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Juvenile Reentry and Aftercare Interventions: Is Mentoring a Promising Direction?

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This study uses systematic review methods to investigate the use of mentoring programs to assist young people in successfully transitioning back into their communities following a juvenile correctional placement. Few studies were found that used comparison or control groups and measured recidivism outcomes. The results of the studies were mixed, with one study finding no differences between groups, and the other two studies finding some recidivism reductions among youth who received the intervention. However, the absence of detailed information on the interventions, weak research designs, and the diversity of the mentoring programs contributed to an overall dearth of knowledge about the effectiveness of these interventions in reducing recidivism.

Keywords: Juvenile reentry, aftercare, mentoring, systematic review

Reentry and aftercare programs are an important component on the spectrum of juvenile justice interventions. Geared to provide young people with a more seamless and supportive transition back to society following confinement, reentry and aftercare programs include models ranging from individual case management, wrap-around services, family therapies, and mentoring programs (Spencer & Jones-Walker, 2004). Overall, there is very limited information about the efficacy of reentry and aftercare programs in curbing recidivism or promoting pro-social outcomes among incarcerated youth. A recent meta-analysis found that reentry and aftercare programs are moderately effective in reducing recidivism, particularly when implemented with fidelity and offered to older and higher risk youth (James et al., 2013). However, the efficacy of specific types of reentry and aftercare programs, such as case management, mentoring, or family-focused interventions remains largely unknown. The absence of rigorous and systematic appraisals of these interventions leaves the juvenile justice and human service fields prone to investing in programs that may in fact not yield the desired results.

This article focuses specifically on mentoring as a reentry/aftercare intervention for youth who are detained or incarcerated in the juvenile justice system. Using systematic review methodology (Littell, Corcoran, & Pillai, 2008) we seek to answer the following research question: *What is*

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known about the efficacy of paid or volunteer mentoring as a reentry intervention for incarcerated youth? We focus on mentoring as a potentially promising intervention based on the weak or null effects of prior case management models (Abrams & Snyder, 2010; Weibush, McNulty, & Le, 2000) and the positive outcomes associated with mentoring for high risk and delinquent youth in other contexts (DuBois, Holloway, Valentine, & Cooper, 2002). Moreover, the Office of Juvenile Justice and Delinquency Prevention (OJJDP) currently endorses mentoring as a reentry model (Read, 2006) and, since 2009, has funded over 20 mentoring programs for system involved youth through the federal Second Chance Act Grants (Council of State Governments Justice Center, 2013). Since little information has been disseminated about the use of mentoring as a reentry strategy, the results of this inquiry can help to guide further program development and funding decisions as well as add to the overall evidence base on effective reentry and aftercare interventions for youth.

LITERATURE REVIEW

Juvenile Reentry and Aftercare Services

The best available data suggest that nearly 100,000 young people the United States reenter the community following a juvenile correctional placement each year (Snyder, 2004). The vast majority of confined youth are male (87%) and people of color (68%; Puzzanchera & Kang, 2011). This estimate does not include young people who served time in adult jail or others who may have served a lengthy stint of time in a detention facility while awaiting trial. As such, it is possible that even more young people could receive the potential benefits of reentry or aftercare interventions.

Reentry and aftercare services (hereafter referred under the umbrella term of "reentry services") are an important component of a larger spectrum of prevention and intervention programming within the juvenile justice system. The return to society following confinement can be challenging in a multitude of ways (Abrams & Snyder, 2010; Altschuler & Brash, 2004). Indeed, the majority of young people who spend time in juvenile or adult correctional facilities recidivate into the juvenile and/or adult criminal justice system within a few years of their release. Although there is no universal measure for or definition of recidivism, scholars and policy makers tend to agree that rates of repeat arrests and reconvictions are far too high. For example, a longitudinal study of nearly 2,500 high-risk juvenile detainees in Texas found that 85% were re-arrested within 5 years of release (Trulson, Marquart, Mullings, & Caeti, 2005). Similarly, the California Department of Juvenile Justice (2010) reported that up to 81% of paroled youth were re-arrested within 3 years. Rates of new convictions (a more conservative recidivism measure) tend to be lower, with eight states (Arkansas, Florida, Georgia, Kentucky, Maryland, North Dakota, Oklahoma, and Virginia) reporting an average 12-month re-conviction rate of 33%, accounting for both juvenile and adult re-convictions (Snyder & Sickmund, 2006).

Juvenile confinement in the United States is a costly enterprise, averaging $241 per day compared to $68 per day for adults (Pew Center on the States, 2008). Given the high costs and high recidivism rates associated with juvenile corrections, several initiatives around reentry services have been implemented in order to provide young people with the support they may need to reduce risk for re-incarceration. In 1995, the federal government invested in a strategy known as the Intensive Aftercare Program (IAP). Launched in four U.S. states (Colorado, Nevada, New Jersey, and Virginia), the IAP provided individualized assessment and case planning during incarceration, transitional services in the 2 to 3 months prior to release, supportive community resources during the aftercare phase, and varying degrees of surveillance depending on assessed risk (Altschuler & Armstrong, 1994). Over a decade of research on the IAP program turned up

scant evidence of success in reducing recidivism. Initial process evaluations of the IAP were promising (Wiebush et al., 2000). However, outcome studies using both randomized control and quasi-experimental comparison groups found that the IAP program did not reduce recidivism rates and, in some cases, the treatment group actually fared worse than the control group (Frederick & Roy, 2003; Wiebush, Wagner, McNulty, & Wang, 2005).

