interviewing (Miller and Ross, 2009)	Randomized controlled trial	Significantly fewer unexcused absences, significantly higher math and English grades and self-reported levels of life satisfaction; no effects on school-reported behavioral infractions or grades for science or history
Challenging Horizons Program – After-School Version (CHP-After School)	No Effects	Rural, Suburban, Urban	10-14 Students with ADHD	Undergraduate Students (9 hours of training); Graduate students are site supervisors	School-based 1-1 mentoring 2 hours and 15 minutes, 2x/week throughout the school year	Randomized controlled trial	No significant differences between youths in intervention group and those in control group

Program	Review Outcome	Geographic Setting	Youth Characteristics	Mentor Characteristics	Program Characteristics	Evaluation Methodology	Findings
Challenging Horizons Program – Mentoring Version (CHP-Mentoring)	No Effects	Rural, Suburban, Urban	10-14 Students with ADHD	Adult mentors (teachers, school staff); Program consultants (school-employed mental health professionals or doctoral psychology students)	School-based 1-1 mentoring Mentors: 1x/week during school day; Mentors meet with program consultants every 2 weeks	Randomized controlled trial	No significant differences between youths in intervention group and those in control group for academic functioning and parent/teacher ratings of ADHD behavior
Check & Connect	No Effects	Urban	High school students referred due to unexcused absences	Teacher or school staff member	School-based 1-1 mentoring Program 2 or more years in duration; includes scheduled and unscheduled meetings of varying frequency depending on youth level of risk.	Randomized controlled trial (multiple studies)	Statistically significant decrease in absent days and significant increase in days in school; Significantly lower math scores; No significant differences in other academic outcomes
Check & Connect Plus Truancy Board (C&C+TB)	Promising	Urban	High school students referred to community truancy board or juvenile petition due to unexcused absences	Truancy board composed of school administrators, volunteers from social service agencies and local businesses, and a juvenile court probation officer (mentor)	Community-based 1-1 mentoring Truancy specialist meets with students formally and informally starting in 9th grade and continuing until graduation; type and frequency of contact varies by student risk level	Quasi-experimental study with comparison group matched by grade, gender, academic performance, and school behavior.	Students in intervention group were more likely to have graduated and less likely to have dropped out of school.
Cognitive–Behavioral Intervention for Children with Emotional and Behavioral Disturbances	Promising	Rural	8-12 year old youth with emotional and behavioral disturbances	Community Mental Health Center Employees; paid mentors.	Community-based 1-1 mentoring Mentors provided 8 hours of training Mentors meet weekly with youth (3 hours/week). Minimum program expectation was 8 weeks Other components: Family services (e.g., support, parent education); Mental health services; Case management	Quasi-Experimental Outcomes: Parental Attachment Externalizing Behavior Problems Internalizing Behavior Problems Parenting Stress Perceived Social Support	Significant improvements on measures of social problem solving and behavior problems; No significant improvements with attachment to parents and social skills among children in intervention group

Program	Review Outcome	Geographic Setting	Youth Characteristics	Mentor Characteristics	Program Characteristics	Evaluation Methodology	Findings
Cognitive–Behavioral, Group-Mentoring Intervention for Children with Emotional and Behavioral Disturbances	Promising	Rural	8-12 year old youth with emotional and behavioral disturbances	Community Mental Health Center Employees; paid mentors.	Community-based group mentoring Mentors provided with 24 hours of initial training Weekly group mentoring meetings (3-4 hours per week) for a 12-week period.	Randomized Controlled Trial	Children in intervention condition showed significant improvements in externalizing and internalizing problems, social problem-solving, and frequency of appropriate social skills and behaviors compared with children in the control group.
Cross-Age Peer Mentoring Program	Promising	Urban	Late elementary-early middle school students Students at Risk of Academic Failure; Youth with Mental Health Concerns (Maybe? technically says "designed to serve a mix of children who are both identified and not identified as at risk for social problems and academic disengagement."	High School Students Not paid	School-based 1-1 mentoring Mentors provided training **Faraway Model (144 hours):** Either Monthly daylong sessions over 6 months (96 hours total) or 2-week summer program (8 hours a day for 6 consecutive days, for a total of 48 hours) OR **Nearby Model (144 hours):** 2 hours/day, twice a week across 9 months (72 hours total) or for 6 hours in quarterly Saturday events (24 hours total) + Summer program (48 hours) Other components: Social/ personal skills training/classes (e.g., interpersonal problem-solving, coping); Family services (e.g., support, parent education)	Randomized Controlled Trial (multiple studies)	Significant improvement on measures of spelling achievement and connectedness to school and to parents compared with the control group; No significant difference in connectedness to reading, future, or friends between control and mentored group
Early Start to Emancipation Preparation – Tutoring Program	No Effects	Urban	Youth (14-15 years) in foster care, in need of independent living assistance, and 1 to 3 years behind grade level in reading and/or math	College students	Community-based 1-1 mentoring Youth and mentor/tutor meet 2 times a week for 2 hours in the youth's home for up to 65 hours Mentors/tutors provided with a 1-day training and a curriculum handbook	Randomized Controlled Trial	Letter-Word Identification Calculation Passage Comprehension School Grades Highest Completed Grade Level High School Diploma or GED School Behavior

Program	Review Outcome	Geographic Setting	Youth Characteristics	Mentor Characteristics	Program Characteristics	Evaluation Methodology	Findings
Eisenhower Quantum Opportunities	Effective	Suburban, Urban	Ethnic minority youth (14-17) identified as being at high risk	Young adults/tutors Payment Not Specified	Community-based 1-1 mentoring plus group mentoring Mentors provided with training Length of program 4 years - Per year: 291-410 hours of participation (135-180 hours for tutoring/mentoring, 44-50 hours for community service/youth leadership, and/or 112 hours for life skill training) Other components: Academic tutoring and assistance, Social/personal skills training/classes (e.g., interpersonal problem solving, coping)	Randomized Controlled Trial Outcomes: GPA HS Graduation Rates College Acceptance Rate	Program participants had significantly higher GPAs, high school graduation rates, college acceptance rates as compared with control group youths.
Experience Corps	Promising	Urban	Grades 1-3 (ages 6-11) at risk of academic failure	Older adult paid volunteers (55 years and older)	School-based 1-1 mentoring Mentors provided training Matches meet twice per week for 8-10 months Other components: Academic tutoring and assistance	Randomized Controlled Trial	Significantly greater gains in reading comprehension scores and teacher-assessed reading skills over an academic year; No significant differences in vocabulary and work attack scores from pre-to-post intervention
Fostering Healthy Futures Program	Promising	Urban	Youth aged 9-11 who were exposed to violence, had mental health concerns and who were in foster care	Social Work and Psychology graduate students (unpaid but received course credit) No payment (but received credit)	Community-based 1-1 mentoring No training provided to mentors 9-month intervention (Manualized Skill Group: 90 minutes/week for 30 weeks; One-on-one Mentoring: 2-4 hours/week for 30 weeks) Other components: Social/personal skills training/classes (e.g., interpersonal problem solving, coping)	Randomized Controlled Trial	Participation in the intervention was associated with significantly reduced mental health problems and measures of dissociation; Treatment group youth living in nonrelative foster homes at baseline were more likely to achieve permanency and experience fewer placements

Program	Review Outcome	Geographic Setting	Youth Characteristics	Mentor Characteristics	Program Characteristics	Evaluation Methodology	Findings
Home-Visiting Program for Adolescent Mothers	Promising	Urban	12-18 Females; African American, Adolescent Mothers	Female adults who lived in the community, had a HS degree, experience in health care, child development, or social work Payment Not Specified	Community-based 1-1 mentoring Mentors provided with 16 hours/2 days of training Mentors met with youth in their home bi-weekly and monthly over a period of 2 years. Other components: Family services (e.g., support, parent education); Social/personal skills training/classes (e.g., interpersonal problem solving, coping); Sex Education	Randomized Controlled Trial	Promoted positive parenting attitudes and school continuation; no significant influence on mental health, contraceptive use, or repeat teen pregnancy
KEEP SAFE	Promising	Urban	10-12 Girls; Drug and Alcohol Prevention; Youth in Foster Care	Adult staff members Payment Not Specified	Community-based 1-1 mentoring Mentors provided with training Mentors meet weekly for 1 year or more Other components: Family services (e.g., support, parent education); Social/personal skills training/classes (e.g., interpersonal problem solving, coping); Group mentoring (one mentor and more than one mentee)	Randomized Controlled Trial Outcomes focused on substance use and delinquent behavior	Participation in intervention associated with Significant decline in tobacco, marijuana, overall substance use, and delinquent behavior; no impact on girls' alcohol use, association with delinquent peers, or overall delinquent behavior
National Guard ChalleNGe Program	No Effects	Not Specified	16-18 Youth with mental health concerns	Mentee-nominated Family Members, Family Friends, School personnel, or religious leaders; mentors were paid.	Community-based 1-1 mentoring Mentors provided with training Mentor-youth meet at least 4 times during a 1 year period Other components: 2-week military discipline and teamwork training; 20-week residential military training	Randomized Controlled Trial	Positive impact on employment and GED attainment among participating youth as compared with control group youth but no significant effects on youths' frequency of arrests, marijuana, or other illegal drug use, delinquent behavior, or psychological distress
Peer Group Connection (PGC) Program	No Effects	Urban	9th Grade Students Youth At Risk of Academic Failure	11th and 12th grade high school students (unpaid volunteers)	School-based group mentoring Mentors provided with training Weekly meetings for 1 year, year 2 with mentor-youth check-ins Other components: Social/ personal skills training/classes (e.g., interpersonal problem solving, coping)	Randomized Controlled Trial	No improvements in high school graduation rates; Significant positive effect on the graduation rate among male students, however

