From the onset of the first juvenile court in 1899, the underlying philosophies of the juvenile justice system have been different from the adult system (Shepherd, 1999). Youth involved in the juvenile justice system largely have been viewed as less culpable for their actions and in need of rehabilitative efforts rather than punitive sanctions; both of these concepts are supported by developmental psychology and related research (Cauffman et al., 2018). Beyond helping to protect public safety, the goals of the juvenile system have included “skill development, habilitation, rehabilitation, addressing treatment needs, and successful reintegration of youth into the community” (Youth.gov, undated). Although the degree to which the juvenile justice system has prioritized rehabilitation has ebbed and flowed over the past century, there continues to be a call for developmentally informed (i.e., research and interventions that account for the developmental stage the youth is in and use strategies that are appropriate) and desistance-focused (i.e., understanding and supporting the process of ceasing from criminal behavior) research, policy, and practice (Kazemian, 2021).

**KEY FINDINGS**

- We identified 162 articles meeting our inclusion criteria that reported on the effectiveness of behavioral interventions for youth who are involved in the juvenile justice system.

- Diversion programs, which aim to provide treatment in community-based settings, were generally found to be effective across a variety of program models.

- Programs using cognitive behavioral approaches, multisystemic therapy, and functional family therapy were associated with positive outcomes.

- Certain treatment approaches were less well supported by the literature. For example, programs designed to enhance community supervision with additional oversight resulted in mixed findings, with some programs resulting in increases in technical violations.

- There were limitations to the existing literature, including a focus on recidivism as an outcome measure and limited efforts to disaggregate data by race, ethnicity, or gender.

- An understanding of effective intervention approaches will help Los Angeles County maximize the impact of its portfolio of services that are aimed at youth who are involved in the juvenile justice system.
In 2019, there were nearly three-quarters of a million (722,600) juvenile delinquency cases in the United States (Hockenberry, 2022a). Of these cases, 19 percent were dismissed at intake (i.e., the point at which authorities decide how to pursue the case), 28 percent were handled informally (i.e., no petition is filed), and 54 percent of cases continued through the court (i.e., petitioned). For the petitioned cases, over 200,000 juveniles were adjudicated (53 percent), the equivalent of being found guilty in adult court (Hockenberry, 2022a). For those whose cases were adjudicated, juvenile probation was the most frequently used sanction, placing youth under supervision in the community while dictating certain requirements on the youth and, at times, their caregiver(s) (Office of Juvenile Justice and Delinquency Prevention, 2019). Youth are also routinely placed in residential facilities. The 2019 Juveniles in Residential Placement census reported 36,479 youth held in 1,523 residential facilities on the day of the census (Hockenberry, 2022b). A simplified version of the flow of youth through the juvenile justice system is presented in Figure 1.

In turn, juvenile justice involvement has downstream implications for the lives of these youth: Research suggests that the deeper a youth penetrates the justice system, the greater the likelihood of future juvenile and adult justice system contact (Petrosino, Turpin-Petrosino and Guckenburg, 2010). Involvement in the juvenile justice system can have negative long-term effects, such as increased depression, reduced physical health, functional impairment (i.e., reduced physical capabilities), and increased suicidal thoughts later in life (Barnert et al., 2017). Youth often face barriers of continuing their education upon exiting juvenile justice facilities preventing them from returning to school (Kubek et al., 2020). Furthermore, removing youth from the community can negatively affect their development, reduce interactions with prosocial peers, potentially increase negative behaviors, and create barriers in effectively transitioning into adulthood (Lambie and Randell, 2013). These effects are particularly damaging when we consider that this population already faces a host of challenges when entering the system.

Youth who are justice-involved often have a wide variety of needs in such areas as mental health, physical health, substance use, and obtaining an education (Barnert et al., 2020; Beaudry et al., 2021; Office of Juvenile Justice and Delinquency Prevention, 2019; Teplin et al., 2013). Despite these challenges, the juvenile justice system often struggles to meet the needs of the youth over which it has stewardship (Dennis et al., 2019; Esthappan and Lee, 2018; Vincent et al., 2021). Nevertheless, many youths desist from criminal behavior rather than continuing to engage in criminal behavior deep into adulthood (Mulvey, Schubert, and Chassin, 2010; National Institute of Justice, 2014; Steinberg, Cauffman, and Moahan, 2015). A key to supporting the desistance process is providing targeted and effective services, ideally early in the youth’s engagement in delinquent behaviors, and incorporating a more strength-based focus when engaging with youth (Kazemian, 2021). To achieve the goal of providing effective services, continued efforts are needed, not only to continue developing and testing new service models but to synthesize and disseminate our current understanding of what practices have supporting evidence. Moreover, it is important to know what works in different settings.

FIGURE 1
Flow Through the Juvenile Justice System

NOTE: This is a simplified version of an individual youth’s trajectory through the juvenile justice system and does not depict every potential pathway through the system or pathways out of the system. There also might be local variations. For more-detailed flowcharts, please see Office of Juvenile Justice and Delinquency Prevention, undated; Bureau of Justice Statistics, undated; and Annie E. Casey Foundation, 2020.
given that justice-involved youth receive services in a variety of settings, from community placements to detention facilities.

In Los Angeles County, a key source of funding for programs for juvenile justice-involved youth is the Juvenile Justice Crime Prevention Act (JJCPA). JJCPA funds are administered by the California Board of State and Community Corrections, and each county receives an allocation of funding to support programs that reduce crime and delinquency (California Board of State and Community Corrections, undated). Los Angeles County receives about $28 million per fiscal year to support its core programming; additional funding is available during the year to support new or one-time programs (Los Angeles Juvenile Justice Coordinating Council, 2021). Although JJCPA’s funds are focused on reducing crime and delinquency, these funds can be spent on both prevention and intervention activities. In Los Angeles County’s most recent Comprehensive Multi-Agency Juvenile Justice Plan (CMJJP)—the document that outlines Los Angeles County’s approach to using JJCPA funds—Los Angeles County presented a funding strategy that would allocate 25 percent of funds to primary prevention (i.e., programs serving youth who have not yet had contact with the juvenile justice system) and 65 percent of funds to early intervention programs (i.e., programs targeting youth who have had early contacts with law enforcement) or intervention programs (i.e., programs targeting youth on probation) (Los Angeles Juvenile Justice Coordinating Council, 2021).

The focus of those early intervention and intervention programs is on individuals who have had early contacts with the juvenile justice system or are under the supervision of the Probation Department.

County data indicate that the number of justice-involved youth has decreased substantially over the last several years. For example, in December 2018, 5,098 youth were under active supervision of the Probation Department. This dropped to 3,538 by October 2020 (Los Angeles Juvenile Justice Coordinating Council, 2021). Although this drop might partially reflect the effect of the coronavirus disease 2019 pandemic, there is also evidence that the population of probation-involved youth had already been on the decline (Education Access and Youth Development Measure J Subcommittee, 2021). As of 2022, an estimated 10,000 youth had initial or early contacts with law enforcement, and just over 4,000 were under the supervision of the Probation Department (Los Angeles Juvenile Justice Coordinating Council, 2021).

Although the size of juvenile justice-involved youth population has declined, this also means that the individuals who remain under the supervision of the Probation Department are likely to be higher-need and have more serious charges against them, making the provision of evidence-based services for this population an important goal. Moreover, as Los Angeles moves toward a Care First, Jail Last approach (Los Angeles County Chief Executive Office, undated), there also has been interest in investing in early intervention services and opportunities to deflect or divert individuals away from Probation Department involvement after early contact with the juvenile justice system. This further underscores the importance of identifying effective diversion and other community-based programs for juvenile justice-involved populations. In fact, provision of
“promising practices, best practices, and evidence-based programs” is an explicit part of the Guiding Principles of the CMJJP in Los Angeles (Los Angeles Juvenile Justice Coordinating Council, 2021).

However, there are several barriers that affect Los Angeles County’s ability to provide evidence-based practices for justice-involved youth. First, JJCPA funding decisions are made by the Juvenile Justice Coordinating Council (JJCC), which comprises representatives from city agencies, county agencies, and local nonprofits. Although the JJCC members have indicated that they believe it is important to fund practices and programs that are effective for a given outcome or population, members have noted that they do not always know what those evidence-based practices are (Whitaker, Smucker, and Holliday, 2022). Second, although JJCC members contribute expertise related to juvenile justice, the JJCPA funding portfolio supports such a broad range of programs that it would be challenging for members to be experts on all areas that receive funding. Third, the funding request submission form requests that agencies provide details regarding the evidence base of their programming; however, agencies often make local adaptations to programs, and it could be difficult for JJCC members to determine what components of programming are evidence-based. Finally, staff from the individual agencies and community-based organizations that provide services may encounter a similar challenge. Although staff from these agencies may understand the importance of implementing evidence-based practices, it can be challenging for those organizations to stay up to date on academic literature while focusing on serving clients.

To address these needs, we conducted a scoping review of the academic literature to understand the state of the evidence on existing programs for juvenile justice-involved populations. Consistent with the typical goals of a scoping review, we aimed to conduct a comprehensive review of the literature, map the body of literature focused on programs for juvenile justice-involved youth, and provide a descriptive review of the literature that met our review criteria (Pham et al., 2014). Although we provide comment on the study design used in the literature, our goal was not to formally appraise the quality of the literature but rather to understand more broadly what programs are supported by the literature and what gaps exist. Specifically, this review aimed to address the following questions:

- What types of programs have been evaluated in the academic literature, and what programs have emerged as promising or evidence-based?
- What are the gaps in the existing juvenile justice literature?
- What lessons drawn from the literature can be applied to the portfolio of programs funded by JJCPA in Los Angeles County?

**Methods**

To identify relevant literature, we conducted a review of peer-reviewed studies published in academic journals. We searched five databases: PsycINFO, PubMed, Criminal Justice Abstracts, Social Science Abstracts, and Social Services Abstracts. We developed a comprehensive search strategy that included search terms that are relevant to both juvenile justice-involved and at-risk youth to ensure that studies of youth involved in earlier stages of the juvenile justice system (e.g., youth who have been arrested or diverted) were included, though our ultimate goal with this review was to focus on literature specific to juvenile justice system-involved youth. We developed a tailored set of search terms for each of the five datasets, which followed the following general structure:2

- Terms related to juvenile justice-involved youth (e.g., “juvenile justice,” “juvenile delinquen*,” “court-involved youth”) or at-risk youth (e.g., “antisocial,” “conduct disorder,” “violenc*”) AND
- Terms related to evidence-based practices (e.g., “evidence-based practice*,” “program evaluat*”) AND
- Terms related to potential outcomes of interest (e.g., “outcome,” “reoffen*”).

We limited our review to studies published since the year 2000, published in English, and that included programs or samples in the United States.
Empirical studies and meta-analyses that reported on juvenile justice–involved populations were eligible for inclusion. For purposes of this review, juvenile justice involvement was defined as individuals who have been arrested, are currently court-involved, have already been adjudicated, are detained, are in community placements, or are on community supervision. We excluded dissertations, theses, book chapters, conference abstracts, and narrative reviews that did not include a statistical synthesis of outcomes. Additionally, if a study reported combined outcomes for both at-risk youth and justice-involved youth, the study was excluded (i.e., studies reporting on a mixed sample of at-risk and justice-involved youth were included only if results were reported for the subgroup of justice-involved youth).

Our focus was on studies reporting findings from behavioral interventions, which represent the majority of programming funded by the Los Angeles County Probation Department. We focused on programs serving youth between the ages of 11 and 17—again, reflecting the primary population of the JJCPA programming—although studies were included if the ages of the sample overlapped at least in part with that age range. However, we excluded studies that solely reported findings of youth younger than age 11 (e.g., preschool interventions) or older than age 17 (which tended to focus on the adult criminal justice system). We included programs that provided services to both youth and family members, but excluded programs if they only provided services to the parent(s)/caregiver (i.e., did not include the youth in services). We also excluded medical interventions (e.g., pharmacological treatments, medical services) and policy-level interventions (e.g., the effects of banning expulsions on outcomes in juvenile justice–involved youth). Overall, studies had to report outcome measures to be included; studies that reported only process measures (e.g., characteristics of youth served, volume or dosage of services received, barriers and facilitators to implementation) were excluded.