Similar to the IAP model, many reentry programs are directed toward sustaining behavior change and compliance among incarcerated youth by providing a set of tailored services that begin during incarceration and extend to six months or more following release (Abrams & Snyder, 2010). However, these case management programs have shown weak to no reductions in recidivism, particularly when outcomes are assessed for periods greater than 6 months after release (Abrams, Shannon, & Sangalang, 2008; Barton, Jarjoura, & Rose, 2008; Wells, Minor, Angel, & Stearmen, 2006). Common among these studies, known risk factors for re-offending such as age of first arrest, race, and age of release predicted recidivism above and beyond the effects of the interventions (Abrams et al., 2007; Wells et al., 2006; Wiebush et al., 2005).

Research on family-based reentry interventions has been more promising than the extant literature on the IAP and similar programs. Family therapies and other family-focused interventions for returning youth offenders, such as Multi-Systemic Therapy (MST), Functional Family Therapy (FFT), and Family Integrated Transitions (FIT), are often delivered by specifically trained therapists after a young person returns home. Researchers have extensively studied MST in child welfare and juvenile justice settings on a range of child and family outcomes, with mixed results concerning its effectiveness in reducing adolescent social, emotional, and behavioral problems (Littell, Forsythe, Popa, & Austin, 2005). Used as a reentry intervention more specifically, one study found that formerly incarcerated youth who did not receive MST were 3.2 times more likely to recidivate than those who did receive the intervention (Timmons-Mitchell, Bender, Kishna, & Mitchell, 2006). Moreover, in a randomized clinical trial study, Sawyer and Borduin (2011) evaluated the long-term impact of MST for offenders who ended treatment on average 21.9 years earlier and found that the frequency of misdemeanor offending was five times lower for MST participants. Other family interventions, such as FST and FIT, have shown similarly positive results when used with reentering youth and their families (Perkins-Dock, 2001).

Although family-focused reentry interventions have shown more promise than individualized case management services, they are often costly due to their reliance on trained and licensed therapists (Perkins-Dock, 2001). Moreover, a number of young people transition from a correctional facility to group homes, foster homes, or independent living settings, and some do not have families who are willing and present to involve in a family-focused intervention. Hence it remains important to investigate a range of reentry interventions that may be able to reduce risk for recidivism and to facilitate other pro-social outcomes, such as education and vocational attainment. Mentoring programs may be one such strategy.

Mentoring Programs and Juvenile Delinquency

Mentoring programs pair young people with adults who act as positive role models, provide encouragement and support, and guide mentees when they face challenges (Center for Substance Abuse Prevention, 2000). The goal of the intervention is typically to reduce risk factors, such as antisocial behavior, alienation, family problems, and school underachievement by augmenting protective factors, promoting community involvement, and reinforcing positive behavior. Mentors typically provide youth with a personal connection, guidance, skills training, job networking and support, exposure to positive values, a sense of self-worth, goals, and hope for the future (Office of Juvenile Justice and Delinquency Prevention, 2013).

In volunteer mentoring programs, community-based agencies, faith-based programs, schools, and other youth-serving organizations provide structure for the relationship between a youth and

a volunteer mentor. They recruit youth and mentors, match them into pairs, and provide ongoing training and mentor support. Mentor-mentee dyads typically meet regularly in either individual or group activities (Office of Juvenile Justice and Delinquency Prevention, 2013). There are two main models of structured volunteer mentoring programs. In community-based mentoring, the adult-youth pair usually meet for a minimum of 4 hours per month to participate in community activities for at least 1 year (DuBois & Rhodes, 2006). In school based-mentoring, the role model is typically a paid or volunteer adult or older student, and the commitment is usually spans the academic year (Herrera et al., 2007).

The most-well-known mentoring program is Big Brothers/Big Sisters, a national mentoring organization that serves approximately 370 communities in the United States. Several studies have analyzed its effectiveness, most notably Grossman and Tierney's (1998) evaluation that randomly assigned youth to either the Big Brother/Big Sister program or a control group. After 18 months, members of the treatment group were less likely to start using drugs or alcohol, felt more confident in their academic skills, had better attendance records, earned better grades, and had better relationships with both parents and peers. Subsequently, the Center for the Study and Prevention of Violence at the University of Colorado (2013) labeled Big Brothers/Big Sisters one of 11 model programs, "meaning the program has a high level of evidence supporting its effectiveness and should be replicated in other communities to prevent violence and drug abuse."

Like the Big Brothers/Big Sisters program, robust research exists on the efficacy of mentoring programs outside of juvenile justice settings. In a meta-analysis of 55 mentoring programs, DuBois et al. (2002) found that young people experienced a modest benefit from participation in such a program, and these positive effects increased through the use of best implementation practices. It is important to recognize that even modest benefits can have a large impact when thinking about their potential effects on a large population group.

Mentoring programs located in context of, or in partnership with, the juvenile justice system aim to prevent youths' illegal activities through positive role modeling, increasing the young person's self-esteem, and encouraging positive community participation and peer groups. In a Campbell Collaboration meta-analysis of 39 programs aimed at either prevention or treatment of juvenile delinquency, Tolan, Henry, Schoeny, and Bass (2008) found that mentoring programs reduced delinquent and aggressive behaviors but only had a modest positive effect on substance abuse and school performance. When emotional support was a central component of the mentoring, the effects were stronger, and randomized controlled trials had the largest positive outcomes. It is of note that the vast majority of the studies including in this meta-analysis focused on programs geared to keep high-risk youth out of the juvenile justice system. This analysis indicated that mentoring can be effective as a delinquency prevention strategy for youth with high-risk behaviors or low-level offenses on record.