Program	Review Outcome	Geographic Setting	Youth Characteristics	Mentor Characteristics	Program Characteristics	Evaluation Methodology	Findings
Promotor Pathway Program	No Effects	Urban	14-24 Drug and Alcohol Prevention	Adult staff members with >4 years experience with youth development Paid mentors	Community-based 1-1 mentoring Mentors provided with training Mentors and youth meet bi-weekly for 18 months Rhodes et al. (2006) model of youth mentoring; Promotor Pathway Program model; Empowerment Theory (Zimmerman, 2000)	Randomized Controlled Trial	Statistically significant, positive effects on school enrollment, housing stability, and births; Statistically negative effects on getting into a fight and binge drinking; No effects on employment, carrying a weapon, incarceration, marijuana use, or perception of control over one's life
Reading for Life (RFL)	Promising	Suburban	13-18 Juvenile Offenders	Adult volunteers with 12 week training Unpaid	Community-based team mentoring (multiple youth and mentors) plus one-on-one youth-mentor meetings Mentors provided 12 weeks training Youth and mentors meet twice weekly for 10 weeks Other components: Community service	Randomized Controlled Trial Outcomes focused on justice system involvement	Decreased chance of prosecution for any offense (including misdemeanors and felonies) and decreased arrests than with the comparison group
Rochester Resilience Project (RRP)	Promising	Urban	5-8 Students At-Risk of Academic Failure; Youth with Mental Health Concerns; Drug and Alcohol Prevention	4 female paraprofessionals (employed by school district) Unpaid	School-based 1-1 mentoring Mentors provided training Mentors meet weekly (25 minutes) with youth for 14 weeks Other components: Social/personal skills training/classes (e.g., interpersonal problem solving, coping)	Randomized Controlled Trial Outcomes: Task Orientation Behavior Control Assertiveness versus Withdrawn Behavior Peer Social Skills Office Disciplinary Referrals Suspensions	Significant, positive effect on measures of children's task orientation, behavior control, assertiveness, and peer social skills; Significant decline in average numbers of suspensions and office disciplinary referrals

Program	Review Outcome	Geographic Setting	Youth Characteristics	Mentor Characteristics	Program Characteristics	Evaluation Methodology	Findings
SAM (Solution, Action, Mentorship) Program for Adolescent Girls	Promising	Urban	13-18 Females; Drug and Alcohol Prevention	Community and Peer Mentors	School-based group mentoring 1 hour group sessions (7-8 students), x1/week for 16 weeks	Randomized Controlled Trial	Statistically significant effect on lowering drug use, improving social competence, increasing knowledge surrounding drug use, and increasing negative attitudes toward drug use; No statistically significant effect on GPA or self-esteem
School-Based Mentoring Program for At-Risk Middle School Youth	Promising	Urban	13-15 Students at Risk of Academic Failure	School faculty and staff Unpaid	School-based 1-1 mentoring No mentor training Mentors meet with youth weekly for 18 weeks Other components: Social/personal skills training/classes (e.g., interpersonal problem solving, coping)	Randomized Controlled Trial Outcomes: Office Disciplinary Referrals Unexcused Absences School Connectedness	Significant decline in the number of office disciplinary referrals and a significant increase in school connectedness; No significant impact on unexcused absences
SOURCE (Student Outreach for College Enrollment) Program	No Effects	Urban	16-18 Students At-Risk of Academic Failure	Undergraduate and graduate students Paid mentors	Community-based 1-1 mentoring Mentors provided with training Mentors meet with youth over 12 month period (frequency not specified) Other components: Academic tutoring and assistance	Randomized Controlled Trial	Minimally positive effects on college enrollment rates and number of months enrolled in California State University and University of California campuses; No statistically significant effects on 2-year, 4-year, or overall college enrollment or months of attendance
Sources of Strength	Promising	Rural, Urban	Youth with Mental Health Concerns	Adults and school staff; Peer leaders	School-based mentoring 30-60 minutes, every other week through school year	Randomized Controlled Trial	Significant improvements on perceptions and behaviors pertaining to suicide and on social connectedness

Program	Review Outcome	Geographic Setting	Youth Characteristics	Mentor Characteristics	Program Characteristics	Evaluation Methodology	Findings
Youth-Nominated Support Team-Version II (YST-II)	No Effects	Urban	13-17 Youth with mental health concerns; Youth with recent hospitalization	Mental Health Professionals (doctoral-level psychologists, masters-level social workers, and psychiatric nurses) with > 3 years of professional experience with adolescents; mentors unpaid.	Community-based 1-1 mentoring Mentors provided with training Matches meet weekly for 3 months	Randomized Controlled Trial	No significant impact on participants' suicidal ideation, depression, negative attitudes about the future, or parent-reported functional impairment

Practice Reviews

The NMRC Research Board's practice reviews are conducted using a customized process similar to, but distinct from, the CrimeSolutions.gov program reviews. Many of the practices reviewed can be implemented in a variety of program models and settings.

The resulting profile for each practice reviewed includes a detailed description of the practice and its evidence base as well as links to resources that can help practitioners implement or adapt the practice for their own programs. Practices are rated for effectiveness in one of four categories (the first 3 of which are similar to effectiveness ratings for program reviews):

- **Effective**: Practice has **strong** evidence that it achieves desired outcomes when implemented with fidelity.
- **Promising**: Practice has **some** evidence that it achieves desired outcomes when implemented with fidelity.
- **No effects**: Program has strong evidence that it did not achieve desired outcomes (or had harmful effects).
- **Insufficient research**: Some relevant research may be available but it is inconclusive. More research is needed to determine effectiveness.

More detailed information about the practice review methodology can be found here.

The 17 practices reviewed by the NMRC Research Board to date are summarized in Table 5. Six of these have been rated as Promising based on the available research evidence:

- Mentor-Mentee Activity Guidance
- Strategies for Preventing Peer Aggression, Bullying, and Victimization
- Strategies for Setting and Working on Mentee Goals
- Support for Mentor Advocacy
- Support for Youth Thriving
- Youth Initiated Mentoring (YIM)

All of these practices involve strategies and activities that staff at mentoring programs or agencies can implement to enhance the mentoring experience of mentors, youth, or both through some combination of additional training/support for mentors to engage in specific activities as part of their mentoring relationship, along with match supervision and support focused on these practice elements.

The remaining 11 practices have been rated as "Insufficient Research" suggesting that, although these are practices of interest and relevance to the field, further research is required to be able to make a determination about their effectiveness. Practices related to matching as well as mentor recruitment, training, match support, and retention are among those in this latter category. This is noteworthy given that these reflect 4 of the 6 standards in MENTOR's Elements of Effective Practice for Mentoring™.

Table 5

Summary of NMRC Practice Reviews

Name of Practice	Description of Practice	Overall Rating	Evidence Base[a]
Family Engagement	The positive engagement of the mentee's parents and family in the mentoring relationship and process in order to facilitate mentor-mentee interactions, strengthen the mentoring relationship, and promote positive outcomes for mentees.	Insufficient Research	EF: 0 PR: 0 NE: 0 IE: 5[b]
Family Support	Systematic efforts to provide services and opportunities to the families of mentees, including direct services or referrals. This is distinct from practices geared primarily toward strengthening the mentor-mentee relationship or mentoring of an entire family unit.	Insufficient Research	EF: 0 PR: 0 NE: 0 IE: 1
Matching Strategies Informed by Participant Characteristics	The intentional use of information about mentor and mentee characteristics to inform the mentor-mentee matching process.	Insufficient Research	EF: 0 PR: 0 NE: 0 IE: 3
Match Support for Mentors	Purposeful and ongoing communication between mentoring program staff and mentors regarding their relationships with mentees after the relationships have begun.	Insufficient Research	EF: 0 PR: 1 NE: 0 IE: 5
Mentor-Mentee Activity Guidance	Supporting matches with engaging in particular types of activities or discussions, either optional or required, distinct from pre- or post-match mentor training and match support as well as one-time events that may be sponsored by programs.	Promising	EF: 0 PR: 4 NE: 2 IE: 2
Mentor Retention Strategies	Efforts to sustain mentor involvement in a program, including ensuring mentor participation through an initial commitment period as well as toward extending participation beyond initial expectations or agreement; distinguished from practices such as mentor training by their intentional focus on mentor retention.	Insufficient Research	EF: 0 PR: 0 NE: 0 IE: 5[b]
Mentor Training for Cultural Competence	Guidance that is intended to develop attitudes, behaviors, and practices that enable mentors to interact and work effectively with mentees from different cultural backgrounds.	Insufficient Research	EF: 0 PR: 0 NE: 0 IE: 2
Monitoring and Evaluation	Monitoring is the routine collection of information as it pertains to individual mentoring relationships within a program, often with a focus on determining compliance with programmatic expectations or standards. Evaluation involves more systematic collection and analysis of information with the aim of assessing need for a program or practice, program design and logic/theory, implementation of a program/practice, impact of a program/practice, and/or program/practice cost and efficiency.	Insufficient Research	EF: 0 PR: 0 NE: 0 IE: 1

Name of Practice	Description of Practice	Overall Rating	Evidence Base[a]
Pre-Match Mentor Training	Guidance intended to help prepare mentors to work successfully with their mentees, provided before or very soon after beginning their mentoring relationship, with a focus on strengthening mentors' knowledge and skills for how to develop and sustain high-quality and effective relationships with their mentees.	Insufficient Research	EF: 0 PR: 1 NE: 0 IE: 5
Post-Match Mentor Training	Providing mentors with structured guidance and instruction after they have begun their mentoring relationships with youth.	Insufficient Research	EF: 0 PR: 0 NE: 0 IE: 4
Strategies for Preventing Peer Aggression, Bullying, and Victimization	Intentional program efforts to develop behaviors, skills, and attitudes that reduce or prevent engagement in (1) aggressive or bullying behavior and (2) experiencing victimization by peers.	Promising	EF: 0 PR: 1 NE: 0 IE: 1
Strategies for Recruiting Male Mentors[c]	Intentional efforts within mentoring programs for youth to increase the number or proportion of males who are available to serve as mentors.	Insufficient Research	EF: 0 PR: 0 NE: 0 IE: 0
Strategies for Setting and Working on Mentee Goals	Systematic efforts within programs to support mentee goal-setting and pursuit in mentoring relationships.	Promising	EF: 1 PR: 3 NE: 0 IE: 2[b]
Support for Match Closure	Efforts by the mentoring program to ensure that the relationship ending process is handled in a way that is beneficial to both youth and mentors.	Insufficient Research	EF: 0 PR: 0 NE: 0 IE: 3[b]
Support for Mentor Advocacy	Practice that focuses on enhancing the actions that mentors may take on behalf of their mentees outside of the mentor-mentee relationship itself (i.e., the time they spend together).	Promising	EF: 0 PR: 2 NE: 0 IE: 0
Support for Youth Thriving	Intentional program efforts to cultivate attitudes, skills, and behaviors among mentees that are widely understood to be centrally important to young persons' positive development and capacity to make meaningful contributions to their communities.	Promising	EF: 0 PR: 3[b] NE: 1[b] IE: 1
Youth Initiated Mentoring (YIM)	Supporting youth with engaging nonparental adults from their social networks (e.g., teachers, family friends, extended family members) in mentoring interactions and relationships.	Promising	EF: 0 PR: 1 NE: 0 IE: 0

[a]EF = Effective, PR = Promising, NE = Null Effect, IE = Insufficient Evidence.
[b]The evidence base included at least one study that included more than one empirical test of the practice.
[c] Empirical tests of the practice were not available for this review.

