

Informal approaches to Pre-court diversion

Toolkit technical report

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About National Children's Bureau

This report has been produced by the National Children's Bureau on behalf of the Youth Endowment Fund. The National Children's Bureau works collaboratively across the issues affecting children to influence policy and get services working together to deliver a better childhood. They were commissioned by the Youth Endowment Fund (YEF) as their Toolkit Partner 2023–2026.

About Youth Endowment Fund

The Youth Endowment Fund's mission is to prevent children and young people becoming involved in violence. They do this by finding out what works and building a movement to put this knowledge into practice. The fund was established in March 2019 by children's charity Impetus, with a £200m endowment and ten-year mandate from the Home Office. For more information, please visit www.youthendowmentfund.org.uk.

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Abstract/Plain Language Summary

The objective of this report is to review the evidence on the effectiveness of informal pre-court diversion programmes as a strategy to prevent violence, crime and offending among children and young people. Informal pre-court diversion programmes typically involve flexible, non-legally binding interventions without formal referrals or formal sanctions. Examples include community resolutions, informal deferred prosecution or cautions, no further action outcomes (such as outcomes 20, 21, or 22), and cannabis warnings.

This report summarises evidence from a systematic review and meta-analysis of informal pre-court diversion programmes, involving 11 studies with 5,846 children and young people. It also includes insights from 14 studies on programme implementation, examining factors such as acceptability, fidelity, and sustainability.

Key findings:

- Informal pre-court diversion programmes are associated with an estimated 30% reduction in crime and offending outcomes (such as arrest rates, offending, or recidivism), based on a meta-analysis of 42 outcomes across nine studies.
- No studies specifically report on the impact of informal pre-court diversion on reducing violence amongst children and young people, so we have used the crime and offending outcomes as a proxy measure for violence.
- Informal pre-court diversion is also more cost-effective than formal processing.
- Informal pre-court diversion is more effective for children and young people on their first contact with the criminal justice system and those involved in minor offences only.
- Effectiveness of informal pre-court diversion has increased in recent years, with studies published in the 2020's demonstrating the largest effects.
- Programmes are more likely to be successfully implemented if they emphasise voluntary participation, individualised support tailored to the child or young person, and relationship-driven approaches.

- Effective implementation also relies heavily on clear guidance, appropriate staff training, strong leadership support, and high-quality multi-agency collaboration.
- There are a lack of studies exploring the impact of informal pre-court diversion according to socioeconomic status, SEND, education, care-experience, place of residence, neurodiversity, or intersectionality of children and young people.
- The overall confidence in the findings on crime and offending is Low (2 out of 5). Four studies were moderate quality (one RCT, three QEDs) and five studies were low quality (three RCTs, two QEDs).

Conclusion

Informal pre-court diversion programmes are associated with a high reduction in crime and offending, particularly when used with first-time entrants and for minor offences. There is no evidence yet available concerning the impact of informal pre-court diversion on reducing violence amongst children and young people specifically. This is likely due to informal diversion typically being reserved for first-time entrants or minor offences, which are less likely to involve serious violent incidents. Successful implementation is associated with supporting children and young people to engage by highlighting freedom of choice and ensuring the interventions are personally meaningful. Staff training, leadership support and high-quality multi-agency collaborations are also essential for successful implementation.

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Preface on Terminology

This review draws on evidence spanning over half a century, during which language around personal characteristics has evolved significantly. At times, we may have to reproduce original terminology used in studies which we recognize today as being outdated and unacceptable offensive terms. This only occurs when the terminology is used in direct quotations or refers to an outcome that the author measured that remains relevant to our analysis. The wider narrative will adhere to current inclusive-language standards guided by the National Children's Bureau, Youth Endowment Fund, and Race Equality Foundation. These guiding principles include using capitalization to acknowledge shared identities (e.g., Black, Asian), whilst not capitalizing white due to its association with white supremacy. The review also avoids deficit framing and respects individuals' self-identification. Person-first language will generally be used when referring to children and young people, except for Deaf and autistic communities, who widely prefer identity-first language. The team acknowledges limitations in terminology and strives for respectful and precise representation throughout. The full preface [on terminology can be accessed here](#).

Objective and Approach

The objective of this report is to review the evidence on the effectiveness of **informal pre-court diversion** as a prevention strategy for children and young people involved in violence and offending. Diversion refers to several different approaches, with no fixed legal meaning (HM Inspectorate of Probation, 2025).

The focus of this review is on **pre-court diversion only**, which are programmes or strategies that aim to prevent children and young people involved in minor offences from entering the formal youth justice system (Youth Justice Legal Centre, 2025). Universal programmes or programmes that are preventative in nature (i.e., targeted at young people at risk of involvement in violence or crime, due to factors such as school absenteeism or living in high-crime areas) are excluded.

Pre-court diversion can be formal or informal in nature. Based on a comprehensive review of diversion papers in England and Wales, Keenan et al. (2023, p.13) were able to distinguish between formal and informal diversion strategies. Specifically, *“formal processing typically occurs post-arrest, involves a ‘justice component’, an assessment, and typically followed by an intervention including conditions (e.g., admission of guilt). Informal processing means the children and young people are often dealt with outside of custody (e.g., point of arrest caution), and without any formal sanctions”*. Whilst Keenan et al.'s (2023) review focused only on studies from England and Wales, the definition remains useful when considering an international context, as diversion is regularly practiced on a formal and informal basis in many legal systems (UNICEF Regional Office for Europe and Central Asia, 2022). However, it must be acknowledged that no standardised definition of informal and formal diversion strategies exists.

The focus of this review is on **informal pre-court diversion**, which tends to have flexible interventions without formal referrals or legal agreements, and are typically reserved for low-risk or first-time offenders (Youth Justice Board for England and Wales, 2022). Comparatively, formal pre-court diversion programmes have a structured approach, are legally binding, and are typically standardised, with official documentation and/or agreements in place (Wilson & Hoge, 2013). As the focus of this review is on informal pre-court diversion only, any

studies exploring formal pre-court diversion programmes are excluded from this review. For a full account of formal pre-court diversion, please see our technical report on formal diversion [insert link].

Out of Court Disposals (OoCDs) include both formal and informal strategies used by the police in England and Wales to resolve a criminal offence committed by a young person, without going to court (Youth Justice Board for England and Wales, 2022). Relevant to this review, informal OoCDs refer to police-led interventions which do not result in a formal criminal record, such as community resolutions and deferred prosecution/caution. OoCDs can lead to 'no further action' (outcomes 20, 21¹, and 22), which may be due to evidential difficulties or where prosecution is not considered to be in the public interest (Youth Justice Board for England and Wales, 2022). In these circumstances, diversionary or educational activities can be offered to children and young people as an alternative. Other informal pre-court diversion programmes included in this review are community resolutions, cannabis warnings, and informal deferred prosecutions/cautions. It should be noted that in relation to community resolutions it remains the case that there is no national data published on their use with CYP in England and Wales, thus leading to potential for ambiguity surrounding community resolutions and their use (Marshall et al., 2023).

Excluded from this review were mentoring programmes, education programmes, employment training, and mental health support, to prevent overlap with other YEF Toolkit strands. The inclusion criteria for this review were determined through reviewing past literature, discussion with YEF and feedback from experts in the field.

¹ Outcome 21 is applied when formal action is considered possible but not in the public interest and does not typically involve diversionary activity, thus it is not discussed further in this review.