As a result of the research base supporting the efficacy of mentoring to benefit high-risk youth, the juvenile justice system has also worked to incorporate mentoring programs into the spectrum of services provided. With significant federal investment, the OJJDP funded the Juvenile Mentoring Program (JUMP) in the 1990s supporting 201 local organizations (Novotney, Mertinko, Lange, Falb, & Kirk, 2002) and has funded the Multi-State Mentoring Initiative since 2007 (OJJDP, 2013a). These programs provide competitive grants for nonprofit and government organizations to reduce risk for delinquency through mentoring programs.

Since experts have endorsed mentoring as an effective delinquency prevention strategy, the federal government has also expanded its reach to fund mentoring services as a reentry intervention. Beginning in 2007, the OJJDP invested over 1.6 million dollars in the Mentoring Initiative for System Involved Youth, specifically funding four sites to provide mentoring services for youth involved in the juvenile justice system, reentry, and foster care (Technical Assistance and Training Center for Mentoring System Involved Youth, n.d.; Read, 2006). In addition, the federal Second

Chance Act (funneled through the OJJDP) grant program has supported nearly 20 mentoring programs for youth returning from prisons, jails, and juvenile correctional facilities (Council of State Governments Justice Center, 2013).

These current mentoring reentry initiatives, while substantial, are still small compared to funded prevention efforts. One explanation for this disparity may be the absence of cohesive research on the effectiveness of mentoring as a youth reentry intervention. As such, this study aims to systematically gather and analyze the available information about mentoring as a tool to help youth return to the community following confinement. Knowledge about the efficacy of youth mentoring in a reentry context could help focus funding in the appropriate places—whether that is to increase the use of mentoring programs for this purpose, increase research and evaluation efforts, or to perhaps utilize resources in a more effective manner.

METHOD

The authors used search, screening, and data extraction methods detailed in the Littell et al.'s (2008) description of systematic review methods to assess the published and non-published literature on mentoring reentry programs involving detained or incarcerated youth. Most importantly, the authors of this review went to great efforts to avoid many of the problems associated with less rigorous narrative reviews, employing a range of systematic review methods to minimize bias and maximize transparency. For the purposes of the review, we applied the following definition of a reentry mentoring program: one that pairs an older individual with a younger one, in either a paid or volunteer capacity, for the purpose of supporting the younger one with community reintegration following a period detention or incarceration in a juvenile justice facility. Following the OJJDP brief on mentoring as a reentry intervention, we allowed for mentoring to be combined with case management in the intervention, as long as a mentoring component was clearly defined in the study (Read, 2006). Our main research question was: *What is known about the efficacy of mentoring as a reentry intervention for incarcerated youth?* To answer this question, we performed a detailed search of the published and unpublished literature between the years of 1990 to 2013.[1]

We began the review with a comprehensive search of the following databases: PsychInfo, Sociological Abstracts, Social Services Abstracts, EBSCO, and Web of Science. We searched the titles, abstracts, and subject headings of these five databases with two different sets of key words. The first set of key words included (juvenile, youth, or youth offender) AND (reentry, re-entry, or aftercare) AND (mentor or mentoring), which yielded 565 hits, including peer-reviewed articles, dissertations, and book chapters. Truncation terms were used throughout (e.g., mentor#) in order to find all uses of the respective terms in the relevant literature. A second search was conducted using the key words (mentor or mentoring) AND (incarcerated or detained) AND (youth or adolescent), which yielded only 21 unduplicated hits from these same five databases. The first and third author of this paper independently reviewed all 586 titles and abstracts and mutually agreed on seven for further review.

We also performed a search of the gray literature, combing websites and information depositories for relevant technical reports and unpublished research. We searched the National Criminal Justice Reference Service Search with the key words "mentor" and juvenile and reentry or aftercare, which yielded 25 hits. We searched the Blueprints for Healthy Youth Development research project within the Center for the Study and Prevention of Violence, at the University of Colorado Boulder using the keyword "mentoring" as the site only allowed single word searches. This search yielded two results. The Office of Juvenile Justice and Delinquency Prevention only allowed single word searches. The keyword searches yielded the following results: "mentoring": 24 hits, "youth offender": 1, "reentry": 0, "re-entry": 0, "transition services": 0, and "aftercare": 0, for a total of 25 hits. We performed a keyword search of the Washington State Institute for

Public Policy website using the following: "reentry, re-entry, aftercare, transition services, juvenile, mentoring, incarcerated youth, juvenile offenders," which produced five hits. The search also included combing through the reference section of reports, literature reviews, and other Campbell reviews, which yielded an additional seven articles or reports to review. We also combed the curriculum vitae of two experts on this topic, attempted to make contact with these experts by phone, and to find additional materials online, which resulted in one additional report. In total, the gray literature search yielded 65 reports or articles to review. The first and second authors of this paper screened these documents and agreed on 13 for further review.

From the published and unpublished materials, 20 studies were reviewed for inclusion in this review, including 11 published articles, 7 technical reports, and 2 dissertations. Two raters independently examined the 20 studies according to the inclusion criteria listed below, with 90% agreement. Those with disagreement were sent to a third author for a final resolution.

1) The intervention must include paid or volunteer mentoring as a component;
2) the intervention must be offered to young people in a juvenile justice correctional setting or upon their release and continued for least 3 months upon their release;
3) the study must have a contemporaneous control or comparison group that did not receive the mentoring intervention; and
4) the study has to clearly report recidivism outcomes.

As listed in the Appendix, 12 of these studies did not meet our criteria for the following reasons: (1) the intervention did not adequately define a mentoring component ($n = 7$); (2) the setting was not a court-ordered youth correctional or detention facility ($n = 4$); and (3) the comparison group selection did not meet the review criteria ($n = 1$). This left a total of eight studies that were consolidated as follows:

- Two studies were selected for analysis for each of three programs ($n = 6$): the Aftercare for Indiana Mentoring Project (AIM), Washington State Juvenile Rehabilitation Administration (JRA) Mentoring Project, and the Clay County, Minnesota Project; and
- Two additional studies regarding Clay County, Minnesota were eliminated as they had less comprehensive details about the intervention or results as those described above. (also listed in Appendix A.