We developed a two-stage review process to identify studies meeting our inclusion and exclusion criteria. The first stage involved screening titles and abstracts. Articles that clearly met our inclusion criteria were retained for full-text review, as were articles for which there was not enough detail in the title or abstract to determine if they met our inclusion criteria. The title and abstract review was completed by two members of the research team. To ensure that the reviewers were consistently applying our inclusion and exclusion criteria, the two research team members and senior investigator independently screened an initial set of 50 articles and discussed them to achieve consensus. The inclusion and exclusion criteria were refined using this process, and the research team then screened a second set of 50 articles. After reaching consensus, the two research team members then independently screened the remaining articles.

Articles that passed our initial screening phase then underwent a full-text review. Articles that met our inclusion criteria at the full-text review stage were retained in our final sample, and data of interest were abstracted by one of the two research team members. The two research team members and the senior investigator met one to two times weekly throughout the data abstraction process to discuss application of the inclusion and exclusion criteria to ensure interrater reliability throughout the abstraction process.

In total, we screened 5,275 articles for inclusion, of which 320 were retained for full-text review. Of the 320 articles reviewed, 162 met inclusion criteria and were available to the research team. We developed a structured form to abstract relevant information from each of the included articles. This included information about the population, setting, nature of the intervention, study design, and outcomes. Each article was reviewed and abstracted by one member of the research team, and the team met frequently to discuss questions and ensure consistency across team members. After completing the data abstraction process, we categorized the articles into one of 13 categories (see Table 1 for a summary of the 12 main categories, the subcategories within each of those higher-order categories as relevant, and the number of included articles in each category). The specific categories were identified after the abstraction process was complete, and the categories were based on considerations related to the stage of processing in the juvenile justice system and/or setting (e.g., in the case of diversion or court-related interventions) and the content of the programs (e.g., in the case of psychotherapeutic or psychoeducational programs). It should be noted that interventions reviewed in the
<table>
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<th>Category</th>
<th>Subcategories</th>
<th>Number of Included Studies</th>
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<td>Teen courts</td>
<td>7</td>
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<tr>
<td></td>
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<td>Other diversion approaches or practices</td>
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<tr>
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<td>Drug courts</td>
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<td>Other court-related interventions</td>
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<td>Care coordination interventions</td>
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<tr>
<td>Psychotherapy and other therapeutic</td>
<td>Cognitive-behavioral approaches</td>
<td>14</td>
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<td>Other psychoeducational programs</td>
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<td>Substance use treatment</td>
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<td>Risk-need-responsivity</td>
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<td>3</td>
</tr>
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<td>Other</td>
<td>(No subcategories)</td>
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</table>
articles could have been included in more than one of the identified categories. Team members sought to place articles in the category that reflected the primary focus of the article or intervention, recognizing that some articles likely could fit in more than one group. For example, some of the diversion programs relied on treatment models described in subsequent treatment categories, such as family therapy, cognitive behavioral therapy, and restorative justice. Because diversion programs operate at a specific phase during youths’ involvement in the juvenile justice system (i.e., by placing them in community-based settings rather than formally being processed by the court), we categorize these as diversion programs as their primary category because the avoidance of formal court processing is an important aspect of the intervention. We took a similar approach to problem-solving courts and other court interventions, particularly because being involved in this type of court often adds reporting and oversight that might not be provided in other settings and that could change the effects of a treatment approach. For the other categories, we primarily focused on the treatment modality rather than the setting. In this report, we identify only the primary categorization of each article.

We found that most articles reported on juvenile justice system outcomes as the primary outcome measure (e.g., rearrest, recidivism, probation violations), although some reported outcomes in other domains, such as behavioral health or academic achievement. In our summary, we focused on describing findings related to recidivism first, but also provided detail regarding any other outcomes measured by the studies.

**Results**

In this section, we provide a summary of the findings for studies in each of the following categories: (1) diversion programs, (2) problem-solving courts and other court interventions, (3) care coordination interventions, (4) psychotherapy and other therapeutic interventions, (5) psychoeducation, (6) health-focused programs, (7) family-focused interventions, (8) substance use treatment, (9) wraparound service models, (10) boot camps, (11) risk-need-responsivity, (12) community supervision interventions, and (13) other (i.e., those that did not neatly fit into one of the previously identified categories). A table of all included studies appears in Appendix B.

### 1. Diversion Programs

Diversion programs aim to reduce youths’ formal contact with the juvenile justice system and can occur at different points along a youth’s path through the juvenile justice system. For example, a youth may be arrested and, rather than formally processed, be referred to a diversion program to prevent going deeper into the system. Youth can also participate in diversion programs after adjudication such that they engage in an alternative sanction instead of entering a residential setting (Office of Juvenile Justice and Delinquency Prevention, 2017a).

Thirty-three studies examined diversion programs. Methodological rigor varied across the studies with five randomized controlled trials (RCTs), two natural experiments, 21 quasi-experimental studies (though the rigor of comparison groups varied by study), and five observational studies. Most of these studies found that diversion programs assisted youth in having statistically lower rates of recidivism when compared with their reference groups. Several diversion programs described specific program models, such as restorative justice programs or mental health diversion programs. Others broadly discussed the use of diversion but did not necessarily focus on a particular population or treatment modality. We categorized the programs in this section into four categories: restorative justice approaches, teen courts, mental health diversion approaches, and other diversion interventions or practices. These are described in further detail in this section.

#### 1.1. Restorative Justice Approaches

Three quasi-experimental studies reported on diversion programs using a restorative justice approach, which traditionally facilitates interactions between the youth who committed the offenses and those affected by it while seeking to repair any harm and hold the youth accountable (Bouffard, Cooper, and Bergseth, 2017). First, Bergseth and Bouffard (2013)
found that youth who participated in a restorative justice program remained offense-free for longer than youth receiving standard care (i.e., probation) over an average follow-up period of 3.5 years. Second, in a later study, Bouffard, Cooper, and Bergseth (2017) compared different types of restorative justice approaches (e.g., community panels, indirect mediation, direct mediation) for youth in a juvenile court. After controlling for group and selection differences, all restorative justice programs had statistically slower rates of future system contact. Third, de Beus and Rodriguez (2007) examined a sample of over 9,000 youth assigned to a restorative justice diversion program or the traditional diversion program offered by the county. Youth receiving the restorative justice program were less likely to reoffend during the two-year follow-up period.

Together, these studies suggest restorative justice programs might effectively serve as alternatives to formal system involvement for youth.

1.2. Teen Courts

Teen courts are intended for first time or nonserious offenses. They can be classified as a type of restorative justice approach (Smokowski et al., 2018), although in contrast with the restorative justice approaches described previously, these courts usually are overseen by an adult (e.g., a judge), run by peers (i.e., youth serve as the bailiffs, attorneys, and jury), and often result in sanctions of community service being given (Vose and Vannan, 2013). Seven studies examined teen court diversion programs: Two are RCTs, four are quasi-experimental, and one is observational.

Results from a quasi-experimental study suggest youth who participate in a teen court might have reduced rates of delinquency and other outcomes, such as parent-adolescent conflict, adolescent violence, adolescent aggression, and number of delinquent peers (Smokowski et al., 2018). The same study also documented increased school satisfaction and self-esteem for youth in the teen court program. Additionally, two other studies (one quasi-experimental, one observational) found positive impacts: Youth were less likely to reoffend compared with other diversion programs (Weisz, Lott, and Thai, 2002) and had relatively low arrest rates (i.e., 20 percent in a year) (Vose and Vannan, 2013).

Despite these positive findings, other studies found null or negative effects on a variety of outcomes. In an RCT, Wilson, Gottfredson, and Stickle (2009) observed differential outcomes by gender. Results suggested that teen courts have a negative effect for boys (e.g., increased substance abuse and delinquent behavior, lower positive self-concept) and no effect for girls. In two quasi-experimental studies, one observed that youth in teen court had higher rates of offending (Stickel et al., 2008), and the other found no statistical difference between the treatment and comparison groups on reoffending rates (Norris, Twill, and Kim, 2011).

In an RCT, D’Amico et al. (2013) sought to examine the effectiveness of interventions assigned as part of youth participation in teen court. Youth were randomly assigned to a psychoeducation course or a motivational interviewing intervention. Youth in both groups demonstrated decreased delinquency and similar or decreased use of marijuana and alcohol; however, there were no significant differences between youth receiving psychoeducation courses and youth participating in the motivational interviewing intervention.

Overall, there were mixed results on teen courts’ abilities to reduce recidivism and other outcomes.

1.3. Mental Health Diversion Programs

Six studies examined diversion programs that focus specifically on youth with mental health concerns, aiming to connect youth with needed mental health services in community-based settings (i.e., treatment settings that the youth engage in while residing in the community with a parent[s] or caregiver). Three studies were quasi-experimental and three were observational.

In a quasi-experimental study, youth who participated in a program that provided family therapy, individual therapy, rehabilitation services, skills training, and substance abuse and educational services to youth had significantly reduced recidivism compared with the comparison group (Jeong, Lee, and Martin, 2014). Another study examined the effects of having resource officers—city police offi-
cers that were members of the Youth and Family Services Unit and assigned to public schools. Resource officers were trained in juvenile mental health needs, and youth who committed an arrestable offense could be diverted from formal system involvement by the resources officer and instead be connected to needed services. Findings showed that youth participating in the program experienced increased outpatient service utilization compared with the reference group (Barrett et al., 2022); recidivism was not measured in this study.

Several studies observed positive outcomes for multisite efforts to provide diversion services for youth with mental health challenges. These efforts provided general guidelines for diversion programs by providing a list of evidence-based practices, and jurisdictions applied the programming with the aim of meeting the needs of their specific population. Two studies evaluated Ohio’s Behavioral Health Juvenile Justice program, which sought to enhance communities’ ability to screen and treat youth with mental health and substance use needs in lieu of detention (Kretschmar et al., 2018; Kretschmar et al., 2016). A quasi-experimental study found that 17.9 percent of youth in the program had a felony charge and 42.9 percent had been adjudicated for any type of offense during the year following youth enrollment in the program, although this finding is difficult to interpret because the study did not provide baseline data on juvenile justice contact. This study also found that youth experienced improvements in functioning across several daily activities (e.g., interpersonal interactions) and reductions in trauma symptoms, anxiety, depression, anger, posttraumatic stress disorder (PTSD) symptoms, dissociation, and sexual concerns (Kretschmar et al., 2016). A subsequent quasi-experimental study observed that youth who completed a diversion program had significantly lower odds of receiving criminal charges between the ages of 18 and 19 than youth who did not participate in such a program (with this latter group having twice the odds of recidivating) and youth who did not complete the program (who were 1.68 times more likely to recidivate) (Kretschmar et al., 2018).

Two other studies evaluated the effects of the Mental Health/Juvenile Justice Diversion Project in New York. Several sites across 12 counties participated, all with the unified goals of preventing rearrest or supervision violations of high-risk youth with mental health and substance use challenges. Although services could vary by site, each location had to provide screenings; assessments; and individual, group, and family therapy, and refer youth to other services. Each site also incorporated case management for the youth and their family. Hamilton and colleagues (2007) observed that sites that provided direct care (i.e., provided services on site rather than referring youth to outside services) were associated with decreased recidivism. This may be because youth who received care more quickly did not get lost in the referral process. Sullivan et al. (2007) examined seven years of data for the New York program and observed decreases in the proportion of youth being rearrested and proportion of youth receiving out-of-home placements over time.