Table 1: Definitions of eligible informal pre-court diversion strategies

Informal Pre-Court Diversion	Definition
Community Resolution	Where children and young people accept responsibility for a low-level crime or admit guilt, a community resolution can be offered. Examples of community resolution include apologising directly to victims, writing apology letters, engaging in community service, or providing restitution (National Police Chiefs' Council, 2022).
No Further Action – Outcomes 20, 21	Used when diversionary, educational, or intervention activity has been undertaken, and further legal action is deemed unnecessary. For outcome 20, diversionary activities are provided by another agency/body, separate from the police (Youth Justice Board for England and Wales, 2022).
No Further Action – Outcome 22	Outcome 22 is used where action has been taken to prevent reoffending or change behaviour, including engagement in diversionary, educational, or intervention activity. Outcome 22 is used as an alternative to formal OoCDs, prosecution, or further investigation, and is not recorded on the record of the children and young people after the diversionary activity is completed. Outcome 22 can be used regardless of whether or not children and young people admit guilt or accept responsibility for a crime (Youth Justice Legal Centre, 2022).
Informal Deferred Prosecution/Caution	Deferred prosecutions/cautions can be classed as formal or informal. Informal deferred prosecutions/cautions are an OoCD option, whereby the police can decide to put a prosecution or caution on hold, if a diversionary activity is completed within a specified time. The

	children and young people's engagement in the diversionary activity is voluntary, but an alternative formal disposal can be enforced if they choose not to participate. All informal deferred prosecutions/cautions should be recorded as an Outcome 22 in the UK (Youth Justice Board for England and Wales, 2022).
Cannabis Diversion Schemes	Cannabis diversion schemes are typically issued to individuals who are caught possessing small amounts of cannabis for personal use (usually under a certain threshold, such as one joint or small amounts of cannabis). If the individual accepts the warning or participates in the scheme and there are no other criminal offences, then it does not proceed to court. In the UK, cannabis warnings cannot be given to children and young people under the age of 18 years, however, these may be used in other countries (Government of Ontario, 2025).

This report is based on a comprehensive systematic review and meta-analysis of existing research on informal pre-court diversion. The evidence base includes:

- 67 outcomes measured across 11 studies, involving a total of 5,846 children and young people. Of these, 42 outcomes from nine studies specifically assessed the impact of informal pre-court diversion on crime and offending.
- Implementation analysis of 14 studies, exploring how factors such as intervention acceptability, fidelity, and sustainability influence effectiveness.

By integrating quantitative meta-analysis with qualitative insights from implementation studies, this report provides a comprehensive evaluation of the impact, effectiveness, and practical considerations of informal pre-court diversion programmes for policymakers, practitioners, and researchers.

The remainder of this report is structured as follows: First, the **Description of the Intervention** outlines the key components of informal pre-court diversion programmes and its intended implementation. Second, **How Effective is the Intervention?** presents findings from our meta-analysis on crime reduction and broader social outcomes. Third, **Who Does it Work For?** examines evidence on the populations that benefit most from informal pre-court diversion programmes. Fourth, **What Factors Affect Implementation?** explores key facilitators and barriers using Proctor's Implementation Outcome Framework. Fifth, **How Much Does It Cost?** reviews available cost data. Finally, the **Conclusion and Takeaway Messages** summarises key findings and recommendations, followed by **Appendices** detailing the systematic review methodology and characteristics of included research.

Description of the Intervention

In the following section details are provided on the interventions which inform this report, noting their key components, any equipment, materials, supplies or training required, the duration and intensity of interventions, who delivered the interventions, and where and how the interventions were delivered. Appendix 3 and 5 provided details on the diversion activities, methodology and locations for studies included in the effectiveness and implementation evaluations in this Toolkit strand. It is important to note that these diversions are international in scope and include studies from the US (19 studies), England (3 studies), Wales (2 studies), UK-wide (1 study) and Norway (1 study). Features of the approach

Informal pre-court diversion strategies adopt a variety of approaches and are often tailored to the specific needs of children and young people. Despite this, many interventions have similar features, involving a process of assessment, referral to counselling or community resources and completion of community service.

Counselling was central to two studies both from the US, where eligible children and young people were offered family crisis counselling (Baron, 1976; Stratton, 2009) and a 24/7 phone service (Baron, 1976). In addition, a number of other interventions could provide counselling to some children and young people as

part of a larger support offer (Home Office, 2012 (UK); Kelley et al., 2003 (USA); Klein, 1986 (USA); Quincy, 1981 (USA); Stewart et al., 1986 (USA)). The COPY (Call Out Programme for Youth) Programme offered children and young people and families who had been referred to the pre-court diversion programme the option of Multi-Systemic Therapy (Kubik & Boxer, 2020 (USA)). In one study, college student volunteers were matched with children and young people to support them with their relationships and behaviour (Davidson et al., 1977, (USA)).

Many interventions involved referral to appropriate external services or interventions, such as mentoring, support with drug and alcohol use, self-esteem or parenting (Baron, 1976 (USA); Haines et al., 2013 (Wales); Hodges et al., 2011 (USA); Hoffman & Macdonald, 2010 (Wales); Home Office, 2012 (UK); Kubik & Boxer 2020 (USA); Myers et al., 2000 (USA); NeMoyer et al., 2022, 2024 (USA); Quincy, 1981 (USA); Stewart et al., 1986 (USA)). Community service was core to 'The Community Service Program' (Koch, 1985, USA)), where it was intended to support children and young people to develop positive interests, build skills and repay society. Alternative voluntary sanctions, such as family rehabilitation and ongoing supervision, were provided to children and young people for minor drug offences, rather than processing through the criminal justice system (CJS) in one study (Sandøy et al., 2022 (Norway)).

Restorative justice elements were present in some interventions. For example, Hoffman (2010 (Wales)) described how Family Group Conferences were utilised for some children and young people, while The Swansea Bureau addressed the needs of the young person and victim using restorative justice components (Haines et al., 2013 (Wales)). The Triage schemes (Home Office, 2012, (UK)) and Treatment Plan scheme (Kelley et al., 2003 (USA)) could include letters of apology or restorative conversations dependent on the children and young people referred, whilst The Community Service Program offered some children and young people restitution (Koch, 1985 (USA)). Informal/unofficial probation, which aims to avoid the stigma and practical barriers court processing can create, was a feature of three interventions delivered in the USA (Rowan et al., 2023; Stewart et al., 1986; Venezia, 1972).

Two articles described development of physical spaces for children and young people. The Southeastern County Truancy Intervention Initiative (Bazemore et al., 2004, (USA)) accommodated children and young people who were truant from school during the day. Students were processed through the unit in a way which evokes a sensation similar to being arrested and taken into custody. Once inside the unit, students were interviewed and expected to remain silent, although some students were offered informal counselling. The WISE arrest diversion program (Fader et al., 2015, (USA)) involved wraparound academic support including tutoring, mentoring and daily check-ins, along with organised sporting activities. The programme provided the 'Underground Café' for children and young people who needed a safe space to engage in positive activities after school.