For the programs noted above with more than one study, we selected the publication containing the longest follow up period (Littell et al., 2008). However, we also examined progress reports from these programs that allowed us to record how the program and the recidivism data unfolded over time. Moreover, to acquire more detailed information about the AIM program and statistical analyses employed, the second author of this paper engaged Dr. Roger Jarjoura, Principal Investigator, in a telephone call on May 29, 2013. We also received additional data from Dr. Elizabeth Drake (via e-mail, June 4, 2013) regarding the JRA mentoring program.

Analysis

Information concerning these three mentoring programs were extracted from the source documents into a spreadsheet and double-checked by the first author for accuracy. The authors used a detailed extraction form involving four main components: (1) the intervention (including for example mentor selection and training, length of intervention, and dosage); (2) the setting and target population (such as types of facilities served, types of offenders served, etc.); (3) the methods employed, including comparison group selection, measures, and time intervals; and (4) the results reported, including recidivism outcomes and significance tests. Data were narratively synthesized both within and between the three programs.

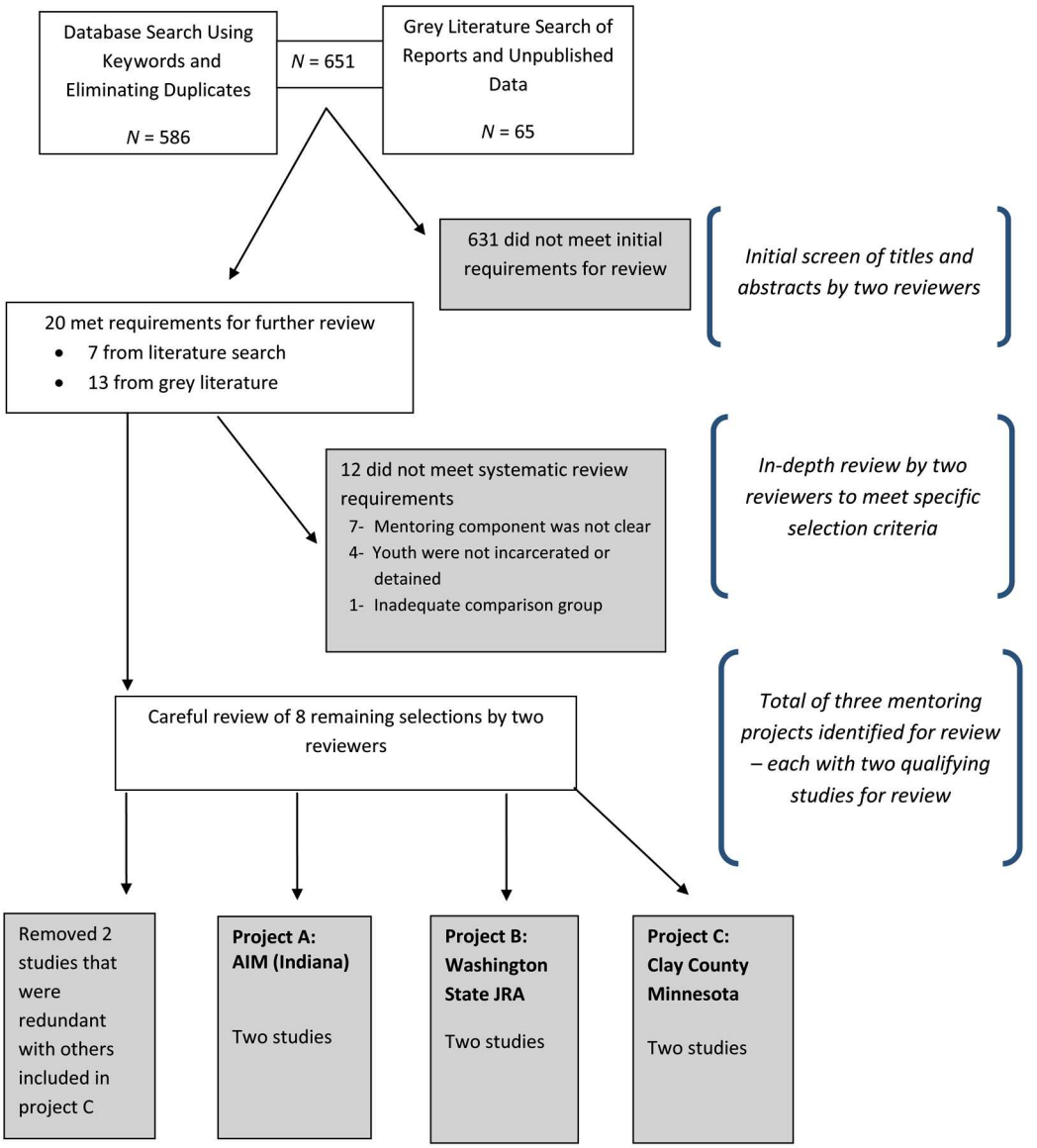

FIGURE 1 Search results.