The studies reviewed here suggest that providing services for mental health needs can positively affect criminal justice outcomes. Furthermore, referring youth to services can increase the use of mental health services. Efforts to identify best practices and allowing local sites to adapt the recommendations to meet their specific needs also proved promising.

### 1.4. Other Diversion Interventions and Practices

Sixteen studies examined a variety of other types of diversion programs with varying program models. There was not necessarily a unifying thread across these studies with respect to program features, other than they all aimed to divert youth to community services. Some of the programs had shared elements in common—for example, including a school-based component or developing a treatment contract. We did not segment these into separate subcategories because there were not necessarily enough shared features to formally combine them into new subgroups. However, in the descriptions that follow, we have aimed to highlight some of the shared features of these programs. Overall, these studies generally found positive results.

Some program models incorporated an academic, writing, or school-based component, at times in combination with a community service element.
An RCT suggested that youth participating in a reading group that also incorporated a service project were less likely to be prosecuted in the future and less likely to have a felony arrest (Seroczynski et al., 2016). A quasi-experimental study found that youth who completed an after-school diversion program were less likely to recidivate compared with the community comparison group (Myers et al., 2000). Finally, a quasi-experimental study sought to evaluate Philadelphia’s effort to decrease the number of school-based arrested youth. Although the rate of school-based arrest decreased by 84 percent following the program’s implementation, youth who were arrested prior to the program had similar recidivism rates compared with the program youth who, instead of being arrested at school, had a social worker visit their home and offer voluntary resources (Goldstein et al., 2021).

Five studies described diversion programs in which a formal treatment contract or treatment plan was developed for participating youth. Two of these termed the agreement a treatment contract, which often included such components as community service, writing an essay or apology letter, and restitution. The first study was an RCT that examined a diversion program for youth who had shoplifted, in which a probation officer developed the treatment contract using an assessment of the youth conducted with the youth’s parent or guardian (Kelley, Kennedy, and Homant, 2003). Over a two-year follow-up, youth assigned to developing a treatment contract were significantly less likely to receive a court petition and demonstrated a greater degree of personal responsibility for shoplifting compared with youth who met monthly with a probation officer. A quasi-experimental study also examined a program in which treatment contracts were established; in this case, the contracts were developed by a community volunteer panel (NeMoyer et al., 2020). They found that 14.8 percent of youth completing the program were arrested compared with 35.8 percent of non-completing youth. Finally, an observational study also suggested that treatment completers perform better than those who do not complete a diversion program (Dembo et al., 2008). In this program, a psychosocial risk and needs assessment was used to develop treatment plans for youth with first time nonviolent offenses and divert them to community services (Dembo et al., 2008). Youth who received the assessment and completed the program had significantly lower recidivism rates than youth who did not complete the program (15 percent versus 33 percent).

Two studies examined the practice of providing judges with treatment plans. Although these studies did not report on recidivism, they found that this practice could increase the likelihood of a youth being diverted. First, one study observed that youth who received a biopsychosocial assessment that was used to create a treatment plan and presented to the judge prior to adjudication were 2.7 times more likely to receive an alternative sentence (i.e., probation along with restitution, mandated treatment, or both) than youth who did not receive the assessment and treatment plan (Geurin et al., 2013). Second, another study looked at a county-wide effort in Erie County, New York, to bring together multiple community stakeholders (i.e., family court, probation, social services, and mental health services) to evaluate youths’ needs and create a treatment plan prior to the youth’s court date (Kazi et al., 2012). Significant increases in the use of alternative sanctions (i.e., youth cases were adjourned in contemplation of dismissal dependent on youth having completed the treatment plan) was observed when comparing data from the two years prior with program implementation (17 percent of cases) and the two years after the program was implemented (63 percent of cases). These two studies highlight the importance of providing judges with informed treatment plans prior to youth being sentenced.

One statewide diversion program in Illinois allowed sites to provide a form of evidence-based family therapy programs in addition to other wrap-around services. A study of this program found that during the 18 month follow up period, youth who completed the program had fewer adjudications (28.8 percent) compared with pre-intervention youth (46 percent) and youth who failed to complete the program (59 percent) (Kethineni and Grubb, 2021).

Three studies broadly examined diversion as a practice, comparing it with more-formal sanctions (e.g., formal system processing, detention). First, one quasi-experimental study compared the general practice of using diversion programs with formal system processing. Following over 1,000 youth for five years,
Cauffman and colleagues (2021) found that youth in diversion programs had lower rearrest rates (43 percent compared with 60 percent) and reduced rates of incarceration compared with youth who remained in the juvenile justice system (17 percent compared with 28 percent). Additionally, youth who were formally processed (1) were less likely to be employed over the course of study tracking, (2) were less likely to attend school, (3) were less likely to graduate, (4) reported higher affiliation with delinquent peers, (5) had lower levels of suppression of aggression, and (6) had lower expectations for future opportunities.

Second, in another quasi-experimental study, youth who had received community supervision rather than having been committed to a residential facility had statistically fewer adjudications or convictions over a one-year period but did not differ on number of arrests or court referrals (Ryon et al., 2013). Third, van Wormer and Campbell (2016) examined a program that allowed youth to participate in two accountability skills–development sessions that targeted dynamic risk factors after violating community supervision rather than being detained. No difference in recidivism was observed between youth who were detained and youth who participated in the skills-building sessions. Although this study did not find a particular benefit for diversion, it is worth noting that providing care in a community-based setting was at least as effective as detaining the youth and potentially might avoid the negative consequences associated with detention.

Two studies examined potential methods of enhancing standard diversion programs. In one, youth randomly assigned to receive 16 weeks of case management in addition to the standard diversion program saw no added reduction in recidivism (Dembo et al., 2006). Another study sought to evaluate whether adding skills training or mentoring components to a diversion program would result in better outcomes (Blechman et al., 2000). Despite finding no statistical difference with recidivism, the skills–training component cost less to implement compared with the mentoring.

One study explored whether programs that adhered to principles of effective correctional intervention (e.g., ensuring a match between the intensity of the program and youth risk levels) resulted in better outcomes (Sullivan and Latessa, 2011). This study included 72 programs across Ohio and found that programs serving higher-risk youth were associated with higher rates of juvenile adjudications or adult convictions. The authors also found that certain youth characteristics were associated with recidivism; specifically, female youth and White youth had a significantly lower likelihood of recidivism, whereas those with higher risk levels were more likely to recidivate.

Finally, Dembo and colleagues (2005a; 2005b) reviewed the effects of discontinuing an existing community service–focused diversion program as a result of policy change and budget cuts and replacing it with diversion programs that occurred further into the juvenile justice system. Results in both the initial study and the 12-month follow-up indicated that the discontinued program had lower rates of arrest and new charges compared with the other programs, suggesting a need to evaluate at what point in time diversion programs are most effective.

2. Problem-Solving Courts and Other Court Interventions

Twelve of the studies reported on problem-solving courts or other court interventions. Problem-solving courts tend to focus on a certain type of offense (e.g., drug-related offenses) or group of individuals committing a crime (e.g., individuals diagnosed with a mental illness). Typically, a goal of the court is to target underlying factors that contributed to an offense occurring, often through case management and treatment (National Institute of Justice, 2020). Of the 12 studies, eight examined drug courts, two looked at mental health courts, one examined a female-only court, and one evaluated practices of a court with a docket for youth who were being adjudicated for a sexual offense. Variation in the methodological rigor can be seen in this grouping of studies with three RCTs, six quasi-experimental studies, and three observational studies.

2.1. Drug Courts

Among the eight studies of drug courts, results were mixed on the effectiveness of drug courts in preventing future recidivism. First, in a national
multi-site quasi-experimental study, youth participating in a drug court had the same or higher odds of recidivating compared with similar peers on probation (Sullivan et al., 2016). Second, in another quasi-experimental study, Pitts (2006) observed that youth participating in a drug court had similar likelihood of receiving a new juvenile court referral as youth on probation, but when adult arrests were also counted—because many youth had aged out of the juvenile system during the 16-month follow-up period—youth in drug court were less likely to recidivate than those on probation.

Third, Belenko and colleagues (2022) examined recidivism among youth participating in drug courts across four jurisdictions. One site randomly assigned medium- to high-risk youth to either juvenile drug court or traditional juvenile court; the remaining three sites used regression discontinuity to compare medium- to high-risk youth assigned to drug court to youth in traditional juvenile courts. In the RCT site, youth in the drug court had significantly lower rearrest rates over a 12-month period (32 percent) compared with the traditional juvenile court (60 percent). Similarly, at two of the other sites, youth assigned to drug court tended to have better outcomes after accounting for the higher risk level of drug court participants. Findings suggest that drug courts can have small to medium impacts on reducing recidivism, reduce cannabis use, and increase mental health service utilization. Moreover, this study indicated that lower-risk youth had better outcomes in traditional courts, moderate-risk youth had similar outcomes between the courts, and high-risk youth tended to do better in a drug court.

There is also evidence that positive results from drug courts can have been maintained over time: A fourth study found that participants had significantly fewer infractions, misdemeanors, and felonies than similar peers on probation over a five-year outcome period (Gummelt and Sullivan, 2016).

Two RCTs examined program models that involved family members in treatment. One suggested that adding contingency management with family engagement strategies, such as developing a contract that rewards youth for abstaining from substance use and engaging family members in the development of the contract while focusing on family strengths, can increase the effectiveness of drug courts (Henggeler et al., 2012), with treatment gains being observed at seven to nine months. The second RCT examined a multidimensional family intervention for youth in drug court (Dakof et al., 2015), comparing its effectiveness with group substance use treatment. At the six-month follow-up, both groups that received and did not receive treatment had reduced arrest rates and self-reported delinquent behaviors, externalizing symptoms, and substance use. The treatment group was significantly lower only in felony arrests rates.

Findings from two observational studies suggest that it is not uncommon for youth who participate in drug court to have, at least initially, some continued substance use, with 79 percent (Hayden, 2012) and 78 percent (Hiller et al., 2010) of youth having at least one positive marijuana test. Finally, recidivism was found to vary widely by jurisdiction one of these studies, highlighting the importance of local evaluation of programs even if they use the same model (Hiller et al., 2010).

Overall, the majority of the evidence points to drug courts having positive effects on reducing recidivism.

2.2. Mental Health Courts

Two studies examined mental health problem-solving courts. First, one study found that youth who participated in a mental health court had fewer overall arrests, including decreases in arrests for assault or battery, violent threats, theft, weapons possession, and vandalism compared with youth not in the mental health court (Behnken, Arredondo, and Packman, 2009).

Second, Heretick and Russell (2013) compared the outcomes of youth participating in a mental health court with several comparison groups, including youth receiving minimum, medium, and intensive levels of community supervision. They found that youth in the mental health court tended to have higher recidivism rates (38 percent) during the intervention than those on minimum (6.7 percent) and medium (22.9 percent) community supervision, and lower rates of recidivism than those on intensive supervision (54 percent), although this might be a
byproduct of the risk level of these different groups. Post-intervention, youth in mental health court had significantly lower recidivism rates (6.6 percent) than those on medium (17.1 percent) and intensive (20.8 percent) supervision. It should also be noted the mental health court had higher (but not statistically significant) recidivism rates when compared with diversion programs during the intervention (38 percent versus 29 percent) and statistically significant lower recidivism rates after the intervention (6.6 percent versus 28 percent). The two studies examining mental health problem-solving courts generally found positive outcomes for the youth involved.

2.3. Gender-Specific Problem-Solving Court
Findings from one study suggested benefits in designing interventions to target gender-specific needs. Davidson, Pasko, and Chesney-Lind (2011) examined a girls-only court developed to address the disproportionate number of girls being arrested in Honolulu, Hawaii. Girls attended a court hearing every five weeks over the course of a year and received praise for their progress and punishments for infractions (e.g., writing assignments, lengthening supervision, out-of-home placement). In addition to court hearings, the girls participated in psycho-education courses, community service, and group and individual therapy. Parents also participated in a group to discuss family problems. Girls in the program had statistically significant reductions in law violations and when compared with a matched sample of girls assigned to a family court and also had significantly fewer days on the run.