Resource Reviews

The National Mentoring Resource Center provides a collection of mentoring handbooks, curricula, manuals, and other resources that practitioners can use to implement and further develop program practices. The resources posted on the NMRC site have all been reviewed by the NMRC Research Board.

Reviews fall into one of two categories:

- **Tier 1** review is used when a resource has been evaluated for effectiveness in research that meets established criteria for rigor. This research is reviewed using a standard protocol and scoring instrument to arrive at a classification of the evidence base for the resource in a manner similar to programs and practices (see above). Only those resources classified as Effective or Promising are listed on the National Mentoring Resource Center website.
- **Tier 2** review is used for any resource that has not yet been rigorously evaluated for effectiveness. The purpose of this review is to ensure that the resource does not conflict significantly with other relevant research. Only those resources that pass this screening are listed on the National Mentoring Resource Center website.

The listing for each resource on the NMRC website includes a brief description, a summary of applicable research (Tier 1 reviewed resources only), and information for accessing and using the resource. Most resources are directly available for download from the National Mentoring Resource Center website or elsewhere online. More detailed information about the procedures used by the Research Board to review resources can be found here.

Table 6 summarizes the 62 reviewed resources available on the NMRC site. Resources are grouped into 6 categories (listed in the table with sample resources noted):

- Mentor Guides and Handouts
- Mentor Training Resources
- Program Management Resources
- Program Policies and Procedures
- Recruitment and Marketing Tools
- Resources for Mentees and Families

All resources reviewed to date fall into the "Tier 2" category (the resource has not been rigorously evaluated for effectiveness). The majority of resources reviewed fall in the categories of "Mentor Guides and Handouts" (21 resources) and "Program Management Resources" (26 resources).

Reviewed resources are nominated by Research Board members, MENTOR, and nominations through the NMRC site. At present, it is unknown if the greater proportion of resources in the two areas noted above reflect greater practitioner demand or development work in those particular areas, or simply reflects resources that have come to the attention of those nominating them for review. The remaining categories with fewer resources (e.g., recruitment and marketing, resources for mentees and families) are an area of potential need for further resource development, however, it is unclear at present if these resources do exist and have not yet been nominated or if there is practitioner need and/or demand for more resources in these areas of mentoring practice.

Table 6

Summary of NMRC Resource Reviews

Resource Category	Number of Posted Resources	Sample Resources
Mentor Guides and Handouts	21	Growth Mindset for Mentors Toolkit Tip Sheet for Mentors: Supporting Children Who Have an Incarcerated Parent
Mentor Training Resources	5	Training New Mentors: Effective Strategies for Providing Quality Youth Mentoring in Schools and Communities Talking it Through: Communication Skills for Mentors
Program Management Resources	26	College and Career Success Mentoring Toolkit Seventh Generation National Tribal Mentoring Program: Kinship Mentoring Framework Group Session Facilitator's Guide
Program Policies and Procedures	1	Generic Mentoring Program Policy and Procedure Manual
Recruitment and Marketing Tools	3	Effective Mentor Recruitment: Getting Organized, Getting Results
Resources for Mentees and Families	6	Preparing for Your Mentoring Relationship Video Mentee Training Toolkit: A Guide for Staff

Model and Population Reviews

Each Mentoring Model/Population Review is conducted by the NMRC Research Board with the intention of examining the full body of rigorous evidence as it pertains to either mentoring for a **specific population** of youth (e.g., youth with disabilities, immigrant youth) or a **specific model of mentoring** (e.g., group mentoring, e-mentoring). Each review is built around a thorough literature review for the topic in an attempt to answer key questions about mentoring's effectiveness, participant characteristics and program processes that influence that effectiveness, and successful implementation of relevant programs to date.

Each review also contains an "Implication for Practitioners" section that highlights steps programs can take to use or build on this evidence base. A draft version of each review and accompanying implications for practice is anonymously reviewed by at least one practitioner and one researcher who have expertise in the topic. A Research Board member serves as the coordinating editor for each review and makes final decisions regarding the acceptability of its content, prior to submission for final review and approval by the Office of Juvenile Justice and Delinquency Prevention.

Table 7 summarizes the 12 reviews completed to date. Three reviews fall under the "model" category (E-Mentoring, Group Mentoring, and One-to-One Cross-Age Peer Mentoring). Eight reviews reflect mentoring for specific populations of youth (Black Male Youth, Children of Incarcerated Parents, Immigrant and Refugee Youth, LGBTQI-GNC Youth, Youth and Young Adults During Reentry from Confinement, Youth in Foster Care). One review, specially requested by MENTOR, examines research as it relates to mentoring and domestic radicalization.

Most reviews found evidence favoring the effectiveness of mentoring for positively influencing youth outcomes. However, available research typically was limited in scope and rigor and thus sufficient to provide only preliminary or tentative conclusions. Gaps in knowledge pertaining to factors that may moderate the effectiveness of mentoring as well as causal processes that may link mentoring to youth outcomes are especially prominent in the reviews.

Table 7

Summary of NMRC Model & Population Reviews

Name of Review	Scope	Questions Addressed in Review				Implications for Practice
		Documented Effectiveness	**Factors Influencing Effectiveness**	**Intervening Processes Linking Mentoring to Youth Outcomes**	**Efforts to Reach and Engage Targeted Youth, Achieve High quality Implementation**	
Black Male Youth	Formal and informal mentoring relationships and activities that take place between Black boys (i.e., mentees) and older, more experienced persons (i.e., mentors) who operate in a nonprofessional capacity to provide support for the youth's healthy development.	• Available research points to a range of potential benefits of both formal and informal mentoring for African-American boys, including in the areas of academic, social-emotional well-being, mental health, and preventing risky behaviors. However, because of limitations in the rigor of this research (e.g., there have been few evaluations in which African-American boys are randomly assigned to mentoring versus a control group), the evidence in support of such benefits is at present tentative and preliminary.	• It is possible that mentoring programs for Black male youth are more effective when they take into consideration Black/African-American culture, history, and values in their design and implementation (i.e., are culturally tailored); research addressing this possibility is lacking. • Cultural mistrust may influence Black boys' perceptions of their White mentors, which may influence the quality of their relationships. Research directly addressing this possibility, however, is lacking. • Group mentoring, rather than one-on-one, is a model that may be more culturally congruent with African-American culture and may be useful in promoting brotherhood and belonging; research, however, has not compared the effectiveness of group versus one-on-one mentoring for Black boys. • Available research suggests that mentors and teachers who provide feedback to African-American students emphasizing that they have high expectations of their students/mentees, that they believe that their students/mentees can meet these expectations, and that they believe that their students/mentees can grow their abilities could be more effective in improving the academic outcomes	• Theory and research suggest that developing a positive ethnic and racial identity could be important in linking mentoring to positive outcomes in other areas (e.g., academics) for Black male youth; however, research directly examining this possibility is lacking. • Group mentoring programs that develop a sense of unity, brotherhood, caring, and trust among program members may be particularly helpful to Black male youth; however, research on the role of these group processes in the outcomes for Black boys in mentoring is limited. • Developing close relationships with mentors may benefit Black boys by providing them with opportunities to develop healthy help-seeking strategies and to trust and depend on others for support; research addressing these processes, however, is very limited. • Mentoring relationships with more instrumental and emotional support may prevent behavioral problems in Black boys, but research is limited.	• Various resources are available that may be helpful to organizations and programs in determining if they are ready to adequately serve Black boys within a mentoring framework and for building their capacity in areas such as mentor training and recruitment; although in many cases informed by available research, these resources have not been examined with respect to their potential to benefit programs in areas such as reach and engagement, quality of implementation, and sustainability. • It appears that Black boys may have less access to various kinds of informal mentors in their communities compared to Black girls; therefore, the need for engagement in formal mentoring programs may be especially high for male youth within the Black community. • Research suggests that Black men are more likely to serve as informal rather than formal mentors and that they experience barriers to	• Don't assume that all Black male youth will need the same mentoring. • Proper training of mentors in aspects of race and culture may be critical. • Recruit mentors who have the right skills and values to mentor Black male youth effectively. • Consider activities and strategies that get young Black males to recognize the mentoring they do have in their lives and to find additional mentors. • Make sure that parents and guardians are treated as partners, not obstacles in the mentoring relationship. • Fight for larger social justice goals in your community.