RESULTS

Program Models

As shown in Table 1, the three mentoring reentry interventions were diverse in regard to population served, types of mentors recruited, and setting. Founded in 1996, Aftercare for Indiana through Mentoring (AIM) at the time of the initial study period paired youth returning from the Plainfield State Correctional Facility to the Indianapolis area with volunteer undergraduate student mentors from Indiana University-Purdue University Indianapolis.[2] The program aims to enhance youths'

TABLE 1
Description of Mentoring Interventions

	AIM	*JRA*	*Clay County*
Target population	Youth returning from the Plainfield State Correctional Facility to the Indianapolis area	Youth returning from JRA state correctional facilities to the Seattle area	Youth returning to Clay County, MN from a variety of court ordered placements
Setting of intervention	Mostly Urban	Mostly Urban	Rural and Urban
Eligibility	Not specified	No sex offenders; must have at least 5 months remaining of incarceration	Must have spent at least 3 weeks in an home placement
Mentor types	Undergraduates at Indiana University-Purdue University Indianapolis (IUPUI)	Adult volunteers	Paid Transition Coordinators
Mentor training	Not specified	One 8 hour training plus monthly support sessions	Not specified
Mentor matching criteria	Not specified	Gender, ethnicity, and hobbies/ interests	Females matched with a female Transition Coordinator when possible
Mentor activities	Individual and Group	Individual	Individual and Group
Target length of intervention	One year	One year	Six months after release

social capital and life skills "through self-development and the utilization of community resources" (AIM, 2007, p. 1). The target population is any young person in the state facility who was returning to the urban Indianapolis area. The program serves young men and women from all risk levels, including sex offenders. The pre-release segment has three elements: a needs assessment for each juvenile, life skills groups, and the creation of a reentry plan to address education, employment, health, money management, living arrangements, transportation, leisure time, social skills, family relationships, and emotional well-being. In the post-release period, AIM staff and mentors work with the youth by connecting them to relevant community services. AIM asks the volunteer mentors to meet with the mentees for at least 4 hours per week and to commit to at least one year of participation (AIM, 2004, 2007).

The Washington State Juvenile Rehabilitation Administration (JRA) Mentoring Program, established in 1996, was part of a federal initiative to reduce youth violence. The program goal was to provide youth returning to Seattle from state correctional facilities an opportunity to be paired with an adult mentor who could help them fulfill their educational and vocational goals and "to live a drug and crime free life" (Drake & Barnowski, 2006, p. 1). At the time of the study, all of the youth who were incarcerated in a state facility were eligible to participate in the program if they (1) had at least 5 to 6 months remaining in their sentence, and (2) were not classified as sex offenders. Training for the volunteer adult mentors included an initial 8-hour training session and monthly meetings. The mentors were required to meet with the youth at least monthly and to write or call weekly during the last 5 to 6 months of incarceration and then to meet at least weekly upon return to the community. The program manager performed a careful screening of both the youth and the mentors in order to provide matches based on such factors as gender, ethnicity, personality, and interests. The volunteers were expected to make a commitment of a least 1 year (Drake & Barnowski, 2006).

The third mentoring program, which took place in Clay County, Minnesota, was piloted in 2003 and designed to provide comprehensive reentry services for youth returning to a semi-rural area of Minnesota. Unlike the other two interventions, the mentors in this program were also paid transition coordinators who performed comprehensive case management functions. However, according to the researchers, the program was more innovative than traditional IAP or case management programs due to its strong mentoring component. In the Clay County program, the transition coordinators worked with "high risk" or "very high risk" young people (ages 11–19) returning home from a number of court-ordered placements including group homes, mental health or chemical dependency facilities, and detention centers (Bergseth & McDonald, 2007). Eligibility for the program stipulated that the young person had served at least 3 weeks in an out-of-home placement. While the facilities were dispersed throughout the state, all of the youth were returning to Clay County, which was a mixed urban/rural setting (Bouffard & Bergseth, 2008). The specific training for the transition coordinators was not specified in the materials examined. However, the program materials suggested that the coordinators had small caseloads of 12 to 15 youth and regularly met with them in individual and/or group sessions for at least 6 months following their return to Clay County (Bergseth & McDonald, 2007).

Design, Measurement, and Bias

Table 2 contains a description of research methods and outcomes associated with the three programs. Two of the programs (JRA and Clay County) used quasi-experimental designs, and the AIM program used an experimental design. As the JRA program was voluntary, the researchers attempted to match the treatment (mentor) group on key demographics (age, ethnicity, and risk level) to the comparison group who received standard probation-only services (typically meaning surveillance for the purposes of compliance with probation orders). The researchers matched the youth within five points on the JRA's Initial Security Assessment (Barnoski, 1998). The initial sample size was 78 in each group, and the researchers followed the youth up to 36 months after release (Drake & Barnoski, 2006). It is unclear from the materials examined whether release date was part of the matching criteria.

Clay County employed a slightly different approach, using a neighboring county to draw a comparison group that had contact with the same set of facilities but who received probation-only services. The sample size over the course of 4 years (2003–2007) was 92 in each group, and the final period of analysis varied from 3.75 to 50.5 months. According to the authors, there were no significant differences between treatment and comparison groups in the average follow-up period. Moreover, the varied weeks of exposure to risk of re-offending was accounted for in their analysis using event history models (Bergseth & McDonald, 2007).

The authors of both the JRA and Clay County studies acknowledged that the use of a non-randomized comparison group introduced significant study limitations and biases. More specifically, the Clay County comparison group had a larger percentage of rural youth, a disproportionate number of Native Americans, and a higher average number of prior court contacts, among other baseline differences noted in Table 2. The groups had baseline equivalence on age, gender, and Youth Level of Service/Case Management Inventory (Hoge & Andrews, 2009) risk score (Bergseth & McDonald, 2007). The JRA program used statistical matching procedures through records to minimize baseline difference between groups, yet recognized that the groups differed in their county of return (Drake & Barnowski, 2006). The AIM study ($N = 135$) used systematic random assignment to place participants into one of three groups (full AIM intervention; pre-release preparation only; no AIM services). Specifically, assignment into each of the groups was based on their month of scheduled release (personal communication, May 29, 2013). The AIM reports did not detail the composition of the three groups, and thus we were unable to assess biases resulting from baseline differences.