2.4. Other Court-Related Interventions
Brusman Lovins, Yoder, and Berry (2017) evaluated the efforts by a Lucas County, Ohio, court to provide comprehensive treatment and effective coordination for youth arrested for a sexual offense. The court had a specialized docket and designated officers to provide case management, working with community providers to assess youth and provide services. After controlling for program completion and risk level, youth receiving the intervention were nearly two times less likely to have a new felony arrest when compared with the historic comparison group.

3. Care Coordination Interventions
Care coordination interventions are conceptualized here as programs in which the primary focus is connecting youth to service providers through case management or service referrals. Eight studies reported on care coordination interventions including one RCT, four quasi-experimental studies, and three observational studies. Overall, results were mixed on the effects of care coordination interventions on recidivism rates.

First, across five sites, Liberman, Husseman, and McKeever (2021) evaluated the Tidewater Reentry Initiatives’ efforts to provide medium- and high-risk youth with services after being detained for six or more months. The program conducted in-reach reentry planning (i.e., meeting with the individual prior to being released to coordinate the reentry process) and provided intensive case management on release. Although program participation was associated with decreased odds of rearrests, reconvictions, and reincarceration, none of the differences were statistically significant compared with the reference group.

Second, Bouffard and Bergseth (2008) reviewed a similar program in which transitional coordinators met with youth prior to release from an out-of-home placement, developed a treatment plan, and coordinated the youth’s reentry transition. On release, the coordinator would set up appointments, assist youth with transportation, provide other case management support, and mentor the youth. Compared with youth in a neighboring county, participating youth had significantly fewer positive drug tests (34.3 percent versus 62.2 percent) despite being tested more frequently. No significant effect was observed on reducing criminal contacts (i.e., official contacts recorded in a juvenile court database excluding traffic, alcohol or tobacco, and status-related offenses), although risk assessment scores decreased by 17 percent for participating youth over the six-month follow-up period.

Two studies examined the Crossover Youth Practice Model, which aims to identify youth with involvement in both the child welfare system and the juvenile justice system. In this model, the two agencies assess youths’ needs and coordinate case management efforts. Haight et al. (2016) found that youth
who received these services had lower odds of being adjudicated over the following year compared with the historic reference group (i.e., youth with justice involvement prior to the program implementation) (odds ratio \( \text{OR} = 1.65 \)) and the contemporary peers reference group (i.e., youth from neighboring counties) (\( \text{OR} = 1.35 \)). A second quasi-experimental study found that youth in the treatment group were significantly more likely to have their cases dismissed in addition to having more home placements relative to their comparison group (Wright, Spohn, and Campagna, 2020). The treatment group was also less likely to be rearrested at nine months, but this finding was not significant when analyzed against the comparison group.

A fifth study also focused on youth involved in both the juvenile justice and child welfare systems; the authors conducted an RCT of wraparound care-coordinating intervention (Coldiron et al., 2019). Youth in the treatment group were assigned a care coordinator who met with the youth to develop a treatment plan, coordinate with the various community providers, and assist in implementing the plan. Although no significant differences were observed between groups, medium to large effect sizes were observed: Treatment youth had lower odds of being arrested, longer periods of time between their existing and future offenses, and better educational progress than the control group. Findings suggested promising effects and pointed to the need for a study with a larger sample size to determine whether these relationships might be significant in a more well-powered study.

Two of the three observational studies suggested promising outcomes. The first found that youth receiving care coordination for substance use treatment self-reported a decrease in crime, substance use, and emotional problems (Hussey et al., 2008). The second observed positive outcomes in a girls-only intervention, the Girls Advocacy Project, which sought to identify girls’ needs across multiple contexts and systems and then connect them to needed services (Javdani and Allen, 2016). Significant decreases were seen in delinquent behavior, anxiety, depression, and anger. Girls also reported having increased skills to address their anger and increased self-efficacy and resilience compared with their baseline assessments.

By contrast, the final observational study evaluated an attempt to improve youths’ access to services through providing civil legal representation (Norbin, Rasmussen, and Von-Frank, 2004). The goal of the program was to remove obstacles and connect youth to educational, mental health, and family services that can address underlying causes of delinquent behavior. No significant reduction in recidivism was observed for participating youth.

It can be challenging to draw conclusions across these care coordination interventions because of the variation in the specific services that youth are connected to and the target population of those interventions. Certain models appear to be more effective, such as the approaches focused on youth involved in both the juvenile justice and child welfare system, perhaps because this is a group that especially benefits from having care coordinated by a consistent team that is aware of what is taking place in both systems.

4. Psychotherapy and Other Therapeutic Interventions

Twenty-two articles evaluated psychotherapeutic programs or other therapeutic interventions administered in individual or group therapy. We categorized these into three subcategories: cognitive-behavioral approaches, motivational interviewing, and “other psychotherapeutic interventions,” which included studies that evaluated the effectiveness of such interventions as expressive writing, therapeutic communities, intensive mental health treatment, animal therapy, or pastoral counseling. Within this section, there were four RCTs, nine quasi-experimental studies, and eight observational studies. This section also includes a meta-analysis of nine studies that used a randomized control or quasi-experimental design.

4.1. Cognitive-Behavioral Approaches

Of the twenty-two abstracted articles, fourteen reported on a cognitive-behavioral approach to improve youth outcomes. Cognitive behavioral therapy (CBT) has been tested as an approach to address mental health symptoms and the risk factors for involvement in criminal activity. We found both types of studies in our review.
Three studies conducted RCTs on a CBT-based treatment program, also exploring whether pairing the class with automated follow-up phone calls after the completion of the course increased the effectiveness of the program (Burraston, Cherrington, and Bahr, 2012; Burraston, Bahr, and Cherrington, 2014; Bahr, Cherrington, and Erickson, 2016). The purpose of the follow-up phone calls was to work with youth to monitor progress toward their goals. Two of the studies found that youth who received CBT were significantly less likely to be rearrested than youth who received standard probation supervision (Burraston, Cherrington, and Bahr, 2012; Bahr, Cherrington, and Erickson, 2016), though the third found no significant treatment effect (Bahr, Cherrington and Erickson, 2016). Bahr, Cherrington, and Erickson (2016) found that supplementing the CBT trainings with follow-up phone calls could increase the effectiveness of the intervention because engaging in more calls was associated with a decreased likelihood of felony arrest (Bahr, Cherrington, and Erickson, 2016).

The articles that used a quasi-experimental design also supported the use of CBT for reducing recidivism for justice-involved youth. For example, there is evidence that participating in CBT is associated with fewer court petitions for youth on probation and among girls living in a group home compared with those that did not participate in the program (Anderson et al., 2019; Jewell et al., 2015). Additionally, CBT also has been shown to result in lower rates of reincarceration among detained adolescents who committed sexual offenses: Those who participated in a CBT program were 2.25 times less likely to be incarcerated at their three-year follow-up relative to the control group that received the standard treatment for sexual offenses (Calleja, 2022). Labrecque, Schweitzer, and Mattick (2018) measured reincarceration among youth participating in a community-based residential program that offered CBT in conjunction with other services (e.g., education, employment, substance abuse services). This study showed that youth in the treatment program were 1.7 times less likely to be incarcerated within one year of completing the program compared with their incarcerated counterparts that did not receive treatment.

Observational studies have also supported the effectiveness of CBT. For example, Thoder and Cautilli (2010) examined the impact of mode deactivation therapy, a form of CBT, on adjudicated teens in a residential facility, and reported no re-offenses over four years in the facility. Fox and colleagues’ (2020) observational study also demonstrates the value in administering high-quality dialectical behavior therapy (DBT), a type of CBT, for youth in residential placement. This study examined different aspects of DBT, such as quality of treatment and frequency of individual or group sessions, and those aspects’ impact on recidivism. According to this evaluation, facilities in which the therapeutic milieu was more adherent to DBT principles had a lower likelihood of youth re-offending, while the frequency of individual or group sessions had no significant association with re-offending.

Although some CBT models focused on addressing delinquency, others measured additional outcomes, including mental health symptoms and substance use. Although some studies of pre- and post-CBT treatment found evidence of reductions in externalizing and internalizing symptoms and improved self-esteem and interpersonal reactivity among youth (Lee and Kim, 2018; McGlynn, Hahn, and Hagan, 2013; Thoder and Cautilli, 2010), Lee and Kim (2018) reported no significant difference in symptoms of youth psychopathology, such as depression, loneliness, impulsiveness, callousness, or unemotional traits. However, other studies found significant reductions in criminogenic and aggressive beliefs for adjudicated youth in a residential or community-based setting among the observed youth that received some form of CBT treatment (Thoder and Cautilli, 2010; Yoder et al., 2017).

Krakow et al. (2001) observed changes in PTSD symptoms and sleep quality for girls in a residential facility using Imagery Rehearsal Therapy, a form of CBT. At the three-month follow-up, these findings indicated no significant changes to PTSD symptoms, but there were significant decreases (57 percent) in nightmare distress and frequency of nightmares. Lastly, Gil, Wagner, and Tubman (2004) observed a culturally sensitive motivational cognitive behavioral intervention on substance use outcomes and found a significant decrease in alcohol and marijuana use among Hispanic and African American youth.
Overall, the use of cognitive behavioral approaches is shown to reduce outcomes related to substance use, aggression, and recidivism, including rearrests, reoffending, and reincarceration, including in studies using a more rigorous study design. However, the evidence was mixed as to whether CBT is an effective treatment for mental health symptoms in juvenile justice populations, although this finding was largely based on observational studies.

4.2. Motivational Interviewing

One study examined motivational interviewing (MI), which involves engaging clients in conversations that facilitate modified behavior (Frey et al., 2021). In this instance, the focus of the MI intervention was on addressing delinquent behavior. In an RCT, Clair-Michaud et al. (2016) found that youth in the MI treatment group had significantly reduced rates of general criminal activity and crimes committed while under the influence of alcohol, although these findings were for only youth that reported low depressive symptoms. There were no significant treatment effects for individuals with average or above average levels of depression and for other forms of delinquency, such as drug use and stealing.

4.3. Other Psychotherapeutic Interventions

We identified seven additional studies that explored a specific treatment modality that did not fall into one of the categories described previously. We describe each of these individually, because each of the programs had distinct characteristics.

Five of the studies were focused on youth in locked correctional settings. First was the quasi-experimental evaluation of a trauma-informed expressive writing intervention that used therapeutic models to measure participants’ emotional health for youth in detention facilities (Greenbaum and Javadani, 2017). Youth in the intervention indicated significantly greater feelings of resilience relative to their counterparts who engaged in nonreflective writing, but there were no significant changes to feelings of shame, guilt, or negative affect.

A second quasi-experimental study evaluated a gender-responsive therapeutic community to measure rates of reoffending, finding that this gender-specific intervention did not decrease recidivism for detained boys or girls (Day, Zahn, and Tichavsky, 2015).

A quasi-experimental study of boys that received an unspecified intensive mental health treatment found that the treatment group committed significantly fewer crimes, including felony and violent offenses, compared with a group that did not receive intensive mental health treatment (Caldwell, Vitacco, and Van Rybroek, 2006).

A fourth quasi-experimental study examined an animal therapy program in which youth were responsible for taking care of animals (Dawson, 2016). The goal of this study was to examine changes in youths’ self-reported empathy. Although the group that received the animal therapy demonstrated a larger increase in empathy, this was not statistically significant relative to the comparison group, who did not participate in animal therapy.

Finally, an observational study examined a program for adolescent boys in which participants met with a pastor for counseling services (Hausmann and Spooner, 2009). The results indicated that pastoral counseling was significantly associated with lower rates of rearrests at follow-up.