Meanwhile, the 'Correct Course' (Hodges et al., 2011, (USA)) utilised specialist computer software to interview children and young people and families, generating an individualised plan of goals, and identifying the support necessary to achieve these. The software identified challenges experienced by children and young people in various areas including mental health, relationships and substance use, which would need targeting through interventions. Interventions tailored to the individual were also used to accompany informal cautions given to children and young people in one study (Kemp et al., 2002, (England)). Similarly, one Youth Offending Team operated welfare-orientated diversionary practices, tailored to the needs of individual children and young people (Boden, 2019, (England)). Of note, Regoli et al. (1985, (USA)) evaluated a mix of informal diversion programmes in the Denver Metropolitan Area, which varied in their features and components.

For all studies included in the effectiveness analysis, the evaluation methods used included treatment and control groups, with some utilising a randomised controlled trial approach.

Equipment, materials or supplies required for implementation

Where equipment was mentioned, this typically included forms for monitoring intake and delivery of projects. These forms included details about the offence, demographics, personality measures and a contract or record of participation (Baron, 1976; Davidson et al., 1977; Koch, 1985; Myers et al., 2000; Quincy, 1981;

Stewart et al., 1986). Equipment cited also included training materials (Baron, 1976; Barrett et al., 2022) and letters containing information about the intervention (Hoffman & Macdonald, 2010; Koch, 1985; Quincy, 1981).

The Southeastern County Truancy Intervention Initiative (Bazemore et al., 2004) and the WISE arrest diversion program (Fader et al., 2015), both of which were USA studies, required physical space to accommodate young people, while WISE also required entertainment resources such as games and recording equipment. The Correct Course (Hodges et al., 2011) required computers and specialist software to assess the young people and generate a service plan, while the Community Service Program (Koch, 1985) required a tape recorder for intake meetings. However, most studies did not record the equipment, materials or supplies necessary for implementation.

Training for intervention personnel

Only a third of studies reported on specialist training for intervention personnel. Several reported that training about the intervention was necessary, without providing specific details (Baron, 1976; Davidson et al., 1977; Haines et al., 2013; Home Office, 2012; Kubik & Boxer, 2020). Some noted that previous specialist experience or qualifications in areas such as probation or social work was required or supportive (Baron, 1976; Bazemore et al., 2004; Klein, 1986). Where details of the training were provided, these included training about counselling, working with children and young people and families, trauma, mental health, in addition to practical aspects of running the intervention, such as data collection and handling (Barrett et al., 2022; Stratton, 2009).

Duration and intensity of the interventions

Only half of studies stated the duration of the intervention. Two lasted between two and four weeks (Haines et al., 2013; Myers et al., 2000), seven lasted two to six months (Davidson et al., 1977; Hodges et al., 2011; Hoffman & Macdonald, 2010; Koch, 1985; Kubik & Boxer, 2020; NeMoyer et al., 2022, 2024; Quincy, 1981) and one lasted between six months and one year (Stewart et al., 1986). The Southeastern County Truancy Intervention Initiative was a one-day intervention, where students could remain at the unit for up to six hours (Bazemore et al., 2004). Triage

schemes (Home Office, 2012) varied by area and ranged from a single session to three months of contact. The Denver Metropolitan Area Diversion Programs (Regoli et al., 1985) ranged from one week to two years, while alternative sanctions (Sandøy et al., 2022) ranged from six months to two years.

Considering the intensity of interventions, the WISE arrest diversion program (Fader et al., 2015) and Project Back-on-Track (Myers et al., 2000) were delivered daily or four times a week, respectively. The Community Service Program (Koch, 1985) and Berrien County Youth Service and Assistance Bureau (Quincy, 1981) involved contact at least weekly, while the Treatment Plan programme (Kelley et al., 2003) involved monthly contact..

Who delivered the interventions

Most interventions included multiple elements delivered by different professionals. Interventions were most frequently delivered by counsellors, psychologists, social workers, police, , and youth justice services (Baron, 1976; Barrett et al., 2022; Bazemore et al., 2004; Fader et al., 2015; Haines et al., 2013; Hodges et al., 2011; Hoffman & Macdonald, 2010; Home Office, 2012; Kelley et al., 2003; Kemp et al., 2002; Klein, 1986; Kubik & Boxer, 2020; Myers et al., 2000; NeMoyer et al., 2022, 2024; Quincy, 1981; Regoli et al., 1985; Rowan et al., 2023; Sandøy et al., 2022; Stewart et al., 1986; Stratton, 2009). Other professionals involved included programme coordinators, volunteers, teachers/school staff, CAMHS staff, probation staff, and staff from local programmes such as drug education services (Baron, 1976; Barrett et al., 2022; Davidson et al., 1977; Fader et al., 2015; Haines et al., 2013; Hodges et al., 2011; Hoffman & Macdonald, 2010; Koch, 1985; Kubik & Boxer, 2020; Myers et al., 2000; NeMoyer et al., 2022, 2024; Quincy, 1981; Regoli et al., 1985; Sandøy et al., 2022).

Where were the interventions delivered

Details surrounding delivery locations were sparse, however authors of this report inferred that delivery typically took place in community locations and schools. Five interventions were held, or contained elements which were held, in custody or the courthouse (Haines et al., 2013; Hodges et al., 2011; Home Office, 2012; Stewart

et al., 1986; Stratton, 2009), while another was held near to, but separate from, the local intake facility (Baron, 1976). Four included visits to the children and young people's home (Hoffman & Macdonald, 2010; Koch, 1985; Kubik & Boxer, 2020; NeMoyer et al., 2022, 2024), while one was held in a child and adolescent psychiatry outpatient clinic (Myers et al., 2000) and another at a truancy unit (Bazemore et al., 2004).

How were the interventions delivered

Authors rarely stated how interventions were delivered, however all appeared to have involved face-to-face delivery, with occasional contact by telephone or letter (Baron, 1976; Hoffman & Macdonald, 2010; Home Office, 2012; Kelley et al., 2003; Koch, 1985; Myers et al., 2000; Quincy, 1981). Activities such as counselling were typically delivered either one-to-one or amongst a family, while skills programmes were generally delivered to groups (Baron, 1976; Fader et al., 2015; Kubik & Boxer, 2020; Myers et al., 2000).

How Effective is the Intervention?

This section examines the effectiveness of pre-court diversion: informal approaches in reducing violence, crime and offending, and other related outcomes through a systematic review and meta-analysis, to provide a robust and objective summary of existing evidence, incorporating advanced statistical techniques, including robust variance estimators (Pustejovsky & Tipton, 2022), for improved accuracy.

Studies employed a variety of comparison conditions, categorised as either Treatment as Usual (TAU) or Alternative Interventions. These categories were based on how young people were processed within the justice system when they did not receive the informal pre-court diversion intervention.

Treatment as Usual (TAU) was operationalised as the standard justice system response that would occur in the absence of the offer of diversion. This generally reflected formal system processing, including court appearances, probation, or adjudication.

In contrast, **Alternative Interventions** included any responses other than informal processing or TAU that involved structured action or service provision. These encompassed a range of diversionary options such as verbal or written cautions, restorative justice conferences, informal adjustments, community-based supports, or other non-court-based approaches aimed at addressing youth behaviour outside of the traditional court pathway.

In this meta-analysis, and consistent with past research (e.g., Wilson et al., 2017; Wilson & Hoge, 2013b), we only included studies where informal diversion programmes were compared to TAU. Studies evaluating informal diversion against alternative interventions such as restorative justice, informal community resolutions, or other structured programmes, were excluded from the meta-analysis. This approach ensured that effect sizes reflected the distinct impact of informal diversion when measured against standard juvenile justice processing providing a more consistent and interpretable comparison across studies.