TABLE 2
Research Design and Method

	Study Design	*Comparison Group Selection*	*Services Received by Control Group*	*Sample Size*	*Recidivism Measures*	*Control Variables*	*Baseline Equivalence Measures*
AIM	Randomized Control Study	Randomized into three groups from one facility based on month of expected release	Group 1: received only pre-release AIM preparation Group 2: did not receive any AIM services	135 total	Re-incarceration	None specified	No analysis provided
JRA	Quasi-Experiment	Youth who did not volunteer to participate were matched on key demographic variables to a non participating group	Probation only services	78 treatment group 78 comparison group	Any violent felony convictions Any felony convictions Any convictions	County of release Gender Age at release Risk score	No differences: race, ethnicity, sex, criminal history score, age, ISCA risk score, and number of priors Significant differences County of return
Clay County	Quasi-Experiment	Geographic-youth returning from the same set of facilities to a neighboring County	Probation only services	92 treatment group 92 comparison group	Any new court contacts Total number of new official court contacts Any new criminal court contact* Total number of new court criminal contacts Any new charges Total number of new charges	Age at release Race/ethnicity Gender Urban/Rural setting Number of priors Time in placement during study period YLS/CMI risk score	No differences: age, sex, most recent placement type, YLS/CMI risk score, history of person-related offending Significant Differences Race Urban/Rural Prior criminal charges Prior felony charges Prior placements Period on probation

*Excluding status offenses, alcohol/tobacco, and traffic violations.

The authors considered using the Cochrane Risk of Bias Tool (Higgins, Altman, & Sterne, 2011) in order to assess bias within and between these three studies. However, while the risk of bias tool can be used with non-RCTs, it is generally geared toward the assessment of randomized controlled trials, and only one of the three studies came close to using random assignment. All three found studies would be highly biased across the range of elements in the tool, making its completion irrelevant for this review.

The recidivism outcome measures were slightly different in each study, yet all three studies examined a number of types of recidivism (i.e., violent, felony) with various indicators (i.e., arrests, court contacts, convictions). The two quasi-experimental studies incorporated a number of control variables in their multivariate models, including age, gender, geographic location, and ethnicity/race variables. The Clay County study also uniquely controlled for time spent in the community between release and study point, meaning time not in out-of-home placement. Including this variable also helped to control for the varied follow-up periods and among the youth in the control and treatment groups (Bergseth & McDonald, 2007).

Recidivism Outcomes

The JRA program reported no significant differences between groups in recidivism rates or odds of recidivism at 36 months after release. Whereas at 12 months after release, the researchers noted a pattern of differences between groups in rates of new convictions and new felony convictions (Barnowski, 2002), by 24 and 36 months these differences had nearly completely dissipated (Table 3). The overall new conviction rate at 36 months was over 70% for both groups.[3] The researchers speculated that the effect of the mentoring may have been greater at 12 months because the youth still were receiving the mentoring services at that time (Drake & Barnowski, 2006).

Both AIM and Clay County reported significant differences between treatment and comparison/control groups on recidivism outcomes. In the AIM study, the proportion of each group who were re-incarcerated at the 48-month marker was 44% for the full AIM program; 52% for those who received only pre-release services; and 62% for those with no AIM services. The difference between those in the full AIM program and the no AIM services control group was statistically significant at the $p < .05$ level (AIM, 2004; personal communication, May 29, 2013). Although a 44% recidivism rate may sound high, an absolute risk reduction of 18% is a fairly powerful effect for a social service program. To accentuate the point, if all 100,000 youth released annually in the United States participated in the AIM program and if the risk reduction rate remained the same, then 18,000 re-incarcerations would be prevented 4 years later.

The Clay County study included the most comprehensive and clearly reported outcome data. At the 6-month time period after release, 36.5% of the mentor group had at least one new court contact compared to 49% of the comparison group, which was not statistically significant. The mentor group, however, did have significantly lower mean number of subsequent contacts that the comparison group (see Table 3). Following these trends, at the last analysis point (which ranged from 3.75 months to 50.5 months depending on when the young person was released), 59.8% of the treatment group had no new official court contacts, compared to 62.0% of the comparison group, which was not significant. However, the average number of official court contacts for the comparison and treatment groups (1.23 versus 1.86), number of later criminal contacts (.85 versus 1.21), and number of later charges (1.48 versus 2.64) were all significantly different (see Table 3). These differences remained significant when accounting for time in the community (and not in placement) and controlling for demographic factors in subsequent multivariate analyses.[4] In addition, differences between groups in highest level of later court contact (i.e., status offenses, misdemeanors, and felonies) were statistically significant, with the comparison group having higher levels of offenses (Bergseth & McDonald, 2007).