One quasi-experimental study explored the provision of services in community-based contexts. Belisle, Salisbury, and Keen (2022) examined a community-based female-specific intervention that uses components from MI, CBT, and relational theory (i.e., a theory that explores relationship dynamics) to reduce convictions and reoffending and increase self-efficacy. There were no significant differences in recidivism or risk assessment scores for the treatment and comparison groups, though girls who completed the program had reported increased self-efficacy (which was not measured among non-completers or the comparison group).

The final study in this category was a meta-analysis on psychotherapy treatment programs for adjudicated youth who have committed sexual offenses (Reitzel and Carbonell, 2006). The meta-analysis included nine total studies across different settings (correctional institutions, specialty courts, or community-based), examined different types of treatment, and reported on justice outcomes, such as arrests or convictions. Each of the treatments included in the meta-analysis were compared with a
group that did not receive treatment at all or received the standard treatment. The types of treatment included in this meta-analysis included cognitive-behavioral or relapse prevention, classic CBT, psychotherapeutic (sexual trauma), psychosocial-educational, psychoanalytic/psychodynamic/ego psychology, humanistic, strictly behavioral, and multisystemic therapy. When aggregated, the recidivism rate for youth in treatment was 7 percent compared with 19 percent of those in the comparison groups, suggesting that any type of psychotherapeutic treatment results in better juvenile justice outcomes for youth rather than no treatment at all.

5. Psychoeducation

There were 16 articles that evaluated psychoeducational programs. We identified three subcategories of programs, including skills training programs, victim awareness programs, or another type of psychoeducational program. Each of these programs was intended to expand participants' knowledge on a specific subject with the goal of subsequently changing behavior. Of these 16 articles, there were three RCTs, seven quasi-experimental studies, and six observational studies.

5.1. Skills Training

Eight studies examined psychoeducational programs that were designed to improve participants' general lifestyle and well-being by providing a variety of skills training programs, including education, employment, social, or life skills.

Only two of these studies used an RCT design. Schaeffer et al. (2014) evaluated a community-based employment program for justice-involved youth with substance use issues by comparing program participants with those who received the usual education services offered from organizations. At the 30-month follow-up, youth who participated in the treatment program were more likely to be employed (76 percent versus 50 percent) and to attend a general education development (GED) program (50 percent versus 26 percent; Schaeffer et al., 2014). Although both the treatment and control groups showed significant decreases in self-reported criminal activities and arrest records, there were no significantly different results between groups. Additionally, there were no significant improvements in self-reported substance use or mental health symptoms. Hein et al. (2020) conducted an experiment to evaluate a social problem-solving skills program for detained youth, but there was no significant effect on the program arrest rates or social problem-solving skills at the 12-month follow-up. Furthermore, the control group reported significantly greater reductions in feelings of anger than the treatment groups.

There were six studies exclusively on life skills training programs, and nearly all used a quasi-experimental design. Although all of these studies used recidivism as an outcome measure, only one study had statistically significant findings. Lancaster et al. (2011) found that predominately Latino court-involved youth in the treatment group were less likely to reoffend at the two-year follow-up compared with the sample that did not participate in the program, 60 percent of treatment youth compared with 46 percent of youth in the comparison group. The other studies indicated that new charges or offenses posttreatment were not significant in a community-based setting for justice-involved boys or young men (Bailey and Ballard, 2006; Marques et al., 2020) or for juvenile offenders in a residential placement (Strom et al., 2017).

Regarding observational studies, Abrams, Shannon, and Sangalang (2008) evaluated an independent living skills–focused program for youth preparing to leave incarceration and found no significant relationship between program participation and new offense charges; in fact, rates of recidivism were comparable or higher for youth that engaged in the program compared with youths who did not. These studies do not provide strong evidence for the effectiveness of a skills-training program for justice outcomes, but these programs might be effective in improving academic outcomes. For example, an intensive literacy program for incarcerated youth found that participants increased their reading ability levels and held more-positive attitudes toward reading following the treatment (Drakeford, 2002).
5.2. Victim Awareness Programs

Victim awareness or victim impact programs generally are designed to raise awareness of the adverse consequences associated with offending and risky behavior.

Three studies evaluated interventions that involve engaging with victims of trauma or crime and emergency personnel to educate participants on the trauma experience. Two of these were quasi-experimental studies that measured the effect of program participation on recidivism one year after program completion (Scott et al., 2002; Theriot, 2006). One of these studies found that participants were significantly less likely to have a violent conviction compared with nonparticipants (Scott et al., 2002), and the other found that participants were less likely to be arrested than those in the comparison group (respectively 14 percent to 19 percent), although the difference was not statistically significant (Theriot, 2006). A final study focused on youth charged with moving violations, finding that over 20 percent of participants reoffended within the first year of follow-up and rates continued to increase by about 5–8 percent per year for six years (White et al., 2018).

Another study focused on a victim impact intervention using a restorative justice approach with youth that were incarcerated. An RCT found that this intervention was associated with greater improvements in youths’ abilities to manage their feelings than those who received a victim impact video series (Baglivio and Jackowski, 2015).

Overall, this suggests that victim awareness programs might effectively address youths’ emotion-regulation abilities. However, the mixed findings regarding rates of recidivism and the observational nature of some of the research makes it difficult to form conclusions about the effectiveness of this approach for reducing juvenile justice contact.

5.3. Other Psychoeducational Programs

There were four studies of psychoeducational programs that did not fit into the categories identified previously. One of these studies used an RCT, one used a quasi-experimental design, and two were observational studies.

In an RCT, Salazar and Cook (2006) evaluated an intimate partner violence–prevention program administered in the community for adjudicated, predominately African American males. In the posttest assessment, results revealed that the intervention group showed significantly higher knowledge of intimate partner violence, but there were no significant differences in the other outcomes, such as knowledge of patriarchal attitudes and prevalence of committing violence or witnessing parental violence (Salazar and Cook, 2006).

One study of a community outreach program used a quasi-experimental design. This program connected youths who had offended to officials and community members to receive prevention and educational services; however, there was no significant difference in rearrest outcomes between the intervention and comparison group (Jeffries et al., 2019).

Additionally, there was one observational study of a gender-specific strengths-based training program for incarcerated young men that showed improvements in participants’ levels of caring and cooperation, but not in attitudes about criminal or aggressive behavior (Viola et al., 2015).

A final observational study of a program that administered overdose training for incarcerated youth found significant improvement in knowledge of overdoses and ways to intervene (Chambers et al., 2021).

6. Health-Focused Programs

There were ten programs that aimed to promote healthy behaviors in juvenile justice–involved youth. These programs typically focused on reducing risky sexual behavior, human immunodeficiency virus (HIV) and sexually transmitted infection transmission, and substance use, and sometimes explored the effect of an intervention on future juvenile justice contact. Nine of the health-focused studies were RCTs and one was observational.

Some studies found positive effects of health-focused programs on risky sexual behavior in justice-involved youth, although the findings were sometimes mixed depending on the specific type of risky sexual behavior that was examined. For example, a peer-led gender-specific health education intervention focusing on relationship and sexual violence
among girls who were incarcerated found that girls in the treatment group showed a larger increase in self-efficacy scores than those in the comparison group (Kelly, Martinez, and Medrano, 2004). However, other studies suggested more-mixed outcomes. For example, a study of an intervention for detained girls found that, although participants reported an increase in knowledge and skills related to mitigating risky sexual behavior, there was no significant effect of the intervention on actual behavior (e.g., condom use) (DiClemente et al., 2014). Another study also found mixed results across outcomes, reporting that participants in an eight-session interactive psycho-educational group had significantly fewer sexual partners than the control group at the six-month follow-up, but only for youth who engaged in sexual activity before they were 12 years old (Donenberg, Emerson, and Kendall, 2018). There was no significant effect on condom use. A separate study of this intervention found that youth who completed the program were nearly four times less likely to be incarcerated within one year of treatment (Kendall et al., 2017).

Still, other studies found no significant treatment effect. For example, one study examined a sexual risk intervention, including an effort to determine whether such an intervention would be more effective when paired with elements from motivational interviewing (Bryan, Schmiege, and Broaddus, 2009). However, there was no significant effect on rates of condom use or having intercourse while drinking. Another RCT compared the effects of an MI-based intervention with a behavior skills training on adolescent risky sexual behavior (Gibson et al., 2020). Both groups experienced significant decreases in risky sexual behavior, but there was no significant treatment effect.

Two RCTs tested health interventions in the context of drug courts. Given that the focus of these programs was specifically on addressing health-related behaviors rather than recidivism, we categorized them with the health interventions. In one RCT, Tolou-Shams and colleagues (2011) found significant increases in rates of HIV testing for both the treatment and control groups, but the likelihood of getting tested was higher for the treatment group. However, they found no significant effect on condom use. The second RCT explored a treatment approach that enhanced a contingency management approach to address sexual risk behavior and substance use in youth participants in drug court (Letourneau et al., 2017). However, there were nonsignificant effects on rates of risky sexual behavior, HIV testing, and substance use.

One RCT evaluated a psychosocial educational program for young men (ages 16–18) that began during incarceration and continued into the community (Freudenberg et al., 2010). The authors found that, although the program did not have a significant effect on risky sexual behavior, it was associated with a decrease in substance use. In addition, this study found that, on average, participants in the program spent 29 fewer days in jail relative to the comparison group that was assigned to a single jail-based discharge planning session.

Finally, an observational study that examined a sexual health intervention measured attitudes in self-efficacy and sexual violence (Shekar et al., 2020). This study found significant improvements in sexual self-efficacy and consent; even when disaggregated by gender, the treatment effect remained significant for boys and girls (Shekar et al., 2020).

Taken together, these findings do not suggest that there is a specific intervention approach that appears to be especially effective at addressing risky health-related behaviors, given the mixed nature of the findings and generally high-quality nature of most of the included studies.

7. Family-Focused Interventions

In this section, we included 33 studies that incorporated family members—most often parents or caregivers—into the treatment approach. Subcategories identified included multisystemic therapy, functional family therapy, a family empowerment intervention, multidimensional treatment foster care, an evaluation of Parenting with Love and Limits, and other family-focused interventions. In this review, 19 were RCTs, 11 were quasiexperimental designs, and three were observational studies.
7.1. Multisystemic Therapy

There were seven community-based family-focused interventions that implemented *multisystemic therapy* (MST), a form of therapy that seeks to limit problem behavior across settings, like the school or at home (Henggeler and Schaeffer, 2016).

Most of the included MST studies implemented an RCT in a community-based setting and focused on examining recidivism. Four of these studies examined the effect of MST on youths’ subsequent rearrest, and each study found that participants in the MST groups were significantly less likely than comparison group participants to be rearrested at follow-up intervals that ranged from 18 months to nearly 22 years (Sawyer and Borduin, 2011; Schaeffer and Borduin, 2005; Timmons-Mitchell et al., 2006). In fact, Schaeffer and Borduin (2005) reported that youths in the MST group were 4.25 times less likely to be rearrested, and Timmons-Mitchell et al. (2006) reported that youth who received MST had a 3.2 times lower likelihood of rearrest when compared with the control group. Borduin, Schaeffer, and Heiblum (2009) also reported that youth who committed sexual offenses and participated in the MST treatment had fewer arrests for sexual and nonsexual crimes at their nine-year follow-up. At least one study did not find significant effects of MST on these outcomes: Letourneau et al. (2013) indicates no significant difference among groups regarding arrests within two years of completing treatment. However, both Borduin et al. (2009) and Letourneau et al. (2013) did find evidence that treatment decreased self-reported criminal activity.