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			of African-American youth; research addressing these possibilities specifically for Black male youth, however, has not yet been conducted. • Mentor gender (i.e., male mentors) and similar life experiences (and perhaps shared cultural similarity) between mentors and mentees may be important in the mentoring relationships of Black boys; however, research addressing these possibilities is limited. • It appears that mentoring has the potential to lessen the negative effects of interpersonal racial discrimination on Black boys, although available research is again limited and preliminary.	• Information and guidance provided by mentors may have the potential to promote positive educational outcomes for Black boys, but research is again lacking.	serving as mentors in formal mentoring programs.	
Children of Incarcerated Parents	Children of incarcerated parents are defined as young people who have experienced the incarceration of at least one of their parents or primary caregivers while growing up.	• Available research suggests that program-arranged mentoring has the capacity to contribute to observable improvements for children of incarcerated parents in their behavior, relationships, and their emotional well-being; however, the scope and rigor of the available evidence are insufficient to draw strong conclusions.	• The existing literature suggests that the effects of mentoring should not be assumed to be similar across children of incarcerated parents with varying personal characteristics and life experiences (for example, capacity for trust and resilience, strength of relationship between child and incarcerated parent, and whether caregiver is a biological parent or not); available research is extremely limited, however, and insufficient to provide a basis for even preliminary conclusions about these possibilities. • As is often common in programs serving higher risk youth, program practices that address critical needs within the family and that serve to strengthen the relationship between the parent and the child, are theoretically promising for	• For the children of incarcerated parents from backgrounds characterized by the highest levels of environmental and personal risk, the existing literature suggests that the full potential of the mentoring relationship to lead to positive youth outcomes is most likely to be realized when the mentor becomes integrated with the array of services and supports necessary to equip the child's household to thrive; to date, however, there is no research that has explicitly examined these causal processes. • The disruptions that children experience to their relationships with incarcerated parents are known to shape	• The literature on mentoring for children with incarcerated parents has helped to shine a light on the complexities that mentoring programs may need to address to effectively serve this population; these include the needs and interests of the children, which may be evident at times in a reluctance to enter into a trusting relationship with an adult mentor, and the needs of the caregivers and their interest/concerns related to having a child in a mentoring program; however, research that addresses the possible influence of these factors	• A networked approach that deeply involves parents and caregivers is a good start. • A Positive Youth Development approach will get mentors going in the right direction. • Training for mentors in trust-building and communicating with the family is a must. • Programs may want to think about how to extend the benefits of the mentoring experience.

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			enhancing the effectiveness of mentoring as a support strategy for children of incarcerated parents; none, however, have yet benefitted from systematic investigations of their effectiveness. • For youth with incarcerated parents, positive benefits of program-arranged mentoring have been more evident while they are actively engaged with their mentors, and the published research does not provide any evidence that the benefits of mentoring are sustained over the longer-term if the relationship has ended.	the perceptions these children have of themselves and their own personal identity; as such, the ways in which these children come to understand what it means to be a mentee and the potential expectations they may have about the value of the relationship with their mentor appears important for understanding how mentoring might contribute to positive youth outcomes; the degree to which this type of pathway is important in linking mentoring to positive outcomes for these youth, however, has not yet been systematically studied.	with respect to engaging children with incarcerated parents is not currently available. • Sustaining the length of the mentoring relationship for young persons with incarcerated parents is apparently difficult for programs serving this population. • As has been indicated for mentoring programs in general, and those serving higher-risk youth in particular, it may be critically important for match retention to provide mentors with high-quality pre-match training and ongoing support by agency staff; research, however, has not examined this possibility.	
E-Mentoring	E-mentoring refers to mentoring conducted entirely or in part using electronic communication, such as email, text, social media, messaging applications, or computer platforms. This also includes the use of technology to support and/or enhance in-person mentoring	• The available evidence on the effectiveness of e-mentoring is mixed and does not allow one to draw conclusions about which formats work for which types of youth. • The evidence also does not permit even tentative conclusions about the effectiveness of e-mentoring for different types of youth outcomes.	• Some demographic characteristics, including gender, race, socioeconomic status, and having an educational role model at home, may influence the impact of e-mentoring, although currently available research does not suggest reasons why. • General self-efficacy and motivation to participate might be related to the development of a positive relationship between a mentor and mentee in an e-mentoring program, but it is not clear if this truly moderates program outcomes for youth.	• Studies assessing interaction frequency and relationship quality in e-mentoring show these factors have an influence on youth outcomes, such as self-efficacy and motivation. • While some studies did not directly assess what processes mediate effects of e-mentoring program participation on youth outcomes, their results could be informative based on the consideration given to differences in program experiences related to variation in outcomes for participating youth.	• E-mentoring programs that have been implemented and sustained seem to benefit from clear guidelines, structure, and organizational tools.	• Consider how mentor-mentee interactions will be better facilitated, or perhaps hindered, by electronic communication. • Consider the role of staff in facilitating and supporting electronic communication. • Plan carefully for the rollout or introduction of technology into the program.

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	relationships (for example, using email communications to stay in touch between in-person meetings or to share resources).		• Interpersonal characteristics such as mentoring style and communication style might moderate program outcomes, but there are no true tests of moderation to support this qualitative finding. • How an e-mentoring program for youth is implemented—one-on-one versus group—may be an important moderator. For gifted girls with interests in STEM, group e-mentoring seems to be more effective than a one-on-one format. • There are no known studies to date assessing how mentoring format—traditional, e-mentoring, or a blended model—affect youth outcomes.			
Group Mentoring	A broad array of "natural" or programmatic contexts in which mentoring activity takes place involving one or more mentors and at least two mentees. The activity involved must involve group process (that is, interactions among group members).	• There is evidence that group mentoring programs can be effective in fostering at least short-term improvements in a broad range of youth outcomes, including those in the behavioral, academic, emotional, and attitudinal/motivational domains. • Adequate evidence does not exist currently to gauge the potential longer-term effects of group mentoring programs. • Adequate evidence does not exist currently to gauge the potential effects of more informal forms of group mentoring	• Because so little research has addressed conditional factors that may influence the effectiveness of group mentoring, only a few very tentative conclusions can be offered (see below) and none can be offered regarding fundamental issues such as group composition (including group size, number of mentors, mentor:mentee ratios), what constitutes sufficient duration, frequency and intensity of meetings, and the extent to which a formal curriculum is implemented. • There is emerging evidence that group mentoring can be effective across a wide range of mentee characteristics, including age, gender, ethnicity, and exposure to risk, and there are isolated findings to suggest that group mentoring might be particularly effective for	• Because research is only beginning to address the intervening mechanisms that might influence the effectiveness of group mentoring, only tentative conclusions can be offered in this area. • In addition to whatever role may be played by the relationships that emerge between mentors and mentees in the context of group mentoring, available research suggests that there are additional relational processes, including group cohesion and belonging, mutual help, and a sense of group identity, that may contribute to more positive outcomes for youth in this type of mentoring.	• Research is currently lacking to inform understanding of factors that may influence reaching and engaging targeted groups of youth, ensuring high quality implementation, and fostering the adoption and longer-term sustainability of group mentoring as an approach to supporting young persons in different settings. • Available studies suggest that key challenges specific to group mentoring may include managing limited resources, maintaining mentees' engagement, selecting appropriate mentors and creating structures to support their work, and logistical issues;	• When first considering group mentoring, think about why the group aspect matters. • Think about how your program can build real relationships in group mentoring. • Provide special training to mentors and compose mentor teams carefully. • Don't skimp on supervision and ongoing mentor and mentee support. • Emphasize activities that get youth engaged with each other (and the world).

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			youth exposed to higher levels of risk. • While the research on program practices is limited, one area that shows promise for enhancing effectiveness involves program practices that foster peer support among mentors (e.g., through opportunities for mentors of different groups to interact or through co-mentorship within groups).	• By simultaneously involving multiple types of relationships between and among mentors and peers, group mentoring may provide a context that helps build skills, positive attitudes, and confidence in social interactions; preliminary evidence suggests that these processes, in turn, contribute to positive behavioral outcomes over time. • Although research to date suggests little potential for "contagion" effects that have been observed for other group interventions for adolescents, these cannot be ruled out until such processes receive more direct examination.	however, systematic data are lacking to address best practices in these areas.	
Immigrant and Refugee Youth	The term first-generation immigrant and refugee youth broadly refers to foreign-born youth with no US citizenship at birth. This population includes youth who are naturalized citizens, lawful permanent residents, refugees, and asylees, and the unauthorized (or undocumented).	• Available research suggests mentoring programs can serve as a useful form of support for FG-IRY, facilitating outcomes in the areas of acculturation (both language and behavioral), social integration, and academic performance; methodological limitations of studies, however, make this conclusion highly preliminary. • Supportive relationships with peers and adults have been linked in limited research to positive indicators and facilitators of school/academic engagement among FG-IRY, including effort and ability to form friendships with fellow students.	• Theoretically, the special pre- and post-migration context and sociopolitical status of undocumented and refugee youth give rise to unique needs among these two groups within FG-IRY that could, in turn, have implications for the types of mentoring that are most beneficial for these youth; however, research addressing this possibility is lacking. • Some research suggests pre-mentoring relationship training, relationship building activities, setting clear expectations, mentee involvement in choice of activities, and family engagement may enhance the likely benefits of mentoring for FG-IRY; however, the implications of these practices has neither been tested directly nor has	• Theory and the broader research literature suggests that facilitation of identity development, particularly ethnic identity development, and fostering a sense of belonging could be an important process through which mentoring can promote other desirable outcomes among FG-IRY, potentially and especially those who have been in the new country for relatively limited amounts of time; however, research examining this possibility is currently absent. • Mentoring may promote positive outcomes for FG-IRY by creating safe and resourceful spaces for them to	• Several strategies for engaging FG-IRY in mentoring programs, including community-family-school partnerships and offering them at religious sites, have been proposed; however, research is lacking on the extent to which these strategies are being utilized and serve to increase engagement of this population of youth in mentoring supports and services. • Close collaboration between community leaders, schools, and families in mentoring programs and support services for FG-IRY has been argued to be important for	• Carefully consider the nuanced needs and specific cultural backgrounds of the mentees and families you wish to serve. • Think carefully about who should serve as mentors. • In many ways, success in school seems to be key in helping FRG-IRY thrive more generally in their new country. • Select recommended resources.