TABLE 3
Recidivism Outcomes

AIM	*Outcomes 12 months* Re-incarceration A In AIM, with mentor: 25% B In AIM, no mentor: 29% C Not in AIM: 39%	Significance $p < .05$ (between A and C)	*Outcomes 48 months:* Re-incarceration A In AIM, with mentor: 44% B In AIM, no mentor: 50% C Not in AIM: 62%	Significance $p < .05$ (between A and C)
JRA	*Outcomes 12 months*[a] Any Recidivism Mentor: 50% Control: 56% Felony Recidivism Mentor: 19% Control: 34% Violent Recidivism Mentor: 3% Control: 8%	Significance	*Outcomes 36 months*[a] Total Recidivism Mentor: 72.5% Control: 75% Felony Recidivism Mentor: 51% Control: 55.5% Violent Recidivism Mentor: 10% Control: 11%	Significance
Clay County	*Outcomes 6 months* Any New Court Contact Mentor: 36.5% Control: 49.0% Any New Criminal Contact Mentor: 28.6% Control: 42.9% Number of New Court Contacts (mean) Mentor: .48 Control: .96 Number of New Criminal Contacts (mean)* Mentor: .35 Control: .61	Significance $p < .01$ $p < .05$	*Outcomes at end of full follow-up period*[b] Any New Court Contact Mentor: 59.8% Control: 62.0% Any New Criminal Contact Mentor: 48.9% Control: 55.4% Number of New Court Contacts* Mentor: 1.23 Control: 1.86 Number of New Criminal Contacts # Mentor: .85 Control: 1.21 Number of New Charges** Mentor: 1.48 Control: 2.64	Significance $p < .05$ $p < .10$ $p < .01$

[a]Figures reported as mean adjusted percentages, provided by principal investigator, Dr. Elizabeth Drake, via e-mail 6/4/13.
[b]Range of 15 to 202 weeks (3.75 months to 50.5 months).

DISCUSSION

This review sought to better understand what is known about the efficacy of mentoring programs in addressing the poor outcomes associated with juvenile offender reentry. Prior reviews and meta-analyses have found that reentry interventions can be beneficial, particularly when targeted to higher-risk youth, implemented with fidelity, and involving the family in the treatment (James et al., 2013; Perkins-Dock, 2001). It is also evident that mentoring with high-risk youth can be an effective strategy to reduce risk of delinquency (Tolan et al., 2008).

While this review represents a far less biased approach to locating, appraising, and synthesizing the evidence, it has a number of potentially substantial limitations. Although the search was extensive, spanning numerous databases and inclusive of gray literature, it was not constructed or reviewed by a librarian as would be the case in a Cochrane or Campbell Collaboration review. As such, there may be issues with the databases chosen, the search strategy (i.e., inclusion of all relevant search terms, properly specified and combined), and inclusiveness of the gray literature search. In addition, although the inclusion criteria and search strategy were pre-specified and the authors have substantial content and methodological expertise, we did not develop an a priori

protocol that was reviewed by external statistical and content experts. As well, only English language studies were included, potentially excluding an unknown number of studies. Finally, given time constraints, we did not anticipate being able to conduct a meta-analysis as part of this review. As it turns out, heterogeneity of interventions, study design, and outcomes in the very limited number of found studies would likely have precluded a meta-analysis. Nonetheless, future reviews should strongly consider this option. That said, this review is transparent and replicable, is less likely to suffer from the personal bias of the authors than traditional reviews, and better approximates a search of all relevant literature than most traditional reviews.

Given the current array of federal funding opportunities for mentoring programs for system-involved youth, we expected to find a body of information regarding these interventions. Yet in response to our main question—"What is known about the efficacy of mentoring as a reentry intervention?"—our primary answer is "not much." So what did we learn from this search process? First, even with different recidivism indicators, all three studies reported moderate levels of recidivism at 12 months (between 39% and 56% for controls, and between 25% and 50% for those with mentoring), and much higher rates of recidivism at the longer-term follow-up points (between 62% and 75% for controls and between 44% and 72% for those with mentoring). It is clear from these trends that both the treatment and comparison groups displayed substantial increases over time. The three studies were mixed with regard to whether or not mentoring was ultimately effective, with the JRA study showing negligible results, and the AIM and Clay County study reporting more significant differences between groups. However, taken together, the two studies that found some benefits of mentoring programs do not amount to sufficient evidence of effectiveness. Although the AIM study used an experimental design and had a statistically significant impact on the group receiving the full intervention, a more complete analysis on the remaining data would be a crucial step toward building a body of rigorous and replicable research. Nevertheless, because the AIM research employed systematic assignment, while potentially biased, it was more likely than the other two studies to produce comparison conditions that had baseline equivalence with respect to unmeasured confounders. This study produced statistically significant results that grew in strength in conjunction with the level of the intervention and the strength of the mentor-mentee bond, providing grounds for cautious optimism with respect to the effectiveness of mentoring as a reentry intervention.

The more extensively reported study in Clay County found a variety of differences between treatment and comparison groups that persisted over time and that controlled for key risk factors, including time not in restrictive placement. However, this intervention was more akin to case management than a traditional mentoring program, which raises the question of whether it was the mentoring relationship or perhaps the other services or referrals provided by the transition coordinators that made a difference in these outcomes. In addition, this study had a non-matched comparison group, using a neighboring county with notable demographic differences, and the youth who were in both groups had been treated in a variety of settings during confinement. Thus, the overall study design had some inherent limitations. There are also competing interpretations of the Clay County research. The greater statistical significance of the continuous data (i.e., number of later court contacts) relative to the categorical data (i.e., any later court contact) may be a result of the power of those different statistical tests. On the other hand, improving behavior outcomes for formerly incarcerated youth is often about reducing criminal activity as progress takes time, and each criminal act prevented is a success. Thus, assessments of program effectiveness may hinge to some extent on the definition of "success."

Based on the mixed evidence for mentoring as an effective reentry intervention and the funding available for these types of programs, there is a clear need for more rigorous and replicable research. Although the three studies provide some evidence that mentoring can have a positive impact in a reentry context, there is simply not enough research accomplished in this area to make any grand conclusions. As a priority, OJJDP and other funders should invest in studies

using randomized control trials, like the AIM study, that are required to report their findings in detail and statistical depth. The AIM study is the least biased of the three, and thus the findings are the most credible, but more research such as this is sorely needed.