Quantitative data from **11 studies** provided information across a variety of 67 outcomes related to the impact of an informal pre-court diversion approach targeted at children and young people.

These studies, included in the meta-analysis, assessed the effectiveness of informal pre-court diversion approaches across a total of **5,846 children and young people**. These studies employed a range of study designs, including:

- Quasi-Experimental Designs (QED): (n = 7, 63.6%)
- Randomised Controlled Trials (RCT): (n = 4, 36.4%)

The 11 effectiveness studies varied considerably in their methodological design and reporting characteristics (see [Appendix 3](#) for individual study details). We examined each study on three design features: (1) how comparison groups were created, (2) the unit to which allocation was applied, and (3) the method used to generate the allocation sequence. Most studies used pre-existing (natural) differences to create comparison groups (n = 7, 63.6%) while four others used a prospective design and assigned participants at the start of the study (36.4%). The methods used to generate allocation varied; truly random allocation was used in four studies (36.4%) while a further six (54.5%) used non-random allocation. The method of allocation was not applicable for one study which did

not use prospective allocation (9.1%). Most studies allocated at the level of individual participants ($n = 10$, 91.0%), with one study not involving any formal allocation process.

Studies were assessed for methodological quality using the YEF-EQA critical appraisal tool and were rated as follows:

High: ($n = 1$, 9.1%)

Moderate: ($n = 4$, 36.4%)

Low: ($n = 6$, 54.5%)

The effectiveness studies spanned multiple decades, with the earliest conducted by Venezia (1972) and the most recent by Rowan (2023). The studies were conducted in two different countries including:

USA: ($n = 10$, 91.0%)

England: ($n = 1$, 9.1%)

Funding information was not consistently reported; nearly half of the studies ($n = 5$, 45.5%) provided no funding source information. Where reported, funding came from a range of sources, including national government departments, either health/social science ($n = 2$, 18.2%) or justice ($n = 1$, 9.1%), local authority youth justice services ($n = 1$, 9.1%), and state/local government justice or youth services ($n = 2$, 18.2%). The intensity of interventions also varied, with two studies classifying their interventions as high-intensity (18.2%), one as low-intensity (9.1%), and two as medium-intensity (18.2%). However, for six studies (54.5%), intensity could not be clearly determined due to a lack of detail. Only three studies (23.5%) explicitly described implementer training; the remaining eight studies (72.7%) provided no information on this aspect.

Interventions were delivered across diverse settings, most commonly in justice system-based ($n = 4$, 36.4%) and community-based ($n = 2$, 18.2%) environments. Others took place in clinical, home, or hybrid contexts, while some studies lacked setting information entirely ($n = 3$, 27.3%).

Intervention components, integrated within the informal diversion programmes, were mapped to our four-domain typology (see [Appendix 7](#) for additional examples):

1. **Therapeutic Support** presented interventions using family or individual counselling, crisis response, and parent-focused work, (n = 4, 36.4%);
2. **Supportive Casework** involved structured assessment, case planning, and regular check-ins, (n = 2, 18.2%);
3. **Developmental Interventions** emphasised skill-building or mentoring and/or coaching, (n = 2, 18.2%), and;
4. **Accountability & Restoration** included programmes built around community service, restitution, or other restorative-justice activities (n = 1, 9.1%).

Two studies (18.2%) did not clearly specify the intervention components.

In terms of demographic representation, some gender balance was reported in two studies (18.2%), while majority male samples ($\geq 70\%$) were present in four (36.4%) and majority female samples ($\geq 60\%$)² were present in two (18.2%). Gender balance was unclear in three (27.3%) studies. Ethnicity was poorly reported overall, though nearly half of the studies (45.5%) indicated some diversity in the participant group.

The **inclusion criteria** used across the 11 effectiveness studies varied in how children and young people were selected for participation. These criteria reflect different levels of risk, offence history, and referral processes:

- **Discretionary Referral (n = 3, 27.3%):** Referrals were made based on the discretion of practitioners, agencies, or the justice system. Eligibility was not strictly defined, potentially encompassing a mix of children and young people with first-time, minor, moderate, or repeat offences. The decision to refer was guided by professional judgement rather than formal eligibility rules.
- **First-Time Entrants (FTE) Only (n = 5, 45.5%):** These studies focused exclusively on children and young people with no prior recorded offences.

² Youth-justice studies with large female samples are rarer than those with large male samples, so different thresholds were applied.

The interventions targeted those identified as first-time entrants to the criminal justice system.

- **Minor Offences Only (n = 2, 18.2%):** Studies designated to this category included only children and young people involved in minor offences (e.g., shoplifting, underage drinking). Referrals typically originated from schools or community agencies. While these studies may have included first-time offenders, this was not always explicitly stated.

One study (9%) did not provide information on the inclusion criteria for the intervention.

Measured Outcomes

Across the 11 effectiveness studies, **6 outcome categories** were identified within the YEF Outcomes Framework³. These categories capture different aspects of crime and offending and other crime related outcomes, including:

1. Crime and offending (k=42; n=9)
2. Criminal peers (k=16; n=1)
3. Youth justice stigma (k=6; n=2)
4. Family relationships and support (k=1; n=1)
5. Positive and prosocial identity (k=1; n=1)
6. School engagement (k=1; n=1)

The majority of these outcomes were derived from Criminal Justice System (CJS) records (n = 36, 53.7%) and self-completed questionnaires (SCQ; n = 31, 46.3%).

Absence of violence outcomes

The initial objective of this analysis was to assess the impact of interventions on reducing violence, as defined by the Youth Endowment Fund (YEF). Violence is understood as a broad construct encompassing both behaviours and offences – physical, verbal, psychological, or sexual in nature (YEF, 2023: p.12).

³ The [YEF Outcomes Framework](#) identifies specific outcomes linked to reducing the risk of children and young people becoming involved in crime and violence, providing a structured approach for measuring the impact of interventions

However, upon review of the available evidence, it became clear that **none of the studies included in this effectiveness review reported outcomes that directly measured violence**. While many studies focused on justice-involved outcomes such as arrest rates, offending, or recidivism, no outcomes specifically captured violent incidents, behaviours, or charges.

As a result, violence outcomes were not included in the meta-analysis, and no conclusions can be drawn about the effectiveness of the informal diversion in reducing violence specifically. In line with YEF's Toolkit Technical Guide, crime and offending outcomes can be used as proxy measures to estimate likely impact on violence, which is used to produce the Toolkit summary.

We present summary results for our separate meta-analysis on **crime and offending outcomes** below:

Table 2: Summary of findings on crime and offending outcomes

Outcome	SMD (SE)	CI (95%)	P	% reduction ⁴	Impact rating	Number of studies	Evidence Security rating
Crime & Offending	-0.34 (0.04)	-0.42 to - 0.26	< .001	30%	High	9	Low

The SMD of -0.34 corresponds to a relative risk reduction of 29.9%, and an absolute risk reduction of 15.0%. The risk of reoffending among those who are not diverted is 50%, compared to 35% among those who do undergo informal pre-court diversion.