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			it been the subject of in-depth investigation. • Both cross- and same-culture mentoring relationships show potential to promote positive acculturation and school-engagement-related outcomes among FG-IRY; the cultural understanding that same-culture mentors bring to the relationship and the cultural competency of cross-culture mentors each may be helpful in forging strong connections with FG-IRY. • Benefits of mentoring for FG-IRY may accrue in part as a result of mentors acting as cultural and system translators and interpreters for behavioral and institutional norms of the new country.	develop, in particular by fostering supportive relationships with peers and adults within systems like school and the family; however, research examining this type of pathway of influence is lacking.	increasing engagement as well as facilitating quality implementation and long-term sustainability; however, research addressing this possibility is lacking. • It appears that natural mentoring relationships are sources of instrumental and emotional support to FG-IRY, but that there is an unmet need for institutional and structural resources and mechanisms to facilitate the establishment and sustenance of these relationships.	
LGBTQI-GNC	Youth who are lesbian, gay, bisexual, transgender, questioning, intersex, and gender nonconforming (LGBTQI-GNC)	• In-person mentoring relationships may serve an important protective role for LGBTQI-GNC youth, helping them to confront challenges such as lack of acceptance from peers and parents; however, available research is too limited to offer more than tentative and very preliminary support for this possibility. • Informal mentoring relationships with adults may promote positive educational outcomes among LGBTQI-GNC youth; however, this conclusion is speculative given that this possibility has been examined within only one study.	• Some subpopulations of LGBTQI-GNC youth—including youth of color, gender nonconforming youth, transgender youth, youth at earlier phases of identity development, and systems involved youth—may experience intersections of risks that hinder the development of trust and for this reason make it more challenging for them to experience high quality, effective relationships with mentors; research directly examining this possibility, however, is lacking. • Existing research suggests that mentors who take youth-centered approaches inclusive of the experiences and needs of LGBTQI-GNC youth may foster greater benefits for this population of youth; in contrast, mentors who are	• Support for identity development and gender identity/expression may be a critical pathway through which mentoring relationships are able to promote positive outcomes for LGBTQI-GNC youth; however, research directly addressing this possibility is extremely limited and thus inconclusive. • Processes that involve mentors taking an advocacy role and offering emotional, informational, and social forms of support may be significant in contributing to positive outcomes for LGBTQI-GNC youth, but existing research is only broadly suggestive of this possibility.	• Few formal mentoring programs appear to exist that provide mission-driven mentoring services to LGBTQI-GNC youth; however, research documenting the prevalence of such programs or the success of mentoring programs, more generally, with engaging LGBTQI-GNC youth is lacking. • A number of promising practices for providing services to LGBTQI-GNC youth are emerging, offering initial clues as to how to create safe climates and responsive programming for this population.	• Learn the definitions behind the acronym and become culturally and linguistically competent when designing and delivering services. • Make sure your program culture and materials are welcoming to this population. • Consider recruiting mentors with lived experience in this area. • Set (or augment) confidentiality policies to address information sharing

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		• At the college level, it appears that informal and formal mentoring relationships may be linked with improved feelings of well-being, success as a college student, commitment to the gay community, and support for identity development; however, evidence to support this possibility is preliminary.	experienced as unsupportive—especially with respect to disclosure of feelings or questions regarding sexual orientation —pose the potential to create harm. • There is indirect and preliminary evidence that the use of criteria that are inclusive of—but not limited to—shared sexual orientation and gender identity/expression between youth and mentors may be important for enhancing the quality of mentoring relationships for LGBTQIGNC; other relationship features with indicated potential to be influential (e.g., amount of time spent together) are similar to those identified as important for mentoring relationship quality among youth more generally.		• Funding for mentoring programs and initiatives focused on LGBTQI-GNC youth is starting to appear.	around the topic of sexual orientation. • Train mentors working with LGBTQI-GNC youth in relevant topical areas. • Advocate for LBTQI-GNC youth in your community and the family. • When possible, contribute to the research base.
[Mentoring and Domestic Radicalization]	Radicalization is the process of developing extremist ideologies and beliefs, with extremism (in the context of liberal democracies) understood to refer to "an ideology that advocates racial or religious supremacy and/or opposes the core principles of democracy and universal human rights".	• Preliminary evidence suggests the potential for program-supported mentoring provided to youth from marginalized communities and those with recent immigrant backgrounds to enhance indicators of PYD that may reduce their susceptibility to radicalization or violent extremism (e.g., rewarding social connections with diverse peers, confidence in being able to successfully pursue postsecondary education and obtain employment); however, the amount and quality of this research is notably limited and restricted to non-US contexts. • Very limited research has examined the potential for	• A wide range of youth and mentor characteristics and programmatic considerations have the potential to condition the effectiveness of mentoring for prevention or reduction of radicalization among young people, potentially in interaction with one another; however, research to address such possibilities is lacking. • Existing evidence, although preliminary, suggests that the potential for mentoring to advance aims of reducing or preventing violent extremism may extend across mentors with varying backgrounds as well as programs utilizing a range of settings and strategies directed toward this aim.	• Available evidence suggests that several of the processes understood to be important in connecting mentoring to positive youth outcomes more generally—such as forging of a close and trusting bond and engaging in activities to promote core aspects of PYD—can also be significant in linking mentoring to prevention or reduction of radicalization among youth; however, these findings are highly preliminary due, in part, to a lack of examination of the viability of potential pathways in their entirety (i.e., from mentoring to lower levels of radicalization).	• Partnerships comprised of diverse local community government and nongovernment entities and stakeholders (e.g., community activists) may be important for facilitating the development, implementation, and reach of initiatives involving mentoring that have aims of contributing to prevention or reduction of radicalization among youth. • Barriers to the engagement of youth in mentoring initiatives associated with efforts to prevent radicalization and violent extremism have included practical challenges	For "Typical" Mentoring Programs • Look for warning signs that youth may be on a path toward radicalization • Examine how your program brings the 6 Cs to life through mentoring. • Help youth expand their horizons. For Programs Explicitly Focusing on Preventing Radicalization • Using members of the mentee's ethnic group or religion as mentors.

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		mentoring to help forestall or interrupt the emergence of attitudes or behaviors that may reflect tendencies toward radicalization among youth; there is, however, limited "proof of concept" evidence for this possibility with respect to attitudes for mentoring carried out with Muslim youth and young adults in varying contexts (i.e., faith- or community-based).		• Some of the processes that tentatively appear to represent viable routes for connecting mentoring to prevention or reduction of radicalization— such as direct discussion of ideological beliefs and engineering of positive contacts with members of other cultural groups—extend beyond those that have been most widely addressed in the general literature on youth mentoring; however, there is also preliminary evidence to suggest such processes (e.g., discussions focusing on culture and ethnicity) may prove ineffective or problematic when initiated with limited preparation or response planning.	associated with identifying young persons expected to be most appropriate for participation as well as overt resistance stemming from sociopolitical concerns, including perceptions of stigmatization and stereotyping. Preliminary evidence suggests that the effects of such barriers can be at least partially offset through meaningful involvement of young persons in programs both as peer mentors and in leadership roles.	• The potential in a blend of one-to-one and group mentoring. • Carefully evaluating how and when you might involve law enforcement in your efforts.
One-to-One Cross-Age Peer Mentoring	A match between an older youth (mentor) with a younger mentee where there is an age difference of two or more years.	• Evidence of the effectiveness of peer mentoring programs is very limited, both because there are few studies of programs meeting the criteria for this review and because only seven of these programs had been tested with rigorous research designs. • Multiple studies report evidence of increasing connectedness to family and peers, as well as peer acceptance and self-esteem. • Consistent evidence was found regarding the benefits of school-based cross-age peer mentoring programs on school	• Teen mentors may need and benefit more than adult mentors from staff support, program structure (e.g., planned activities), and ongoing training. • Mentors should not be coerced or lured into mentoring because of the potential negative consequences for the mentees to whom these disinterested mentors are assigned. • Mentors who hold more positive attitudes toward youth in their community, who are motivated to help, and who report greater social (rather than self-) interest should be selected. • Although parent involvement has not been the specific focus of	• Establishing a relationship first seems critical to generating the experiential building blocks of a mentoring relationship— empathy, trust, mutuality, and reciprocity. • For teenage mentors, more structure is typically needed to create the conditions for befriending to occur between cross-age peers. • Some guidance and activity advice ("interaction structure") may be needed for mentors to feel competent and efficacious, but too much could feel	• Staffing is critical to successful program implementation and sustainability. Effective coordinators are interested in leading the program, are well trained, possess the necessary organizational and leadership skills, and are effective at securing the resources they need. • Program coordinators (in many ways like peer mentors) need support, co-coordinators, and an active advisory board involved in program operations. They should also work continuously to secure and	• Lay a strong foundation for the program by selecting the right coordinators and the right mentors. • Select the right match activities to scaffold relationship building. • Provide lots of training and supervision to peer mentors. • Let the youth lead as much as possible.

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		connectedness (or related outcomes like school bonding). • There is conflicting evidence of cross-age peer mentoring effects on grades, class performance, or achievement, as well as on misbehavior and misconduct.	research in cross-age peer mentoring programs, evidence exists that engaging parents in these programs through family events may be useful in facilitating improvements in mentees' connectedness to their parents.	stifling and deflating to the youth. • Teenage mentors may need help to become flexibly reliant on prescribed or curricular activities, and require training in how to grow the relationship by strategically diverting into personal discussions instead of the provided task.	maintain buy-in from school administrations. • Teen mentors, like all mentors, need extensive initial and sufficient ongoing training. This should include information on program parameters and training on all the necessary skills to be an effective mentor. Training for teen mentors should also prepare them for responding to potential worst-case scenarios. Similarly, administrators and coordinators should develop a response protocol for those occasions in which mentors make mistakes. • When choosing program curriculum or other activities to organize the matches, be sure relationship development can be prioritized, and consider allowing students to guide activity development to make curricula relevant to local needs.	
Youth and Young Adults During Reentry from Confinement	Confinement of a range of lengths and in a range of settings. Can include a period of a few hours at a police station, a few days at the local county youth services facility, a	• Insufficient evidence is available to draw conclusions about the effectiveness of mentoring, whether delivered in tandem with other services and supports or not, for youth or young adults during reentry.	• Insufficient evidence is available to draw conclusions about the moderators of the effects of mentoring provided to youth during reentry from juvenile justice.	• Insufficient evidence is available to draw conclusions about mediators of outcomes related to mentoring youth and young adults at reentry	• Insufficient evidence is available to draw conclusions about any aspect of implementing mentoring programs and supports for youth or young adults during reentry following confinement; this is also true for related considerations of	• A few, and possibly critical, moderators of outcomes. • Partnerships and flexibility may be critical in reentry work. • Preparing for challenges in