The future should also consider incorporating additional dependent variables. The three studies used a variety of recidivism measures including arrests, convictions, and court contacts. While to some extent these measure various aspects of criminality, they may also register some inaccurate information, such as false arrests. This may artificially worsen the recidivism rates of those who experienced some minor setbacks. On the other hand, recidivism rates represent official reports of criminality and do not always represent actual criminal behavior. In either case, adding in measures of positive outcomes, such as attitude toward self and family, criminal associations, educational achievement, and employment, can provide more insight into some of the functional aspects of the mentoring interventions versus simply systems outcomes. There is precedent for using these and other measures in prior research on mentoring which should be replicated in reentry research (DuBois et al., 2002; Tolan et al., 2008).

If mentoring can indeed be an effective tool for reentry, it is also important to identify the mechanisms underlying the intervention through richer descriptions of the intervention itself, such as recruitment strategy, type of training, systems for matching mentor-mentee dyads, recruitment of mentors, and how mentors are supported in their work. It would also be helpful to know whether the relationship between the mentor and mentee has a bearing on the results, akin to a therapist-client relationship (Norcross & Lambert, 2010). If not, then it is important to learn whether the impact comes from the adult providing a tangible benefit (i.e., job referrals, tutoring, emotional support) or simply just having someone to help pay attention to their well-being. While the Clay County study stressed the importance of the adult-youth connection, it also supports the value of effective case management services, linkages, and referrals.

Future research should also explore the effectiveness of different types of mentoring programs. The programs that we studied included both one-to-one and group mentoring (and sometimes both), but there is not enough research to know which techniques or combinations of techniques are most effective. Moreover, all three studies revealed increases in recidivism at successive time intervals, which raises some important questions. Is there an optimal duration of mentoring that can prevent recidivism? How many hours per week of mentoring are necessary to produce the improved outcomes that programs seek? Such questions would require careful tracking of the intervention dosage in order to link this information to outcomes.

Another area for further study are the characteristics of both the adults and the youth in the programs. Prior research has found that matching based on race, gender, or interests does not play a role in the impact of the mentoring (DuBois et al., 2002), but formerly incarcerated youth are a unique population. Mentoring could prove to be more beneficial depending on the age gap in the dyad, gender, or ethnic match. Conversely, because the benefits of mentoring are not yet conclusive, it may be informative to explore the characteristics of the youth who benefit most from this type of intervention, such as higher-risk, drug-involved, gang-affiliated, or other types of offenders. Simply put, the studies that currently exist are insufficient in number and are not robust enough in methodology or sample size to answer these questions.

CONCLUSION

Working with formerly incarcerated youth is a complex and multi-layered process (Abrams & Snyder, 2010). There are also many factors that can play a role in the effectiveness of both an individual mentoring relationship and a mentoring program (DuBois et al., 2002). The lack of rigorous or replicable research on mentoring as a reentry intervention needs to be addressed if funding for these programs is to continue at its current level. Early indications from these

studies as well as the wealth of data on mentoring programs for high-risk youth more generally provide reason for cautious optimism that mentors and similar support systems can help youth to successfully overcome the numerous challenges they face upon reentry. Future research will be needed to turn hopefulness into a more definitive statement about the effectiveness of mentorship as a juvenile reentry intervention.

NOTES

1. We included studies beginning in 1990 because that year corresponds with many changes in juvenile prosecution and sentencing laws that led to longer sentences for youth, a dramatically increased juvenile corrections population and an increasing focus on reentry and aftercare programs (Snyder, 2003).
2. The AIM program is currently still in operation and now serves youth from nine facilities.
3. The recidivism data were reported in graph form in the published report (Drake & Barnowski, 2006), and exact, mean adjusted figures were provided by co-principal investigator Dr. Elizabeth Drake from the Washington Institute for Public Policy via e-mail June 4, 2013.
4. The sample sizes used for 6-, 12-, and 24-month multivariate analyses were varied (and decreased over time) as they were dependent on meeting criteria related to length of time since release (Bergseth & McDonald, 2007).

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APPENDIX: LIST OF EXCLUDED STUDIES

1. Must include a paid or volunteer mentoring component
2. Must be offered to young people in a correctional or detention setting
3. Must have a contemporaneous control or comparison group
4. Must clearly report recidivism outcomes
5. Duplicate research of studies selected for analysis

1. Barton, W. H., Jarjoura, G. R., & Rosay, A. B. (2008). *Evaluation of the boys & girls clubs of America targeted re-entry initiative: Final report.* Indianapolis: Indiana University.

   Primary Reason for Exclusion: 1

2. Bauldry, S., & Hartmann, T. A. (2004). *The promise and challenge of mentoring high-risk youth: Findings from the national faith-based initiative*. Philadelphia, PA: Public/Private Ventures.

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   Primary Reason for Exclusion: 5

6. Cohen, M. A., & Piquero, A. R. (2010). An outcome evaluation of the Youthbuild USA offender project. *Youth Violence and Juvenile Justice*, *8*(4), 375–385. doi:10.1177/1541204009349400

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Reason for Exclusion: 1

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Primary Reason for Exclusion: 2

13. Trout, A. L., Tyler, P. M., Stewart, M. C., & Epstein, M. H. (2012). On the way home: Program description and preliminary findings. *Children and Youth Services Review*, *34*, 1115–1120. doi:10.1016/j.childyouth.2012.01.046

Primary Reason for Exclusion: 2

14. Unruh, D. K., Gau, J. M., & Waintrup, M. G. (2008). An exploration of factors reducing recidivism rates of formerly incarcerated youth with disabilities participating in a re-entry intervention. *Journal of Child and Family Studies*, *18*, 284–293. doi:10.1007/s10826-008-9228-8

Primary Reason for Exclusion: 3