⁴ This represents the percentage reduction in reoffending

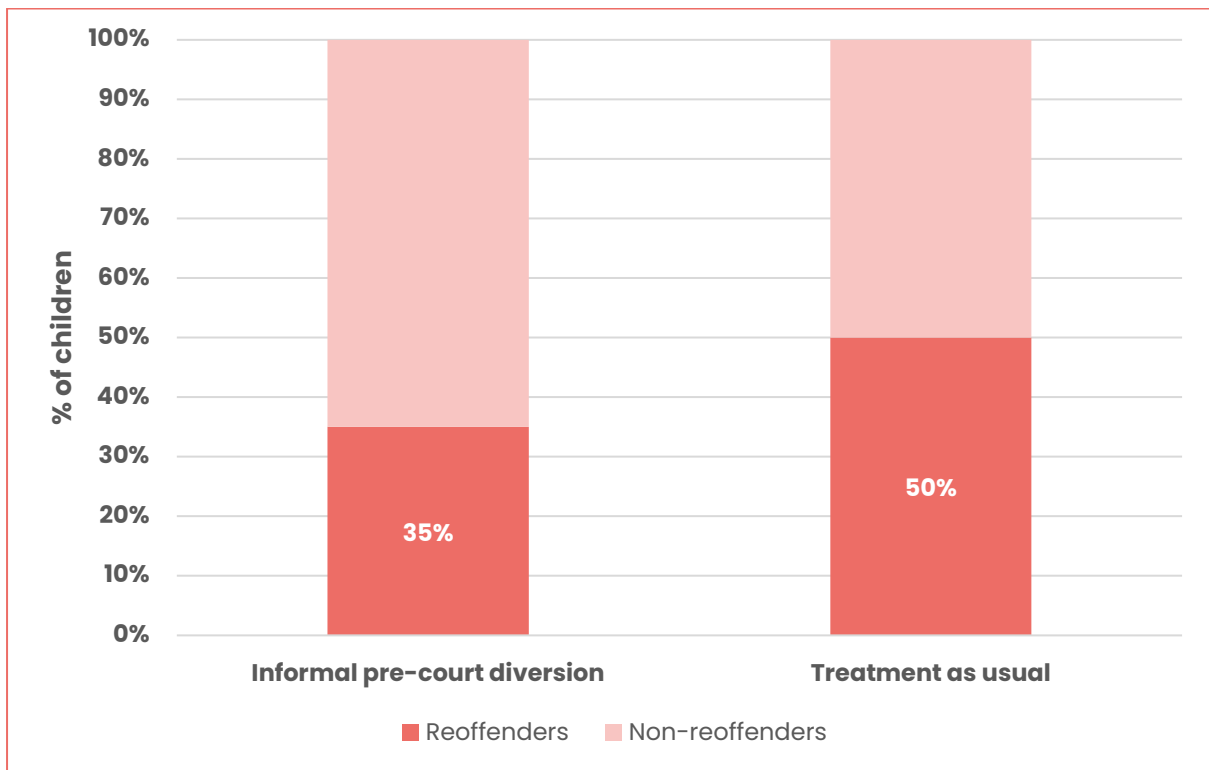


Figure 1: Risk of reoffending for children undergoing informal pre-court diversion compared to those receiving treatment as usual

Meta-analysis of crime and offending outcomes related to Informal Pre-Court Diversion

Informal Pre-Court Diversion is associated with a high impact on crime and offending outcomes, corresponding with a 30% reduction across these outcomes, based on 42 effect sizes across 9 studies.

The majority of studies included **crime and offending** outcomes. A total of $k = 42$ effect sizes were included in this analysis. The estimated average outcome based on the random-effects model was $\hat{\mu} = -0.34$ (95% CI: -0.421 to -0.259). This estimate was statistically significantly different from zero $z = -8.23$, $p < .001$, and dropped slightly but remained statistically significant when adjusting for clustering across studies using robust variance estimation ($t = -7.28$, $df = 3.91$, $p < .01$). The estimate remained the same suggesting the original meta-analysis was stable. However, the increased p-value and standard error in the re-

analysis suggest that within-study correlation was likely underestimated in the original model.

Table 3: RVE Output for meta-analysis on crime and offending outcomes

	Estimate	SE	t-stat	d.f (Satt)	p-val (Satt)	Sig
Intercept	-0.34	0.047	-7.28	3.91	0.002	<.01

In practical terms, this indicates reliable evidence that the intervention had a meaningful impact on crime and offending outcomes across studies. Based on YEF impact categorisation, the effect size ($d = -0.34$) corresponds to High impact, representing a 30% decrease in crime and offending compared to a baseline prevalence of 50%.

According to the Q-test, the true outcomes appear to be moderately heterogeneous $Q(41) = 95.37$, $p < 0.001$, $\tau^2 = 0.033$, $I^2 = 54.63\%$. This level of variability suggests that differences in study characteristics may moderately influence the intervention's effectiveness.

A forest plot showing the observed outcomes on crime and offending behaviour and the estimate based on the meta-analysis model is shown in Figure 2 below⁵.

⁵ Each study often reported multiple effect sizes (up to 42 in total), which would make a conventional forest plot unreadable. We therefore computed a single, inverse-variance-weighted summary effect per study for the "crime or offending behaviour" outcome and plotted one row per study to ensure clarity and interpretability.

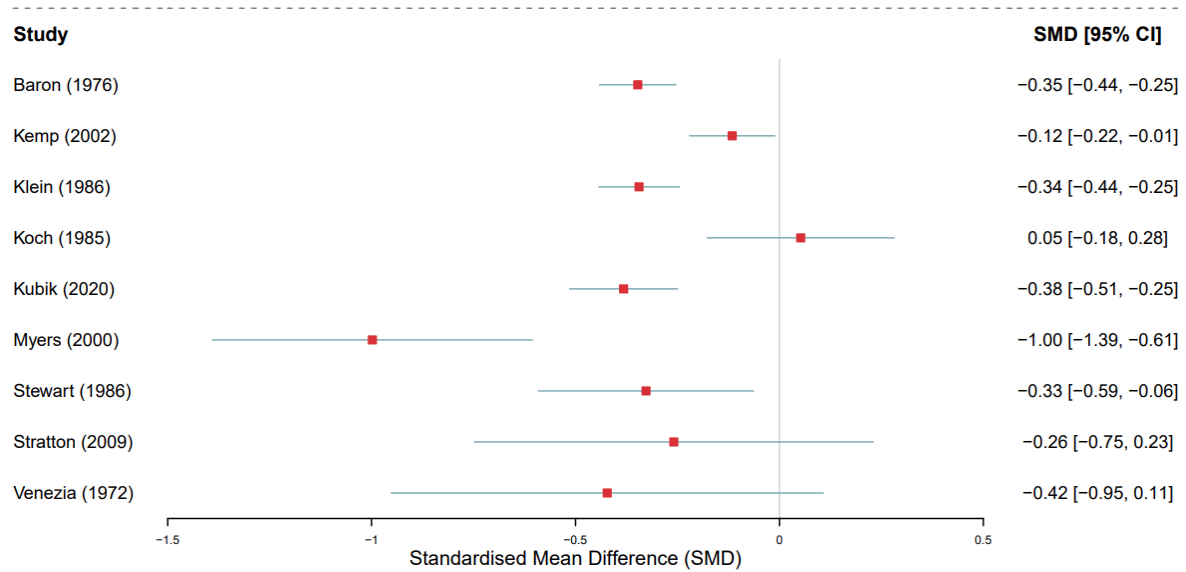


Figure 2: Forest plot showing the observed estimates of the random-effects model on crime and offending behaviour (42 outcomes across 9 studies)

Results from the meta-analysis on all outcomes related to Informal Pre-Court Diversion

A total of $k = 67$ outcomes were included in the overall analysis of 11 studies. The estimated average outcome based on the random-effects model was $\hat{\mu} = -0.44$ (95% CI: -0.53 to -0.36 , $SE = 0.04$), and was statistically significant, $z = -10.30$, $p < .001$, suggesting that informal diversion programmes significantly improve outcomes for the intervention group when compared to a treatment as usual comparison group.