Some of the RCT studies of MST reported on outcomes beyond recidivism. Several found that MST was associated with significant reductions in substance use, externalizing behaviors, sexual deviance, psychiatric symptoms, and delinquency compared with the group that received treatment as usual (Borduin, Schaeffer, and Heiblum, 2009; Henggeler et al., 2009; Letourneau et al., 2009). Letourneau et al. (2013) reported reduced substance use for youth in treatment during the first year of follow-up but not in the second year. Similarly, Timmons-Mitchell et al. (2006) found no significant differences between groups for substance use and externalizing behaviors but did find evidence of significantly better functioning for youth at school or work, in the home or community, and on emotion subscales.

Glisson et al. (2010) evaluated MST treatment in conjunction with an availability, responsiveness, and continuity (ARC) intervention approach to measure court-involved youths’ out-of-home placements and problem behavior. In this study, the treatment group showed greater decreases in problem behavior in the first six months compared with the control group, but this finding was not significant at the 18-month follow-up. However, at the 18-month follow-up, the treatment group had significantly lower rates of out-of-home placements when compared with the control group (Glisson et al., 2010), consistent with other studies (Letourneau et al., 2009; Letourneau et al., 2013).

Boxer et al. (2017) implemented a quasi-experimental design to evaluate the effectiveness of MST among gang-involved and non-gang-involved youths, but these findings revealed that there was no significant difference between groups on overall or violent rearrest rates.

Finally, Connell et al. (2016) observed youth demographic and case influences on the relationship between MST and recidivism. In this study, 73 percent of youth in MST were arrested for any offense (e.g., status offense, violation of court order, misdemeanor, or felony) by the 18-month follow-up, and certain groups were more likely to recidivate than others, including younger youth, youth in an out-of-home placement relative to youth in a two-parent household, youth with a behavioral disorder, and youth with a parole officer relative to youth with a parole officer (Connell et al., 2016).

In aggregate, these studies show mixed support for MST on a variety of different outcomes. Many studies did demonstrate at least some positive effects of participation, whether on recidivism, out-of-home placements, and mental health symptoms and substance use, although it might be that the specific population or setting influences the effectiveness of this approach.

7.2. Functional Family Therapy

*Functional family therapy* (FFT) is a family intervention that delivers in-home counseling services admin-
istered by trained therapists; this intervention seeks to address dysfunctional family dynamics to reduce delinquent behavior (Sexton and Turner, 2010).

Two randomized trials measured different recidivism outcomes from FFT with mixed results. First, Gottfredson et al.’s (2018) study found that males in juvenile court who received FFT were significantly less likely at the 18-month follow-up to be adjudicated or have drug and property charges, compared with youth who received treatment as usual. Second, another study focused on felony adjudications found no significant differences between the treatment and control groups of adjudicated youth 12 months post-intervention (Sexton and Turner, 2010).

Two quasi-experimental studies also looked at the effectiveness of FFT on recidivism. Celinska et al. (2019) used a quasi-experimental design to evaluate FFT for court-involved youth and found that the treatment group was 93–99 percent less likely to be convicted of a property or drug offense and 67 percent less likely to be convicted of a technical violation relative to the comparison group who received case management services. Another quasi-experimental study compared FFT with MST with results suggesting that FFT might be superior to other treatment models (Baglivio et al., 2014). More specifically, a comparison of MST and FFT indicated that MST treatment had significantly higher rates of offending during treatment.

7.3. Family Empowerment Intervention

*Family empowerment intervention* provides in-home services targeting parenting skills and child conduct to increase youths’ prosocial behavior (Dembo et al., 2000b). Five studies focused on this community-based family-focused intervention that is intended for youth who have been previously arrested. These studies indicated no significant group differences on number of arrests or delinquency (Dembo et al., 2000a; Dembo, 2000b; Dembo et al., 2001a; Dembo et al., 2001b). However, for families that participated in the family empowerment intervention, youth reported fewer self-reported substance use behaviors (Dembo et al., 2001b) (Dembo et al., 2000c).

7.4. Multidimensional Treatment Foster Care

*Multidimensional treatment foster care* is a program model that places youth who are engaged in delinquent behavior in foster homes. The youth receive services, such as skills training and individual therapy, and the foster parents receive in-depth training and ongoing consultation (Leve et al., 2012). Two RCTs evaluated the effectiveness of this approach, finding it to be promising for reducing mental health symptoms and improving educational outcomes. The first study focused on girls in residential placements, finding that multidimensional treatment foster care was associated with significantly lower rates of depressive symptoms over a two-year period compared with their counterparts that did not receive this treatment (Harold et al., 2013). The second study found that girls who were randomly assigned to the multidimensional treatment foster care condition had better education outcomes than those assigned to the control group who received a group care program. Specifically, youth in the treatment condition spent significantly more days on homework during treatment and had a better school attendance record at the 12-month post-treatment follow-up (Leve and Chamberlain, 2007).

7.5. Parenting with Love and Limits

There were two studies that examined a community-based program for youth who are justice-involved, called *Parenting with Love and Limits*. This program provided therapy sessions to youths and their guardians, in addition to offering parenting education services. Compared with their counterparts who did not participate in the program, youth in the program were significantly less likely to be arrested, cited by police, placed on probation, or enter a residential or correctional facility (Karam, Sterrett, and Klaer, 2017; Ryon, Early, and Kosloski, 2017). However, there were no statistically significant differences between groups for adjudicated offenses (Ryon, Early, and Kosloski, 2017).

7.6. Other Family Interventions

There were ten studies that did not fall into the previously identified categories. Two used an RCT to evaluate the effects of the family interventions on recidivism and other related outcomes. The first
was a suicide prevention program that administered family-focused in-home treatment and psychiatric services for male adolescents in juvenile court. There were no significant differences between the treatment and comparison groups for reoffending, but the comparison groups spent significantly more days in correctional facilities 12 months post-treatment (Gray et al., 2011). Second, Tolou-Shams et al. (2017) evaluated a family-based HIV prevention intervention for youth in a juvenile drug court, in which youth were randomized into the HIV-focused intervention or a health-promotion intervention. Although the study found no significant between-group differences for alcohol use, the treatment group reported decreased marijuana use and reduced risky sexual behaviors at the three-month follow-up (Tolou-Shams et al., 2017).

Six studies of family interventions used a quasi-experimental design to measure the effects of a program on recidivism. Four of these found positive outcomes among treatment participants. The first focused on the Family Solutions Program, a multiple-family group intervention that is intended to address issues in family functioning to improve youth behavior; the authors found that youth were significantly less likely to reoffend than the comparison group of youth on probation. In fact, the comparison group was over nine times more likely to reoffend than youth that participated in this specific family intervention (Quinn and Van Dyke, 2004). A second study, focused on a family violence intervention, also found significantly lower rates of new court referrals for the treatment group when compared with their counterparts who did not participate in the program (Gilman and Walker, 2020). A third study focused on a family-based transitional housing intervention, Family Integrated Transitions, and the authors found that felony convictions for participating youth were significantly lower—by 30 percent within three years—compared with youth who did not participate in the program (Trupin et al., 2011). However, there was no significant effect on overall or misdemeanor recidivism. Finally, a gender-specific family-based delinquency intervention also seemed to significantly lower rates of rearrest; moreover, both boys and girls showed a similar significant decrease in mental health symptoms relative to the historical comparison group (Mayworm and Sharkey, 2013). Although these studies suggest some promise for family-focused interventions using a variety of approaches, two quasi-experimental studies found no significant effect of family interventions on such outcomes as rearrests, new court petitions, and convictions (Diamond, Morris, and Caudill, 2011; Anderson, Rubino, and McKenna, 2021).

Finally, two observational studies assessed other types of family interventions but did not include comparison or treatment groups. First, Yoder et al. (2015) conducted an observational study on the effects of family involvement during a multidisciplinary team treatment approach for youth convicted of sexual offenses, but family involvement had no significant association with new court filings in the three years after the treatment. Second, Cervantes, Ruan, and Dueñas (2004) observed a culturally specific family intervention for Hispanic adolescents who were first-time offenders. Although parent-reported assessments of youth academic, community, and family behavior showed statistically significant improvements, there were no significant changes in youths’ self-reported substance use. Overall, nearly 90 percent of youth that were in the program were not rearrested within one year of program participation.

8. Substance Use Treatment

We categorized studies as substance use treatment programs if their primary intervention target was the reduction of alcohol or drug use. Substance use treatment programs can vary in intensity and can include both residential and outpatient community-based treatment. Eight studies examined substance use treatment in either residential treatment centers or locked facilities, including one RCT, four quasi-experimental designs, and three observational studies. Two other studies examined community-based substance use interventions: one RCT, and one quasi-experimental design.

8.1. Therapeutic Community Treatment Programs

Four studies evaluated programs that used therapeutic community approaches within a residential treatment or detention center setting. Therapeutic com-
**Communities** are a treatment approach often employed in residential substance use programs, and although variations exist, typically they include a group of individuals working together to support and reinforce their treatment goals of abstaining from substance use (National Institute on Drug Abuse, 2015). When these therapeutic communities are implemented in a detention center, youth participating in the program are traditionally housed in a separate unit.

Two quasi-experimental studies examined the effectiveness of the Phoenix Academy program. Initially, this residential treatment program showed positive results (at three, six, and 12 months) (Morral, McCaffrey, and Ridgeway, 2004); however, the positive treatment effects were not observed in a long-term follow-up (at 72, 87, and 102 months) (Edelen et al., 2010). These findings suggest that improvements initially might be seen in substance use frequency, problems related to substance use, and psychological symptoms, but other efforts might be needed to maintain treatment gains (Edelen et al., 2010).

Roberts-Lewis et al. (2009) conducted a pilot study examining a substance use therapeutic community treatment program (HEART) among girls who had been committed to a youth development center. In this program, participants were housed separately from the rest of the facility. In a pre- and post-analysis, significant improvements behavioral and cognitive skills were observed. This program was also found to be more effective in reducing social functioning issues (Roberts-Lewis et al., 2010). Girls in the HEART program also had significant improvement in depression, self-esteem issues, and personal stress, but results were not significantly different than the comparison group.

Overall, interventions using therapeutic community interventions within residential facilities and detention centers were found to have positive effects on the reduction of substance use in the short term and improvements in behavioral health outcomes.

### 8.2. Other Residential and Facility-Based Programs

Four studies examined residential and facility-based programs that did not employ a therapeutic community approach. One observational study examined a short-term residential facility that provides residential care for American Indian youth: A place for detox to occur, case management, administration of a life skills course, and community treatment referrals (Joyce, Westerberg, and Matthews, 2015). Youth were brought to this facility by police officers if their offense did not warrant detainment. Based on pre- and post-measures, youth had substantial decreases in arrest at six months (73 percent decrease) and 12 months (75 percent decrease) and in alcohol use, marijuana use, negative impacts from substance use, emotional problems, and suicidality (both thoughts and attempts) at six months and 12 months. Positive findings also were reported for parental control, family environment, overall health, and resilience.

Two studies documented the importance of considering characteristics and engagement of youth participating in treatment. First, an evaluation of a Texas statewide substance use treatment program found that youth who had higher levels of program performance, defined as participation, curriculum compression, acknowledgement of addiction, and other factors, tended to have lower subsequent arrest rates (Mears and Kelly, 2002). Second, an experimental study evaluating the effects of youth who receive an MI intervention found that youth with lower levels of depression who received the MI intervention had lower rates of drinking and driving and being a passenger of someone who had been drinking when compared with youth receiving relaxation training (Stein et al., 2006). However, for youth with high levels of depression, no differences were observed between the two interventions.

Finally, an observational study examined use of the program Free Talk, a six-session program designed to increase motivation to reduce substance use with observed success in community settings; in this case, the program was applied at a detention center (Tennity and Grassetti, 2022). Results indicated youth motivation to reduce substance use actually decreased on average after the intervention; however, youth with the highest amount of substance use reported an increased motivation to reduce their use. This suggests that even programs demonstrated to be effective in one setting (e.g., community settings) should be specifically evaluated to determine their effectiveness in another (e.g., secure settings).
Overall, these studies suggest potential benefits for developing treatment options that are tailored to specific youth populations, the need to support youth engagement in treatment, and the need to account for mental health symptoms.