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	few months in a group home, up to many months at a state youth correctional facility.				successfully engaging targeted youth in such programs or support and their adoption and sustained utilization by host settings.	working with this population
Youth in Foster Care	Children and adolescents in any type of court-ordered out-of-home care (i.e., non-relative foster care, kinship foster care, or congregate care) due to maltreatment, including transition-age youth (16 to 25 years old) as long as the studies included some participants under 18.	• Although not yet confirmed through rigorous evaluation, mentees report that both natural and program mentors provide life-changing informational, instrumental, and emotional support to young people in foster care who often lack consistent adults to help them navigate the many challenges they face. • Available research suggests that both natural and program-based mentoring for children in foster care (across a range of ages and mentoring formats) can have positive impacts on mental health, educational functioning and attainment, peer relationships, placement outcomes, and life satisfaction; mentoring demonstrated no impact or mixed results for other outcomes, including social skills, attachment to adults, physical health, employment and financial assets, risky behaviors, and associated negative life-course outcomes (e.g., substance use, delinquency, arrests). • Most of the mentoring programs serving youth in foster care that have been evaluated to date have been	• The existing literature suggests that the effects of mentoring may differ by children's demographic characteristics, but the literature is insufficient to provide firm conclusions about their effects. • Youth who are at very high levels of risk may not benefit as much as youth at lower levels of risk, and risk may also differentially affect distinct outcomes (e.g., psychosocial outcomes vs. child welfare outcomes). • Characteristics of the mentoring relationship, including frequency of meetings, duration, and quality of the match, are inconsistently related to mentoring outcomes, although few of the rigorously designed studies examined these characteristics and no studies systematically varied these indices to test their importance. • Studies of natural mentoring suggest that mentor characteristics and the role mentors play may be linked with youth's receipt of benefits.	• Mechanisms, or processes, through which mentoring may affect outcomes include improving future expectations and self-determination and increasing time in care, but research is extremely limited and thus inconclusive. • One well-designed study found that improvement in prosocial skills was critical to avoiding some delinquent behaviors, but more research is needed to generalize these findings to other programs and outcomes of interest.	• Both natural and program-based mentoring appear to appeal to and engage youth who are diverse in sociodemographic and behavioral/emotional functioning, although mentoring programs (especially those with less structure) often have difficulty retaining foster youth. • Studies have not examined whether adherence to a given program model predicts better outcomes for youth, although alignment of program goals and outcomes is reported to be important by program developers and participants. • Although there are many conceptual reasons why mentoring is an excellent fit for youth in foster care, there are pragmatic challenges, both logistical and financial, that make widespread implementation difficult and no studies have been conducted that examine program expansion or adaptation. • Because of the high potential for adverse	• When undertaking mentoring with this population, adequate staffing resources, access to clinical expertise, and knowledge of and collaboration with foster care systems are critical. • Train mentors to serve as "appropriate working models" of healthy relationships. • Consider helping youth build or strengthen "natural" ties through youth-initiated or network-engaged approaches to mentoring. • When serving older foster youth, think about taking a self-determination approach.

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		Documented Effectiveness	Factors Influencing Effectiveness	Intervening Processes Linking Mentoring to Youth Outcomes	Efforts to Reach and Engage Targeted Youth, Achieve High quality Implementation	
		multicomponent (i.e., they included components other than one-to-one mentoring, such as skills groups) and utilized mentors who were agency staff members or university students; thus, we know less about other program models serving this population.			outcomes among this vulnerable population, great care and coordination is required for implementing mentoring programs and supporting natural mentoring relationships for youth in foster care; if done well, however, the benefits of mentoring appear to outweigh the risks and foster youth may experience positive outcomes across a range of domains.	
Youth Involved in Commercial Sex Activity	YCSA are young persons who have current or past involvement in (or at high risk for involvement in) commercial sex activity, broadly defined as any form of being sexual in exchange for money, gifts, safety, drugs, or survival needs, whether or not the young person gets to keep the money/goods/ service.	• Mentoring is a theoretically promising form of support for youth with current or past involvement in (or high risk for involvement in) commercial sex activity (YCSA); direct evidence of the effectiveness of mentoring for this population of young persons, however, is lacking. • Available research suggests that relationships established between YCSA and staff, including those with histories of commercial sex involvement themselves, can be an important component of programs to support this population of youth. • Structured approaches to supporting the positive development of YCSA through mentoring show promise but have not yet been adequately tested; the same is true of psychoeducational programs that aim to help YCSA build the	• The existing literature suggests that the effects of mentoring should not be assumed to be similar across YCSA with varying personal characteristics and life experiences (for example, age, profiles of risk and protective factors, and history and current status of involvement in commercial sex activity); available research is extremely limited, however, and insufficient to provide a basis for even preliminary conclusions about these possibilities. • Several practices -- including a number that already appear to be in common use (e.g., use of peer survivors as mentors, coordination of mentoring with other supports and services) – appear theoretically promising for enhancing the effectiveness of mentoring as a support strategy for YCSA; none, however, have yet benefitted from systematic investigations of their effectiveness.	• The existing literature directs attention to a potential for mentoring to be of benefit to youth with backgrounds of involvement in commercial sex activity by virtue of facilitating positive growth in areas such as personal identity, skills for accessing needed resources, perceptions of self-efficacy, and feelings of hopefulness; research bearing directly on these possibilities, however, is not currently available. • A further important way in which mentors have the potential to prove valuable in the lives of youth with involvements in commercial sex activity is to connect them to resources (e.g., persons, institutions) that can be of direct support in addressing their needs in areas such education, employment, and self-care; the degree to which this type of pathway is	• There is reason to anticipate the viability of engaging youth with backgrounds of commercial sex involvement in mentoring supports and services, but potentially significant challenges with sustaining their participation over time due to high levels of flux and instability in their life circumstances; the limited data available are broadly consistent with this expectation. • Both quality of implementation and the sustainability of mentoring programs for YCSA have the potential to be significantly compromised by a range of issues relating to organizational capacity (e.g., staff turnover, funding) and mentors (e.g., skill levels, follow-through on program commitment); to date,	• It's going to take a special kind of mentor to serve YCSA mentees. • Mentors can serve as connectors to other services and community. • Not all YCSA may be ready to benefit from a mentoring relationship. • Patience is the key to mentoring YCSA.

Name of Review	Scope	Questions Addressed in Review				Implications for Practice
		Documented Effectiveness	**Factors Influencing Effectiveness**	**Intervening Processes Linking Mentoring to Youth Outcomes**	**Efforts to Reach and Engage Targeted Youth, Achieve High quality Implementation**	
		skills necessary to foster healthy relationships, including with potential mentors.		important in linking mentoring to positive outcomes for YCSA, however, has not yet been systematically investigated.	these possibilities have not been systematically investigated.	
Youth with Mental Health Challenges	Includes youth with a formal diagnosis, those experiencing internalizing or externalizing problems, and those identified as "emotionally and/or behaviorally disturbed."	• Available research offers minimal support for the effectiveness of mentoring programs for youth with mental health challenges. • The evidence for mentoring program effectiveness is strongest for programs that have had a relatively high degree of structure and been directed toward higher functioning younger children (i.e., those receiving outpatient mental health services or identified as having mental health–related challenges while still functioning in a regular school setting) or young adolescents with ADHD. • Research on mentoring programs for youth with mental health challenges show the most evidence of having a positive effect on mental health symptoms and academic outcomes, with less evidence supporting social and life functioning outcomes. • Both site-based mentoring programs in schools and community-based natural support teams show preliminary evidence of being helpful for youth with mental health challenges.	• Available research suggests that the youth's gender and severity of symptoms have the potential to condition the impact of mentoring on outcomes for youth with mental health challenges, with females and those with more severe symptoms receiving greater benefit than boys and those with fewer symptoms, respectively. • There is some evidence that formal mentoring programs (versus natural mentoring) may have more of a positive impact for youth with mental health needs. • Qualitative research suggests that the relatively high levels of interpersonal trauma in the backgrounds of youth with mental health challenges have the potential to constrain their ability to form strong mentoring relationships; this suggests that interpersonal trauma could similarly condition the impact of mentoring on the outcomes of this population of youth, although research does not appear to have addressed this possibility. • Theoretically, consistency of the person (mentor), place (site), and program may be important in conditioning the effects of mentoring for youth with mental health challenges; however, research has not addressed this possibility.	• Preliminary evidence suggests that decreases in the stress level of caregivers represents one pathway through which mentoring may improve outcomes for youth with mental health challenges. • Relationship quality should be further considered as an important process linking mentoring to positive outcomes. • Preliminary research with young adults experiencing mental health challenges suggests processes involving improvements in trust, socio-emotional support, affect regulation, and anxiety, among others, as potentially important ways through which mentoring may beneficially influence outcomes for this population; however, these processes have not been investigated among younger samples.	• Mentoring programs intended specifically for youth with mental health challenges that have received rigorous evaluation appear to have successfully engaged substantial numbers of youth on a local level; however, these programs have not apparently been adopted and implemented on a larger scale and related research (e.g., on factors influencing adoption and sustainability of programs) is lacking. • There is preliminary evidence of the interest and amenability of youth receiving mental health services and their caregivers for involving youth in mentoring as part of service provision, as well as the potential for sustained engagement of youth and families in services with the support of mentoring relationships that are established.	• Understanding trauma exposure and other negative life experiences can help you determine the role your program can play. • Determine how your program can support two key strategies noted in this review. • Design program activities and mentor training to emphasize potentially important additional relationship characteristics and mediators of outcomes. • Define what success looks like for serving youth with mental health challenges and measure accordingly. • Select additional resources for practitioners.

Special Projects: Measurement Guidance Toolkit

The Measurement Guidance Toolkit for Mentoring Programs provides recommended instruments for measuring key youth outcomes in mentoring programs as well as several risk and protective factors that may be relevant to program outcomes. The recommended instruments are grouped into different domains in which mentoring has well-established potential for impact. All recommended instruments have been carefully reviewed and selected by a group comprised of members of the NMRC Research Board.