When adjusting for clustering using robust variance estimation, the estimate remained the same suggesting the original meta-analysis was stable ($t = -3.46$, $df = 5.11$, $p = 0.02$). The increases observed in the p-value and standard error suggest that within-study correlation was likely underestimated in the original model.

Table 4: RVE Output for meta-analysis on all outcomes

	Estimate	SE	t-stat	d.f (Satt)	p-val (Satt)	Sig
Intercept	-0.44	0.13	-3.46	5.11	0.02	<.05

A forest plot showing the observed outcomes on crime and offending behaviour and the estimate based on the meta-analysis model is shown in Figure 3 below

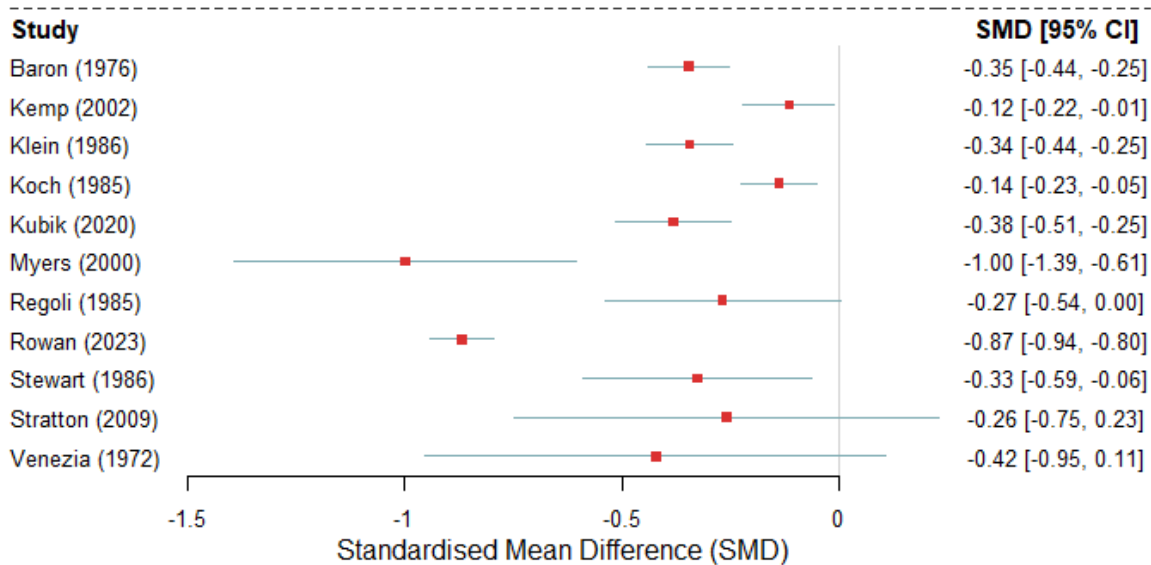


Figure 3: Forest plot showing the observed estimates of the random-effects model on all outcomes (11 studies)⁶

The Q-test indicated substantial heterogeneity in effect sizes across studies $Q(66) = 342.72$, $p < 0.001$, $\hat{\tau}^2 = 0.085$, $I^2 = 77.75\%$. This suggests that the observed variation is unlikely to be due to chance alone and may be influenced by differences in study design, sample characteristics, or contextual factors. To better understand these differences, moderator analyses were conducted to explore potential sources of heterogeneity.

Subgroup analysis

Gender

To investigate whether the effectiveness of informal pre-court diversion programmes varied according to the gender composition of the study samples, subgroup analyses were conducted across four categories: studies with majority male samples, majority female samples, some gender balance, and those with no reported gender information (Table 5).

⁶ This forest plot is aggregated at study level.

Table 5: Subgroup analysis of gender

Subgroup	k; n	SMD (95% CI)	p	Qw(df) ⁷ p-value	I ² (%)	Qb (df)	p ⁸
Majority Female	6; 2	-0.69 (-1.08 to -0.30)	<0.001	11.8 (5) p = 0.038	61.2	29.35 (3)	<.0001
Majority Male	26; 4	-0.65 (-0.78 to -0.52)	<0.001	100 (25) p = 0.000	75.8		
Some Gender Balance	13; 2	-0.29 (-0.38 to -0.78)	0.003	53.5 (12) p = 0.000	79.9		
No info	22; 3	-0.27 (-0.36 to -0.18)	<0.001	24 (21) p = 0.291	28.6		

Note: k= number of effect sizes; n = number of studies; Qw= within studies; Qb= between studies.

The four studies comprising majority male samples (k=26) showed a large and statistically significant pooled effect size (SMD = -0.65, 95% CI: -0.78 to -0.52, $p < .001$), indicating strong support for the effectiveness of informal diversion in these groups. However, substantial heterogeneity was observed ($I^2 = 75.8\%$), suggesting variability in outcomes across individual studies.

Similarly, studies with majority female samples (k = 6) also demonstrated a strong and significant effect (SMD = -0.69, 95% CI: -1.08 to -0.30, $p < .001$). While the direction and size of the effect mirrored that of male-dominated studies, the

⁷ 'Qw (df) p-value' is the within-group heterogeneity test (Qw), which tests whether the variation in effect sizes within the subgroup is greater than would be expected by chance.

⁸ The p-value corresponds to whether heterogeneity between the subgroups (Qb) is statistically significant

smaller sample size and moderate heterogeneity ($I^2 = 61.2\%$) warrant cautious interpretation.

Conversely, studies with more gender-balanced samples ($k = 13$) showed a more modest, though still significant, effect ($SMD = -0.23$, 95% CI: -0.38 to -0.08 , $p = .003$). Heterogeneity in this group remained high ($I^2 = 79.9\%$), indicating that program effectiveness varied considerably across these studies. Finally, studies that did not report gender information ($k = 22$) produced a smaller but consistent effect size ($SMD = -0.27$, 95% CI: -0.36 to -0.18 , $p < .001$) with notably lower heterogeneity ($I^2 = 28.6\%$), suggesting relatively stable outcomes across these studies despite the missing gender data.

Q-test for between-group heterogeneity

A Q-test for between-group heterogeneity was conducted to assess whether the effect sizes differed significantly across the gender subgroups. The result indicated that there was a statistically significant effect ($Q_b = 29.35$, $df = 3$, $p < .0001$), suggesting gender composition significantly moderated programme effectiveness.

Collectively, these results indicate that gender composition may be a meaningful moderator of informal diversion effectiveness across all outcomes. While positive outcomes are evidenced across all groups, stronger effects were observed in studies with predominantly male or female participants.