8.3. Community-Based Substance Use Treatment

Two substance abuse treatment programs that provided treatment in community-based settings were also included in this category. Henderson et al. (2016) conducted an RCT to evaluate a program for youth on probation who had moderate to severe substance use. Although the treatment and control groups both significantly reduced substance use, there were no significant differences between the groups. There was also a quasi-experimental study that evaluated a community-based substance use treatment program for adjudicated boys who had committed a serious offense (Chassin et al., 2009). Youth in treatment over ninety days showed a significant decrease in alcohol use at the six- and 12-month post-treatment follow-up time points and in marijuana use at six months when compared with the group that did not receive treatment. This study also highlighted the value of family involvement in treatment because those in treatment with family involvement demonstrated significant reductions in criminal offending compared with those without family involvement.

9. Wraparound Service Models

Wraparound services are built on a model that targets multiple needs of youth and their families. Wraparound services are not necessarily one specific program but rather an approach in which the youth, their family, service providers, and others from the community establish a team and work to take a holistic approach to supporting the youth and their families (National Center for Innovation and Excellence, undated). Because these models tend to be unique to the specific jurisdiction or population being served, it can be difficult to draw firm conclusions about the most-effective program elements across interventions. Six studies examined programs that use a wraparound service approach: one RCT, four quasi-experimental designs, and one observational study.

Some of these wraparound service models included a care coordination or case management component in addition to providing youth with services that aim to address criminogenic risk factors. McCarter (2016) conducted an RCT evaluation of a forensic social work intervention that provided wraparound services, applying a strength-based, family-centered, and culturally sensitive approach when developing personalized treatment plans. While there was no significant difference between the treatment and control groups with respect to receiving a new petition, the treatment group did have significant improvements in depression, somatic complaints, thought problems, attention problems, rule-breaking behavior, and aggressive behavior.

In a quasi-experimental study, Krebs et al. (2010) evaluated the Juvenile Breaking the Cycle program (JBTC), which brings together representatives from different human service organizations that serve justice-involved youth and conducts comprehensive assessments, provides case management, and ensures collaboration takes place across service providers. Youth who participated in the program had lower odds of being arrested and fewer arrests during the six- to 12-month post-baseline period than the comparison group. It should be noted that some youth in JBTC participated in drug court as part of their care plan, and greater reduction in recidivism was seen for youth who participated in the drug court aspect of the program.

Finally, Espinosa et al. (2021) evaluated a program that provided wraparound services for youth at risk of receiving out-of-home placement; the program provides case management, counseling, and a curriculum that uses CBT and MI. Program outcomes were compared with youth participating in a vocational program. Overall, minimal differences were observed between the programs’ effects on recidivism outcomes. However, for both programs, program completion and longer program involvement resulted in better recidivism outcomes.

Some wraparound service models include a vocational component that aims to teach youth skills that could be applied in educational and employment settings. For example, one such intervention provided
wraparound services in a full-time program lasting between nine and 24 months, during which youth spent half of their time learning construction trade skills and working on projects (Cohen and Piquero, 2010). Youth who completed the program were more likely to graduate (58 percent compared with 18 percent) and had reduced recidivism rates compared with youth who did not complete the program.

Two studies examined wraparound services for youth exiting detention facilities. One of these observational studies focused on youth with mental health challenges who were released from a state detention center (Lyons et al., 2003). Forty-two percent of youth in the program were rearrested, which was substantially lower than the statewide recidivism level for youth (72 percent). Although substance use did not improve over time, youths’ emotional problems decreased within three months of their referral, and functioning in the home, community, and school significantly improved. Another program provided wraparound services to youth with previous gang involvement as they exited detention facilities (Spooner et al., 2017). The intervention was successful in identifying youth who had gang involvement and increasing the number of services received by those youth. However, no significant reduction in rates of arrest was observed between youth in the program and other gang-involved peers.

Results were mixed when examining the effects of wraparound services on reducing recidivism: Some found no impact, others found similar effects when compared with other interventions, and others were found to have a positive effect. However, wraparound interventions generally appeared to improve mental health outcomes.

10. Boot Camps

Juvenile justice bootcamps employ a military type of boot camp approach rather than a traditional detention approach, focusing on providing education and youth development in such areas as self-discipline and self-esteem (Barfield-Cottledge, 2014). Overall, four studies examined the use of boot camps for juveniles, including one RCT and three quasi-experimental studies. Findings from these studies suggest that boot camps are not effective in reducing recidivism and could increase the risk of recidivism. Bottcher and Ezell’s 2005 study, which randomly assigned youth to a juvenile boot camp or community supervision, found no significant difference between the groups in the average time to rearrest or average number of arrests over an average follow-up time of 7.5 years. Similar results were seen in the three quasi-experimental studies. Trulson, Triplett, and Snell (2001) reported that youth participating in boot camp were three times more likely to be rearrested than youth under intensive community supervision. Wells and colleagues (2006) reported that youth who participated in Cadet Leadership Education Program were less likely to recidivate four months after the program compared with the control group; however, no significant difference was observed at eight or 12 months after release. Finally, Steiner and Giacomazzi (2007) found that participating in a boot camp (the Rider Program) was not associated with recidivism over a two-year follow-up.

11. Risk-Need-Responsivity and Principles of Effective Correctional Intervention

Three studies examined the importance of providing quality treatment and matching the treatment provided to the needs of the youth involved (Baglivio, Wolff, Howell et al., 2018; Baglivio, Wolff, Jackowski et al., 2018; Lowenkamp et al., 2010), consistent with principles of the risk-need-responsivity model (Bonta and Andrews, 2017). Two of the studies used quasi-experimental approaches and one was an observational study. One study found that youth who received matched services based on the number of targeted services and the recommended duration of treatment were less likely to recidivate than the comparison group (Baglivio, Wolff, Howell et al., 2018). Another study examined whether higher-quality treatment would result in better justice outcomes (Baglivio, Wolff, Jackowski et al., 2018). Treatment quality for a given intervention was scored on a one to ten scale using such factors as whether the facilitator had received formal training, whether the intervention had an established treatment manual or protocol, and whether internal fidelity monitoring
occurred. Sites with the highest-quality intervention provided had reduced odds of youth being reincarcerated. Sites that had the highest average quality across all their interventions had reduced odds of arrest, conviction, and incarceration following participation. This suggests that providing one high-quality intervention is not as effective as providing a host of well-run services. Finally, Lowenkamp et al. (2010) found that community correctional facilities that maintained higher treatment integrity, served high-risk youth, and treated identified risk factors were more effective in reducing recidivism.

12. Community Supervision Interventions

Youth can receive community supervision as a sanction for committing an offense. In community supervision, youth are placed under the supervision of a community officer and must follow certain requirements (e.g., curfew, drug testing, mandated treatment) or they can face additional sanctions (Office of Juvenile Justice and Delinquency Prevention, 2017b). There were two RCTs and one quasi-experimental study examining the effectiveness of community supervision. Mixed results were found among the three studies that examined community supervision interventions.

Giblin (2002) conducted an RCT that assigned youth to standard community supervision or a program where the police and probation departments formed a partnership, and a police officer would randomly visit youths’ homes in addition to any probation officer visits. Youth in the program had three times higher odds of receiving a technical violation but were not more likely to receive new charges. Lane et al. (2005) conducted an RCT in which the treatment group received more contacts and lengthier interactions with supervision staff and found no significant differences in the number or types of arrest over an 18-month period.

In a quasi-experimental study, Urban (2008) evaluated a program in which a police officer and probation officer conducted curfew checks together. No significant differences were observed when looking at youth who received juvenile court referrals and those in the comparison groups. However, youth in the treatment group did report decreased victimization and had significantly lower self-reported delinquency compared with the reference group.

Overall, these studies suggest little to no benefit to increasing surveillance of youth who are on community supervision, and, in fact, these studies indicate that these types of interventions could result in additional violations for potentially minor infractions (e.g., technical violations) because of the increased level of oversight.

13. Other Programs

There were two studies included in the review that did not clearly fit into one of the previously identified treatment categories.

First, a quasi-experimental study examined a 21-day wilderness program (Walsh and Russell, 2010). Although no significant differences were observed between the treatment and comparison groups for rates of recidivism, school enrollment, or employment, youth who participated in the wilderness program did have significant increases in their self-efficacy and hope for the future. Youth who endorsed higher levels of hope for the future (using a validated measure) approached significance in predicting reduced recidivism, suggesting a potential relationship worth further exploration.

Second, Edgemon et al. (2020) evaluated the use of behavioral skills training (applied behavioral analysis) for improving job interviewing skills for seven male youth who had been adjudicated for sexual offenses. Results indicated that four of the seven youths’ appropriate responses increased with behavioral skills training only. For the other three youth, improvements were seen after applying stimulus and response prompts.

Discussion and Implications for the Los Angeles County Juvenile Justice Crime Prevention Act

This scoping review provides insight into the current evidence base for programs for youth involved in
the juvenile justice system. Based on this review, we found that there are several intervention models that appear to be more effective for these youth—whether in reducing rates of recidivism or promoting other positive outcomes (e.g., improved mental health symptoms). In this section, we highlight the findings from some of the categories of interventions that appeared to be especially effective. Overall findings across categories are summarized in Table 2.

Many diversion programs were associated with better outcomes for youth, including a lower likelihood of future arrests, adjudications, and out-of-home placements across multiple studies. These programs used a variety of different models—for example, with some focusing on youth with mental health concerns (e.g., Kretschmar et al., 2016); some providing evidence-based family programs (e.g., Kethineni and Grubb, 2021); and others using unique models, such as writing-based interventions (Serocynski et al., 2016). Across these program models, studies generally found reductions in recidivism. The exception to this was teen courts: Some studies found positive effects (e.g., Smokowski et al., 2018) and others observed nonsignificant (Norris, Twill, and Kim, 2011) or even negative effects (Wilson et al., 2009). Studies also suggested generally positive outcomes resulting from problem-solving court models, including drug courts (e.g., Gummelt and Sullivan, 2016) and mental health courts (e.g., Behnken, Arredondo, and Packman, 2009).

There were also certain psychotherapeutic interventions that were found to improve outcomes, such as recidivism and mental health functioning. For example, some effective CBT interventions targeted decisionmaking and problematic thinking patterns and were associated with positive juvenile justice outcomes in multiple populations, including girls living in a group home (e.g., Jewell et al., 2015), youth who have committed sexual offenses (Calleja, 2022), and adjudicated youth in residential (Thoder and Cautilli, 2010). There also was evidence that CBT that addresses mental health conditions had benefits as well, such as imagery rehearsal therapy (Krakow et al., 2001). Some family-focused interventions also appeared to be effective at reducing such outcomes as recidivism, out-of-home placements, and mental health symptoms, including MST (e.g., Schaeffer and Bourduin, 2011) and FFT (e.g., Gottfredson et al., 2018).

Third, some studies found that substance use treatment that was provided in both residential and community-based settings resulted in lower recidivism rates (Joyce, Westerberg, and Matthews, 2015) and substance use (e.g., Chassin et al., 2009). Additionally, there was evidence that interventions that match the treatment provided to the needs of youth, consistent with the risk-need-responsivity model, were more effective (e.g., Baglivio, Wolff, Jackowski et al., 2018).

Our review also found that certain program models appear to be less effective at preventing recidivism for youth involved in the juvenile justice system, including community supervision interventions and boot camps. For example, interventions that augmented standard community supervision services appeared to have no significant effect on recidivism, and in some cases increased the likelihood of technical violations (e.g., Giblin, 2002), likely because of increased oversight. Boot camps also had no significant long-term effect (e.g., Bottcher and Ezell, 2005).