Table 8 summarizes the categories and associated constructs and measures included in the toolkit. Measures are grouped into 8 different domains. The newest domain was completed in the current project year and recommends 9 measures of Mentoring Relationship Quality and Characteristics. There are several domains reflecting areas of program outcomes: Mental and Emotional Health, Social-Emotional Skills, Healthy and Prosocial Behavior, Problem Behavior, Interpersonal Relationships, and Academics. The final domain is Risk and Protective Factors. Information in each domain area includes an overview (describing key constructs and background research), as well as structured profiles of the recommended measures. Within the profile, users will also find a link to use to obtain the recommended measure.

Table 8

Summary of NMRC Measurement Guidance Toolkit

Measurement Domain	Construct	Recommended Measure
Mentoring Relationship Quality and Characteristics	Multidimensional relationship quality	Youth Mentoring Survey (YMS) and Match Characteristics Questionnaire (MCQ)
		Social Support and Rejection Scale
		Network of Relationships Inventory-Social Provisions Version
	Unidimensional relationship quality	Youth and Mentor Strength of Relationship Scale
		Mentor Youth Alliance Scale
	Specific facets of relationships	Group Mentoring Climate Scale
		Mentor Support for Racial/Ethnic Identity
		Youth-Centered Relationship Scale
		Growth-Goal Focus Scale
Mental and Emotional Health	Life satisfaction	Brief Multidimensional Students' Life Satisfaction Scale – Peabody Treatment Progress Battery
	Depressive symptoms	Pediatric Depressive Symptoms – Short Form from the Patient-Reported Outcomes Measurement Information System (PROMIS)
	Adaptive coping with stress	KIDCOPE – Child version
	Hopeful future expectations	Abbreviated version of the Hopeful Future Expectations (HFE) Scale
	Self-Esteem	Self-Esteem Questionnaire – Global Self-Worth Scale
	Sense of meaning and purpose	Meaning in Life Questionnaire (MLQ) – Presence of Meaning Scale
	Ethnic identity	Multigroup Ethnic Identity Measure – Revised (MEIM-R)
Social-Emotional Skills	Self-control	Social-Emotional and Character Development Scale (SECDS) – Self-control subscale
	Social competence	Social Competencies Scale of the Youth Outcome Measures Online Toolbox
	Problem solving ability	National Longitudinal Study of Adolescent Health (Add Health) - Problem-solving items
	Skills for setting and pursuing goals	Global scale of Selection, Optimization, and Compensation (SOC)
	Perseverance	EPOCH Measure of Adolescent Well-Being – Perseverance Scale
	Career exploration	Vocational Identity Status Assessment – In-Depth Career Exploration Scale

Healthy and Prosocial Behavior	Healthy eating	National Longitudinal Study of Adolescent to Adult Health (Add Health) – nutrition/dietary intake items
	Physical activity	Youth Risk Behavior Survey (YRBS)—Physical activity item
	Prosocial behavior	Social-Emotional Character Development Scale (SECDS) – Prosocial Behavior subscale
	Civic engagement	Active and Engaged Citizenship (AEC) – Civic Participation scale
Problem Behavior	Delinquent behavior	Problem Behavior Frequency Scale (PBFS) — the Self-Report Delinquency Scale
	Aggression	Modified Aggression Scale (MAS) — Bullying subscale
	School misbehavior	Patterns of Adaptive Learning Scales (PALS) – Disruptive Behavior subscale
	Substance use	The CRAFFT Screening Questionnaire
	Truancy	Recent and Lifetime Truancy Scale
Interpersonal Relationships	Parent-child relationship quality	Network of Relationships Inventory (NRI)-short form — Parent Support subscale
	Very important non-parental adult	Presence of a Very Important Adult
	Peer relationship quality	Hemingway Measure of Adolescent Connectedness (MAC) — Connectedness to Peers subscale
	Loneliness	Loneliness Questionnaire — Short Version (LQ-Short)
	Community connectedness	Community Engagement and Connections Survey – Connection to Community Subscale
Academics	Academic performance	Academic Performance
	Growth mindset for intelligence	Revised Implicit Theories of Intelligence (Self-Theory) Scale
	Academic self-efficacy	Patterns of Adaptive Learning (PALS) - Academic Efficacy subscale
	School engagement	Engagement versus Disaffection with Learning (EvsD) – Behavioral Engagement subscale
	School connectedness	The Hemingway Measure of Adolescent Connectedness — School Connectedness subscale
Risk and Protective Factors	Family management	Communities That Care (CTC) Youth Survey — Poor Family Management subscale
	Neighborhood risk	Communities That Care (CTC) Youth Survey — Community Disorganization subscale
	Deviant peer affiliation	Peer Affiliation and Social Acceptance (PASA) Measure — Peer Affiliation subscale
	Peer victimization	University of Illinois Victimization Scale – Peer Victimization items
	Out-of-school (OST) structured activity time	Out-of-School-Time Structured Activity Involvement
	Symptoms of trauma exposure	Child Post Traumatic Stress Disorder Symptom Scale (CPSS)

Conclusions and Next Steps

Conclusions

Reporting gaps and inconsistencies. As noted in various places within this synthesis, there is substantial variability in the scope and detail of information that is included in the final reports under consideration. This inconsistency is particularly apparent with respect to contextual information, such as details concerning mentoring program practices and the characteristics and backgrounds of participating youth as well as mentors and program staff, all of which may be important for interpreting and applying the research findings (Glasgow).

Research aims. The projects reviewed were concerned primarily with advancing understanding of the effectiveness of mentoring programs in fostering desired outcomes for participating youth. Considerably less attention was given to in-depth examination of mentoring relationships formed within programs, the individual and contextual factors that may shape them, and the associations of different types and longevity of relationships with youth outcomes. Almost entirely absent were aims focused on increasing the reach of mentoring programs. Aims of this type might focus on identifying and testing promising strategies for mentor recruitment and retention, thus increasing the number of youth able to be served by programs and reducing what has been referred to as the "mentoring gap" (Mentoring Effect). Equally relevant would be investigation of strategies for increasing representation of vulnerable and historically under-served youth populations in mentoring programs would also fit within this can identifying strategies that facilitate mentor recruitment. The Research Board of the National Mentoring Resource Center (NMRC) has addressed these concerns in a number of its activities, including reviews of the evidence to support different mentor recruitment practices and those examining the effectiveness and current reach of mentoring as it relates to under-represented populations of youth (e.g., LGBTQI). These efforts have been inherently constrained, however, by the limited attention that issues of program reach have received to date within the overall research literature on youth mentoring.

Representativeness of programs. For the most part, the mentoring programs that were evaluated or otherwise served as the context for the funded projects considered in this synthesis used a one-to-one mentoring model. For the most part, too, programs were affiliates of Big Brothers Big Sisters of America (BBBSA). These trends are not surprising considering both that one-to-one mentoring has historically been the dominant approach within structured mentoring programs for youth and that BBBSA is the largest youth mentoring organization in the U.S. BBBSA, furthermore, has a well-established track record of partnering with researchers on numerous studies that have figured importantly in the development of the field's evidence base. Yet, when considered against the backdrop of current trends in mentoring, such as what appears to be a growing number and variety of programs at the local, regional, and national levels, rapid growth in group-based approaches and various other more novel strategies (e.g., youth-initiated mentoring), and efforts initiated to increase the field's capacity to provide more specialized forms of mentoring for certain high-need youth populations (e.g., commercially sexually exploited youth), the programs considered in the research reviewed in this synthesis are clearly not representative of the current landscape of the field (although they clearly were to a notably greater extent at the time the projects involved were proposed and funded). The programs reviewed under the auspices of the NMRC for CrimeSolutions.gov are more reflective of this current diversity, with programs employing group formats, peer-to-peer approaches, and e-mentoring, for

example, having been reviewed and in many instances determined to have promising evidence of effectiveness.

Research methods. The methods utilized in the reviewed projects were largely rigorous and well-matched to the research questions of primary interest. These include use of randomized control or strong quasi-experimental designs when attempting to discern the impact of mentoring programs or modifications and relatively in-depth mixed method and observational methods for investigating questions relating to program implementation and mentoring relationship processes. Significant methodological limitations of the research, however, are also apparent. These include relatively small sample sizes and attrition (loss of participants to follow-up assessments) within quantitative domain as well as issues detracting from the rigor of qualitative research. In a number of instances, these types of concerns were judged pronounced or numerous enough to result in relatively low ratings of the validity or trustworthiness of the findings reported in selected projects. Such limitations are also evident within the broader research literature on youth mentoring. This reality is reflected in the significant numbers of practices and programs reviewed by the NMRC for which substantive conclusions about effectiveness have not been possible due to methodological limitations of the available research. It also contributes to the largely tentative and preliminary nature of the conclusions that are reached in the NMRC's broader reviews of mentoring as it relates to particular program models or youth populations.

Findings. The findings included in the reports considered in this synthesis, in combination with the work undertaken by the NMRC Research Board, provide a number of substantive insights that can be useful for informing both current practice and future research. Equally noteworthy, as detailed below, are topics that, although largely not addressed in the reports, could be investigated in further analyses of the data available.

Evidence supporting mentoring program effectiveness. In line with prior research, the projects reviewed provide evidence consistent with the potential for mentoring programs to be of benefit to participating youth in a range of areas important to their development. A significant and distinctive contribution of the OJJDP-supported research is the preliminary evidence that it provides of the capacity for mentoring program involvement to have positive implications for outcomes for the youth involved over longer time horizons than has been typical of those investigated in most prior research, including those extending well beyond the period of program participation and into adulthood. At the same time, neither these nor the other evaluations considered yielded consistent evidence of program effectiveness when considering results across the full set of outcomes examined. Similarly, approximately one-third of the programs reviewed through the NMRC received ratings of "No Effects," although it is worth noting that even in these instances it has been commonplace for there to be some outcomes for which favorable program effects are evident.

One potentially useful approach for dealing with the breadth of outcomes for which mentoring programs may be effective is to utilize more broad-based indices of impact that cut across multiple areas or domains of interest. These types of measures may be especially useful when constructed in ways that accommodate the reality that youth may vary considerably in the specific areas in which they demonstrate change or benefit stemming from program participation. The breadth of outcomes examined in many of the projects reviewed makes the data collected well suited to exploring this possibility.