Ethnicity

To explore whether programme effectiveness varied by ethnicity, studies were grouped into three categories: Majority white ($>85\%$ white participants), Some Diversity (15–49% Black and Global Majority), and Diverse/Balanced ($\geq 50\%$ Black and Global Majority). In this analysis, only one study was designated to the majority white category (Venezia, 1972) and was excluded from the subgroup analysis (Table 6).

Table 6: Subgroup analysis of ethnicity

Subgroup	k; n	SMD (95% CI)	p	Qw(df)	I ² %	Qb (df)	P
<i>p-value</i>							
Diverse / Balanced	28; 3	-0.70 (-0.83 to -0.57)	<0.001	92.7 (27) p = 0.000	73	38.61 (3)	<.0001
Some Diversity	19; 5	-0.24 (-0.36 to -0.12)	<0.001	54.6 (18) p = 0.000	69		
No info	19; 2	-0.27 (-0.37 to -0.18)	<0.001	23.4 (18) p = 0.173	32.4		

Note: k= number of effect sizes; n = number of studies; Qw= within studies; Qb= between studies.

Studies conducted with ethnically diverse or balanced samples (k = 28) demonstrated a large and statistically significant pooled effect size (SMD = -0.70, 95% CI: -0.83 to -0.57, $p < .001$), alongside substantial heterogeneity ($I^2 = 73.0\%$). This may suggest that informal diversion programmes could be particularly effective across interventions where no single ethnic group is dominant, though variability in outcomes across studies was notable.

In studies categorised as having some diversity (k = 19), the effect size was smaller (SMD = -0.24, 95% CI: -0.36 to -0.12, $p < .001$), but still significant, with moderately high heterogeneity ($I^2 = 69.4\%$).

For the studies where no information on participant ethnicity was provided, the pooled effect size was high (SMD = -0.27, 95% CI: -0.37 to -0.18, $p < .001$), and heterogeneity was lower ($I^2 = 32.4\%$). The consistency of results in this group likely reflects either more uniform study contexts or a lack of reporting bias but also underscores the importance of collecting and reporting demographic data in future studies.

Q-test for between-group heterogeneity

A Q-test for between-group heterogeneity was conducted to assess whether the effect sizes differed significantly across the ethnicity subgroups. The result indicated that the differences in effect sizes between the ethnicity subgroups are statistically significant ($Q_b = 38.61$, $df = 3$, $p < .0001$), suggesting that ethnicity may be a meaningful moderator.

Outcomes

Subgroup meta-analyses were conducted for only two of the six YEF outcome categories measured across the eleven informal diversion studies (Table 7). The remaining four categories were excluded from subgroup analysis due to insufficient statistical power but were later examined in a meta-regression model to explore sources of heterogeneity (Table 13).

Table 7: Subgroup analysis on outcome category

Subgroup	k; n	SMD (95% CI)	P	Qw(df) p-value	I ² %	Qb (df)	p
Crime and offending	42; 9	-0.34 (-0.42 to -0.26)	< .001	95.36 (41) p < .001	54.6	55.94 (5)	< .0001
Criminal peers	16; 1	-0.83 (-0.97 to -0.68)	< .001	42.44 (15) p < .001	70.3		

Note: k= number of effect sizes; n = number of studies; Qw= within studies; Qb= between studies.

A very large and statistically significant effect was observed for criminal peers (SMD = -0.83, 95% CI: -0.97 to -0.68, $p < .001$) with high heterogeneity ($I^2 = 70.3\%$). As this finding is based on a single study, it should be interpreted with caution.

The most consistent and well-supported finding was for crime and offending outcomes, with a significant pooled effect size of SMD= -0.34 (95% CI: -0.42 to -0.26, $p < .001$) based on a larger evidence base (9 studies, 42 outcomes). This

represents a high impact according to YEFs impact rating and suggests an approximate 30% reduction in crime and offending behaviour among children and young people in pre-court diversion programmes.

Q-test for between-group heterogeneity

The Q-test for subgroup differences was statistically significant ($Q(5) = 55.94, p < 0.0001$), indicating that differences in effect size across outcome categories meaningfully contribute to the observed heterogeneity. This finding supports the idea that intervention effectiveness varies by the type of outcome targeted.

Decade

Subgroup meta-analyses were conducted by decade to explore variation in effect sizes over time, given the wide range of publication years across included studies (from 1972 to 2023, Table 8).

Table 8: Subgroup analysis on decade

Subgroup	k; n	SMD (95% CI)	p	Qw(df) p-value	I ² %	Qb (df)	P
1970s	4;2	-0.49 (-0.87 to -0.10)	0.01	35.3 (3), <.001	92.4	31.15 (3)	<.0001
1980s	28;4	-0.24 (-0.30 to -0.18)	<.001	25 (27), p = 0.573	4.0		
2000s	11;3	-0.41 (-0.67 to -0.15)	0.002	29.6 (10) <.001	77.0		
2020s	24;2	-0.68 (-0.81 to -0.54)	<.001	87.3 (23), <.001	75.6		

Note: k = number of effect sizes; n = number of studies; Qw = within studies; Qb = between studies.

The most recent decade, the 2020s, presented the largest effect size (SMD = -0.68, 95% CI: -0.81 to -0.54, $p < .001$), based on two studies contributing 24 outcomes. This finding suggests that the effectiveness of informal diversion seems stronger in recent years. However, as with earlier subgroup findings,

caution is warranted due to the limited number of studies and the potential for unmeasured confounding factors.

The 2000s also yielded a large and significant effect (SMD = -0.41 , 95% CI: -0.67 to -0.15 , $p < .01$), though based on only three studies. This is closely followed by the 1970s subgroup (SMD = -0.49 , 95% CI: -0.87 to -0.10 , $p = 0.013$), based on just two studies which had showed high heterogeneity ($I^2 = 92.4\%$) suggesting variation in effect sizes across studies. While these effects are sizeable, the small evidence base and potentially outdated methodologies or intervention models limit the confidence with which conclusions can be drawn about their generalisability.

By contrast, the 1980s showed a more moderate effect (SMD = -0.24 , 95% CI: -0.30 to -0.18 , $p < .001$) with low heterogeneity ($I^2 = 4\%$), and with stronger support from four studies and 28 outcomes, providing a somewhat more reliable estimate.

Q-test for between-group heterogeneity

The Q-test for subgroup differences was statistically significant ($Q(3) = 31.15$, $p < 0.0001$), indicating that publication decade likely contributes to the observed heterogeneity.

Country

To investigate potential differences in the effectiveness of informal pre-court diversion programmes, subgroup analyses were conducted by country (Table 9).

Table 9 Subgroup analysis on country

Subgroup	k; n	SMD (95% CI)	P	Qw(df) p- value	I ² %	Qb (df)	p
England	4;1	-0.15 (-0.32 to 0.02)	0.08	6.83 (3) p = 0.08	57	3.27 (1)	0.07
USA	63;10	-0.46 (-0.55 to -0.38)	<.001	297.84 (62) p= <.001	76.3		

Note: k= number of effect sizes; n = number of studies; Qw= within studies; Qb= between studies.

Studies conducted in the USA ($k = 63$) showed a statistically significant pooled effect ($SMD = -0.46$, 95% CI: -0.55 to -0.38 , $p < .001$), indicating a consistent benefit of informal pre-court diversion. However, substantial heterogeneity ($I^2 = 76.3\%$) suggests variation in effect sizes across studies. Evidence from England ($k = 4$) produced a smaller, non-significant effect ($SMD = -0.15$, 95% CI: -0.32 to -0.02 , $p = 0.08$) with moderate heterogeneity ($I^2 = 57\%$). As this finding is based on a single study, it should be interpreted with caution.