Finally, psychoeducational programs appeared to have mixed effects, including life skills training programs, social problem-solving programs, and employment-focused programs. Although these programs sometimes resulted in decreased recidivism, it was not significantly different from the experience of youth in comparison group conditions (e.g., Schaeffer et al., 2014). Similarly, health-focused programs, which typically measured involvement in risky health behaviors as an outcome, had mixed findings across studies.

Our scoping review also provides insight into the limitations of the existing literature on programs and practices for justice-involved youth. First, there is wide variation in how recidivism is defined and measured. Across the studies reviewed, the recidivism outcome measures included new arrests or charges, violations of community supervision, new complaint filings in court, convictions or adjudications, any contact with law enforcement, and self-reported delinquency; some studies failed to provide a clear operational definition of recidivism. Second, the study follow-up periods ranged widely, with some as short as three months and others following youth
<table>
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<th>Category</th>
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| Diversion programs | • Overall, diversion programs showed evidence of reducing recidivism.  
• Restorative justice programs reported lower recidivism rates.  
• Teen courts had mixed results, with one study finding negative effects for boys and no effect for girls.  
• Mental health diversion programs tended to have positive reductions in recidivism, and some studies reported improved symptoms and service utilization.  
• Providing judges with informed treatment plans prior to adjudication increased the use of alternative sanctions. |
| Problem-solving courts and other court interventions | • Results were mixed when examining drug courts’ abilities to reduce recidivism; however, more-rigorous studies found a small to medium effect size.  
• Only two studies examined the use of juvenile mental health courts. While results were generally positive, additional research is needed in this area.  
• Courts targeting specific populations (e.g., girls in court or youth with a sexual offense) reported reduced recidivism rates. |
| Care coordination interventions | • Programs focused on care coordination had varying results, including nonsignificant reductions in recidivism, nonsignificant reduction in recidivism but reduced risk scores, and reduced odds of adjudication.  
• These types of intervention occasionally reported increases in educational outcomes, increased skills, and improved self-efficacy. |
| Psychotherapy and other therapeutic interventions | • CBT-based programs that address criminogenic risk tended to be effective at reducing recidivism.  
• Other forms of CBT that target mental health had mixed outcomes, although certain forms of such therapy appeared to effectively improve mental health.  
• Some other psychotherapeutic approaches showed promise, such as pastoral counseling, but many others did not demonstrate significant effects on recidivism (e.g., gender-specific therapeutic community, animal therapy). |
| Psychoeducation | • There was not strong evidence that skills training programs are effective at reducing recidivism.  
• Victim awareness programs appeared to be associated with reduced recidivism, although program models varied across studies. |
| Health-focused programs | • Health-focused programs largely included an emphasis on sexual risk behavior and sometimes substance abuse.  
• Although most of the studies in this category used a rigorous design, outcomes were mixed and leave open questions regarding the most effective way to address risky health behaviors in juvenile justice populations. |
| Family-focused interventions | • Multisystemic therapy was associated with reduced likelihood of rearrest across multiple RCTs, and even showed promise over long-term follow-up periods.  
• Studies of FFT suggested that this approach can effectively reduce recidivism.  
• Multidimensional treatment foster care was associated with positive mental health and educational outcomes, although there is a need to understand its effect on recidivism.  
• There are many other approaches to integrating families into treatment, and although some were associated with positive effects, there is a need for additional studies of these models. |
| Substance use treatment | • Treatment facilities and correctional units that use therapeutic communities generally reported reductions in substance use and improved behavioral health outcomes; however, one study failed to find long-term benefits.  
• Community-based substance use programs had mixed results.  
• Family involvement in treatment had positive effects in one study. |
| Wraparound service models | • Mixed results were observed for wraparound service models.  
• The length of program and whether the program was completed appear to be important factors.  
• Studies also reported improved mental health outcomes. |
| Boot camps | • Boot camps were found to have little to no effect and, in one case, increased the odds of recidivism. |
| Risk-need-responsivity | • Incorporation of risk-need-responsivity principles was associated with better outcomes.  
• Matching youths services with identified needs improves outcomes.  
• Service quality is important; additionally, youth who received a higher average of service quality across different services did better. |
Table 2—Continued

<table>
<thead>
<tr>
<th>Category</th>
<th>Key Takeaways</th>
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<tr>
<td>Community supervision</td>
<td>• Programs that increased surveillance generally had null or negative effects; however, one study had youth self-report less delinquent behavior and less victimization.</td>
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| Other                        | • One study suggested that a wilderness program increased youths’ feelings of self-efficacy and hope for the future, but did not observe reduced recidivism.  
• Another study suggests that behavioral skills training can improve youths’ preparation for job interviews. |

for five or more years. Not only does this make it difficult to compare across studies, but it also raises questions about the ways in which the tendency for youth to desist from criminal activity might intersect with the longitudinal nature of some studies. Third, many of the studies failed to look at more-proximal outcomes that would be expected to change in the shorter term, instead focusing on more-distal recidivism outcomes. For example, mental health–focused programs that might be expected to reduce mental health symptoms or family-focused programs that might expect an improvement in family relationships only measured recidivism as an outcome measure, making it difficult to determine how these interventions affected youth well-being and whether improvements in youth well-being are a mechanism by which programs reduce recidivism. Fourth, not all quasi-experimental studies used a rigorous comparison group. For example, many compared treatment completers to noncompleters. Although these studies often found that treatment completers had better outcomes than noncompleters, the studies were unable to account for selection bias in these two groups and therefore should be interpreted with caution. Finally, during the abstraction process, we aimed to identify studies that disaggregated the findings by race, ethnicity, or gender to determine whether certain interventions were more effective for particular subgroups. However, very few studies disaggregated results in this way. Although studies might have included race, ethnicity, and/or gender as covariates in statistical models, the authors generally did not explore interaction effects between these characteristics and treatment conditions. A handful of studies explored the effect of gender-specific programs, such as the problem-solving court for girls (Davidson, Pasko, and Chesney-Lind, 2011), the culturally sensitive substance use treatment program for Hispanic and African American youth (Gil, Wagner, and Tubman, 2014), and the family intervention for Hispanic adolescents (Cervantes, Ruan, and Dueñas, 2004). However, this was an important limitation of the literature and precluded us from drawing conclusions about the effectiveness of programs for youth of different racial and ethnic backgrounds and genders.

**Limitations**

It is important to acknowledge the limitations of our scoping review. First, we limited our review to academic literature; however, there is also gray literature related to interventions for juvenile justice populations. Therefore, our comments on the status of the literature should be interpreted as specific to the academic literature. That said, we believe that the bulk of relevant studies will appear in the academic literature rather than in gray literature, and focusing on academic literature ensured that all studies had undergone peer review prior to publication. Second, as noted in the methods, although we did our best to categorize these studies into meaningful categories, there is potentially some overlap among the categories we identified. For example, some of the diversion programs relied on treatment models that were described in subsequent treatment categories, such as family therapy, CBT, and restorative justice. Third, we did not include a formal measure of study quality, which is often done for systematic reviews. However, this type of rating was outside the scope of the current study because it was intended as a scoping review. To address this limitation, we aimed to provide information about the study design that related to quality (e.g., sample size, outcome study design). Finally, our search strategy was focused on identifying services that focused on serving youth, although sometimes this included family-oriented programs. We excluded programs that were focused solely on
parents or caregivers, in part using the scope of the existing portfolio of funded services in Los Angeles. However, there might be parent- or caregiver-focused interventions that are particularly effective, and if serving families continues to be an important goal of the JJCPA portfolio of services, it would be valuable to conduct a search focused specifically on those programs to determine what models are effective.

Implications for the Los Angeles County JJCPA Portfolio of Services

As previously described, 65 percent of JJCPA base funds in Los Angeles County are allocated to early intervention and intervention programs (which receive 35 and 30 percent of funds, respectively). Therefore, understanding what programs are supported by the research is important to shaping the portfolio of services and maximizing its benefits for youth.

As of this writing, JJCPA funds support several programs that were found to be effective in this scoping review (Juvenile Justice Coordinating Council, undated). Related to the diversion program category, two diversion programs receive funding as of this writing. One of these is the Early Intervention and Diversion Program, which provides intensive case management, school services, and mental health and substance use disorder services (Los Angeles County Chief Executive Office and Los Angeles County Department of Probation, 2018; Los Angeles County Probation Department, 2019), which has demonstrated positive effects in local evaluations conducted by the county. The second program is the Youth Diversion and Development Program, a newer program providing case management services that is currently expanding (Los Angeles County Department of Youth Diversion and Development, 2022).

In the category of problem-solving courts and other court interventions, two court-related interventions also receive funding, including a court-based care coordination intervention and a juvenile mental health court, both of which are participating in evaluations of their effectiveness.

There also are funded programs relevant to the psychotherapy and other therapeutic interventions and substance use treatment categories. JJCPA funds MST for both probation-involved youth and youth identified at risk of juvenile justice system involvement. It also funds mental health treatment in juvenile halls and community-based substance use treatment for youth on probation. This scoping review reveals that not all mental health and substance use disorder treatment is equally effective, but that programs that use a CBT approach or MI are likely to be most effective.

Overall, these findings also can be useful to agencies applying for JJCPA funds and JJCC members as they evaluate annual funding requests. Agencies seeking funding must provide a description of their program, including the nature of the services, population served, and evidence base. These agencies can draw on this review to identify treatment modalities that might be particularly effective for the populations whom they serve and also can draw evidence and citations from this review to support their applications. In turn, when JJCC members are reviewing funding requests, they can be attuned to whether programs are describing the use of program models that have better empirical support. There are routinely more requests for funding than can be fulfilled through JJCPA funding, and for this reason, knowing what approaches might work will ensure that funds are invested in the most-effective programs.
Notes

1 Note that, for the purposes of this review, we use such terms as services, programs, practices, and interventions interchangeably to refer to services that are provided to youth.

2 For complete search terms, see Appendix A.

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### Abbreviations

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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CBT</td>
<td>cognitive behavioral therapy</td>
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<tr>
<td>CMJJP</td>
<td>Comprehensive Multi-Agency Juvenile Justice Plan</td>
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<td>FFT</td>
<td>family functional therapy</td>
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<td>HIV</td>
<td>human immunodeficiency virus</td>
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<tr>
<td>JJCPA</td>
<td>Juvenile Justice Crime Prevention Act</td>
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<td>JJCC</td>
<td>Juvenile Justice Coordinating Council</td>
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<td>MI</td>
<td>motivational interviewing</td>
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<td>MST</td>
<td>multisystemic therapy</td>
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<td>PTSD</td>
<td>posttraumatic stress disorder</td>
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<td>RCT</td>
<td>randomized controlled trial</td>
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About This Report
The Juvenile Justice Crime Prevention Act (JJCPA), administered by the California Board of State and Community Corrections, provides funding to counties to support programs that have proven their effectiveness in curbing crime among at-risk youth and youth involved in the juvenile justice system. In the County of Los Angeles, the Probation Department oversees the implementation of JJCPA-funded programs, which are approved by the county through the Juvenile Justice Coordinating Council (JJCC), which comprises stakeholders from county agencies, city agencies, and community-based organizations. In 2019, the Probation Department selected the RAND Corporation to provide evaluation and technical assistance services related to JJCPA-funded programs, including an annual gap analysis. In this report, we provide a review of the literature evaluating programs for youth who are involved in the juvenile justice system, with the goal of identifying promising and effective practices. The findings from this report will help the JJCC make evidence-informed decisions regarding programs that are selected for funding and will help community-based organizations that serve justice-involved youth choose program models that are effective for their target population.

Justice Policy Program
RAND Social and Economic Well-Being is a division of the RAND Corporation that seeks to actively improve the health and social and economic well-being of populations and communities throughout the world. This research was conducted in the Justice Policy Program within RAND Social and Economic Well-Being. The program focuses on such topics as access to justice, policing, corrections, drug policy, and court system reform, as well as other policy concerns pertaining to public safety and criminal and civil justice. For more information, email justicepolicy@rand.org.

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