Lack of demonstrated effectiveness of potential program enhancements. The program modifications investigated in several of the projects are largely consistent with strategies (e.g., mentor training, more intentional mentor-youth activities) that would be expected to hold promise for increasing benefits for participating youth. Yet, for the most part, there was very little evidence that being selected randomly to receive these potential enhancements served to either strengthen the mentoring relationships or improve youth outcomes. Clearly, a host of factors could account for this pattern. Some of these are hinted at by the findings of the projects involved, such as limited uptake or exposure to the new activities and supports on the part of youth and their mentors and subgroup differences in youth responsiveness. These factors could be fruitful to explore on a more consistent basis across the projects. It could be useful, as well, to further explore project data that bear on the potential implications of more general or foundational practices within mentoring programs. Training of mentors appears especially worthy of attention in this regard.[9]

It is also worth noting that the program effectiveness reviews completed for the NMRC include at least two instances in which a program was modified based on results of an initial evaluation, which resulted in "No Effects" finding on CrimeSolutions.gov, and then obtained more favorable results and a rating of "Promising" or "Effective" when re-evaluated (see, e.g., Brief Instrumental School-Based Mentoring Program and the revised version of this program). More in-depth consideration of these programs, the processes involved in their iterative evolution, and the associated evaluations and evidence reviews may provide useful insight into conditions that are conducive to success when seeking to strengthen or enhance the effectiveness of already existing mentoring programs.

Implementation challenges. The reports reviewed include abundant evidence of challenges involved with program implementation. It is not surprising, in view of the well-established challenges of introducing change or innovation into existing programs of essentially any type, that some of the most pronounced implementation difficulties have been reported in the context of attempting to evaluate the effects of introducing potential enhancements into existing mentoring programs. Existing programs, however, were clearly not immune to implementation challenges. These findings highlighted, most notably, that programs were often not successful in providing participating youth with mentoring relationships that were sustained over intended minimum periods of time.

Further mining of qualitative data collected within projects could provide further insight into the types of challenges encountered, as could additional quantitative exploration of the data available. These types of analyses could shed greater light on constellations of youth, mentor, and site or program level factors that contribute to implementation variations with respect to both program innovations (e.g., adequacy of staff training, willingness and capacity for uptake by volunteer mentors) and more fundamental deliverables such as a sustained high-quality mentoring relationship.

Mixed record of success in serving vulnerable youth within programs. Findings from the funded research projects point to the significant complexities and difficulties that programs can encounter when seeking to ensure that youth with heightened levels of risk or vulnerability, such as disability, parental incarceration, and juvenile justice system involvement, receive high-quality and effective

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[9] As noted earlier in this report, NMRC reviews of pre- and post-match training for mentors resulted in evidence ratings of "Insufficient Research." Updating these reviews to incorporate findings relating to mentor training included in the projects considered in this synthesis should be a priority.

mentoring. There are, however, also encouraging results in this area, such as the evidence of success in providing mentoring of long-term benefit to youth in foster care within a program tailored to serving this population of youth and enhanced indications of relationship quality in conjunction with specialized mentor training and dedicated funding in the case of youth with incarcerated parents. In line with these findings, NMRC reviews have highlighted promising evidence of effectiveness for several programs designed to serve specific populations of vulnerable youth, such as those with learning disabilities, juvenile justice system involvement, or foster care involvement. Yet, results for these types of tailored programs have not been consistently favorable. A recurring theme in the center's reviews of mentoring for youth populations understood to be at elevated risk or have special needs, furthermore, is the dearth of research that exists to directly inform the design of effective mentoring programs for the groups involved. Notably, opportunities to address such gaps in knowledge appear to exist within the data sets of some of the OJJDP-projects considered in this synthesis.

Mentoring relationships. Among the most robust findings in the broader literature is the tendency for the characteristics of mentoring relationships and how they are experienced by youth and their mentors to vary considerably, even within the same program. The differences observed along several of these dimensions, such as emotional closeness and relationship longevity, furthermore, frequently are found to be predictive of differences in the outcomes of the youth involved. These considerations served as the primary impetus for adding a section on measures of Mentoring Relationship Quality and Characteristics to the previously described Measurement Guidance Toolkit of the NMRC. Against this backdrop, it is surprising that the reports reviewed do not more consistently and intensively explore issues such as influences on mentoring relationship quality and longevity, processes of mentoring relationship development and change or stability over time, and consequences of different relational features for youth outcomes. The findings reported in the projects that are among the most notable exceptions in this regard, such as those indicating an influential role for multiple different types of associated relationships (e.g., parent-mentor) as well as youth and family risk and vulnerabilities in risk for match closure, suggest the potential value for more in-depth consideration of the mentoring relationship data that is available in other projects.

Limited consideration of more complex and nuanced patterns of influence. It is widely accepted in program evaluation research that there is much to be gained by moving beyond the typical overall tests of effectiveness to examine both intervening processes that may be instrumental in leading to outcomes (mediation) as well as conditioning factors, present from the outset, that may serve to amplify or diminish observed program effects (moderation). Mediational analyses may be especially useful for purposes of theory testing and development as well as identification of core processes that are important for replicating or improving on program effectiveness. These, however, received almost no consideration in the reports reviewed. Investigation of possible moderating influences can be valuable, among other possibilities, for clarifying the types of youth who are most likely to benefit from participation in a given program as well as those for whom effects may be lacking or even harmful. Tests of moderators, although included in a number of reports, are typically restricted to limited numbers and types of factors relative to those that could be important in conditioning program effects. Limited consideration of the relatively complex and more nuanced patterns of influence represented by mediation and moderation is similarly apparent in other portions of reports, such as analyses examining predictors and outcomes of mentoring relationship quality and duration. Paralleling these trends within

the reports reviewed, NMRC literature reviews have revealed only limited research on intervening processes and conditioning factors that may be important for the different mentoring models and populations of youth considered.

Next Steps

One important next step will be to update this synthesis to incorporate several additional OJJDP-funded projects for which final reports either became available after initiating the present report or are anticipated to be completed within the remainder of this year. It is anticipated that these projects will both expand the scope and types of mentoring programs considered (e.g., non-BBBS, group mentoring) and add further findings on important topics addressed in this report (e.g., tests of program enhancements, long-term effects of youth mentoring programs) and in doing so, it will be useful to assess the extent to which conclusions provided in this report. Other updates will include additional research conducted with data from the projects considered in the current report as well as additional research-related work of the NMRC.

In the interim, it may prove useful to take steps to facilitate utilization of the findings of the present synthesis in both practice and research. To facilitate application to practice, it may be useful to develop and host a webinar that highlights trends in results most likely to be of interest to programs and in doing so to elaborate on their potential implications for program design, implementation, improvement, and evaluation activities. In a similar vein, it may be useful to engage past, current, and potential future OJJDP-funded researchers in discussion around issues such as opportunities for further analysis of existing data sets, consistency and detail within research reports (whether prepared for OJJDP grants or other purposes), and promising directions for building on the methods and findings of the research considered in this synthesis (i.e., studies directly funded by OJJDP as well as the broader scope of research considered through NMRC's work). We are optimistic that such efforts, in combination with periodic updating of the synthesis, will prove useful in strengthening the research evidence base for the field and, ultimately, advance both the reach and effectiveness of the mentoring initiatives that are implemented to support the positive development of those youth whose welfare is most central to the mission of OJJDP.

References

DuBois, D. L. (2014). Program evaluation. In D. L. DuBois & M. J. Karcher (Eds.), *Handbook of youth mentoring* (2nd ed., pp. 481-498). Thousand Oaks, CA: SAGE.

DuBois, D. L., Holloway, B. E., Valentine, J. C., & Cooper H. (2002). Effectiveness of mentoring programs for youth: A meta-analytic review. *American Journal of Community Psychology, 30,* 157-197.

DuBois, D. L., Portillo, N. Rhodes, J. E., Silverthorn, S., & 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.

DuBois, D. L., & Silverthorn, N. (2005). Research methodology. In D. L. DuBois & M. J. Karcher (Eds.), *Handbook of youth mentoring* (pp. 44–64). Thousand Oaks, CA: Sage.

Eby, L. T., Allen, T. D., Evans, S. C., Ng, T., & DuBois, D. L. (2008). Does mentoring matter? A multidisci-plinary meta-analysis comparing mentored and non-mentored individuals. *Journal of Vocational Behavior, 72*, 254–267.

Flay, B. R., Biglan, A., Boruch, R. F., González Castro, F., Gottfredson, D., Kellam, . . . Ji, P. (2006). Standards of evidence: Criteria for efficacy, effectiveness and dissemination. *Prevention Science, 6,* 151–175.

Garringer, M., Kupersmidt, J., Rhodes, J., Stelter, R., & Tai, T. (2015). *Elements of effective practice for mentoring* (4th ed.). Boston, MA: MENTOR: The National Mentoring Partnership.

Garringer, M., McQuillin, S., & McDaniel, H. (2017). *Examining youth mentoring services across America: Findings from the 2016 National Mentoring Program Survey*. Boston, MA: MENTOR: The National Mentoring Partnership.

Grossman, J. B., Chan, C. S., Schwartz, S. E., & Rhodes, J. E. (2012). The test of time in school-based mentoring: The role of relationship duration and re-matching on academic outcomes. *American Journal of Community Psychology, 49,* 43-54.

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,* 199-219.

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 published by MDRC. Available on-line: http://www.mdrc.org/sites/default/files/Role%20of%20Risk_Exec%20Sum-web%20final.pdf

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*. Philadelphia: Public/Private Ventures.

Kuperminc, G., Emshoff, J. G., Reiner, M. N., Secrest, L. A., Niolon, P. H., & Foster, J. D. (2005). Integration of mentoring with other programs and services. In D. L. DuBois & M. J. Karcher (Eds.), *Handbook of youth mentoring* (pp. 314–339). Thousand Oaks, CA: SAGE.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications.

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton Mifflin.

Valentine, J. C., & Cooper, H. (2008). A systematic and transparent approach for assessing the methodological quality of intervention effectiveness research: The Study Design and Implementation Assessment Device (Study DIAD). *Psychological Methods, 13*, 130–149.