Q-test for between-group heterogeneity

A Q-test for between-group heterogeneity was conducted to assess whether the effect sizes differed significantly by country subgroups. The result indicated that there was not a statistically significant effect ($Qb = 3.27$, $df = 1$, $p = 0.07$), suggesting that the country in which the intervention was conducted does not seem to significantly moderate programme effectiveness.

Moderator analysis (Meta-regression models 1-4)

In addition to the Subgroup analyses presented above, meta-regressions were also conducted to explore potential moderators. See Appendix 1 for an overview of the methods used in this section.

Moderator Analysis 1. Study-Quality Moderators

Characteristics added to model 1 include:

- Study Design
- Study Timing
- Unit of allocation into group
- Method of allocation into group
- Quality appraisal as assessed by the YEF-EQA tool

The meta-regression analyses revealed that study-level characteristics may influence the reported effectiveness of pre-court diversion interventions (see Table 10). Importantly, both quasi-experimental designs and randomised controlled trials yielded statistically significant reductions in crime and offending.

While the effect sizes were very similar in magnitude (QED: -0.75 ; RCT: -0.67), this aligns with wider evidence that more rigorous designs often produce slightly more conservative estimates.

Table 10: Results from moderator analysis 1 with study-quality moderators

Moderator	Estimate	SE	95% CI Lower	95% CI Upper	P- value	Sig
Study Design: Quasi-experimental Design (QED)	-0.75	0.18	-1.10	-0.3	<.0001	***
Study Design: Randomised Controlled Trial (RCT)	-0.67	0.18	-1.02	-0.31	<.0001	***
Study Timing: Prospective	-0.13	0.15	-0.42	0.17	0.41	
Study Timing: Retrospective	0.14	0.40	-0.66	0.93	0.74	
Unit of Allocation: No prospective allocation	-0.05	0.44	-0.92	0.82	0.90	
Method of Allocation: Not stated/Unclear	-0.02	0.36	-0.73	0.69	0.96	
Method of Allocation: Quasi-random	0.28	0.35	-0.40	0.96	0.41	
Method of Allocation: Random	0.13	0.15	-0.16	0.42	0.37	
YEF_EQA: Low	0.30	0.18	-0.05	0.65	0.09	
YEF_EQA: Moderate	0.38	0.18	0.03	0.74	0.03	*

Studies using a randomised controlled trial (RCT) design reported a substantial mean reduction in crime ($\hat{\mu} = -0.67$, $p < .0001$). Similarly, quasi-experimental designs (QEDs) also reported large reductions ($\hat{\mu} = -0.75$, $p < .0001$).

The method of allocation did not significantly moderate effect sizes. Neither random allocation ($\hat{\mu} = 0.13$, $p = 0.375$) nor quasi-random allocation ($\hat{\mu} = 0.28$, $p = 0.414$) were associated with statistically significant differences in crime reduction rates compared to studies without prospective allocation.

Study quality as assessed by the YEF-EQA tool, likely also moderated effect sizes. Studies rated as Moderate quality showed a significant reduction in crime ($\hat{\mu} = 0.38$, $p = 0.034$) while Low quality studies were not significant ($\hat{\mu} = 0.30$, $p = 0.091$).

The overall test of moderators was significant ($QM(df=10) = 101.85$, $p < .0001$) indicating that the included variables collectively explain a substantial proportion of the variability in effect sizes. However, there was no evidence of residual heterogeneity ($QE(df=57) = 21.80$, $p = 1.00$) suggesting that the model accounted for most of the heterogeneity across studies.

Moderator Analysis 2. Intervention-Level Moderators

Characteristics added to model 2 include:

- What country the intervention took place
- The intensity of the intervention
- The key components of the intervention
- Where the intervention took place
- Special training given to people providing the intervention

The meta-regression analysis examining intervention-level moderators found no statistically significant predictors of effectiveness across all outcomes (see Table 11). While several variables were examined, including intervention country, intensity, type of components, settings and implementer training, none reached levels of statistical significance.

Table 11: Results from moderator analysis 2 with intervention-level moderators

Moderator	Estimate	SE	95% CI Lower	95% CI Upper	P-value	Sig
Country: England	-0.43	0.68	-1.76	0.90	0.52	
Country: USA	-0.71	0.40	-1.50	0.08	0.08	
Intervention Intensity: Low	-0.13	0.53	-1.18	0.92	0.81	
Intervention Intensity: Medium	-0.29	0.51	-1.30	0.71	0.57	

Intervention Intensity: Unclear	-0.01	0.33	-0.66	0.63	0.97	
Component: Not stated/Unclear	-0.12	0.51	-1.12	0.88	0.81	
Component: Supportive Casework	0.30	0.74	-1.15	1.74	0.69	
Component: Therapeutic Support	0.38	0.51	-0.62	1.37	0.46	
Intervention Setting: Community- based settings	0.57	0.38	-0.18	1.32	0.14	
Intervention Setting: Home or Hybrid Settings	0.58	0.53	-0.46	1.63	0.27	
Implementer Training: Yes	0.03	0.40	-0.75	0.82	0.93	

Although no individual moderator showed a significant effect, the overall test of moderators was significant ($QM(df=11) = 106.35, p < .0001$) suggesting that collectively these intervention-level characteristics explain a substantial variability in effect sizes. There was no evidence of residual heterogeneity ($QE(df=56) = 17.31, p = 1.00$) indicating that the model fully accounted for the variation across studies.

Moderator Analysis 3. Population-Level Moderators

Characteristics added to model 3 include:

- The inclusion criteria
- Ethnicity of the sample
- Gender of the sample

The meta-regression examining population-level moderators found that eligibility criteria for the children and young people included in the interventions significantly influenced the reported effectiveness of pre-court diversion programmes (see Table 12).

Table 12: Results from moderator analysis 3 with population-level moderators

Moderator	Estimate	SE	95% CI Lower	95% CI Upper	P-value	Sig
Inclusion Criteria: Discretionary Referral	-0.71	0.38	-1.45	0.03	0.06	
Inclusion Criteria: FTE only	-0.74	0.31	-1.34	-0.13	0.02	*
Inclusion Criteria: Minor offenses only	-1.00	0.32	-1.62	-0.38	0.00	**
Inclusion Criteria: No information	-0.93	0.37	-1.65	-0.21	0.01	*
Ethnicity: Majority White Sample	0.26	0.61	-0.93	1.44	0.67	
Ethnicity: No information	0.57	0.52	-0.46	1.59	0.28	
Ethnicity: Some Diversity	0.41	0.31	-0.20	1.02	0.19	
Gender: Majority Male Sample	0.03	0.31	-0.57	0.64	0.91	
Gender: No information	0.02	0.49	-0.94	0.99	0.96	

Gender: Some Gender Balance	0.17	0.31	-0.44	0.77	0.59	
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Interventions that targeted children and young people based on first-time entrant (FTE) status ($\hat{\mu} = -0.74$, $p = 0.02$) or those involved in minor offenses only ($\hat{\mu} = -1.00$, $p = 0.002$) showed strong and statistically significant reductions in crime and associated negative outcomes.

Interventions using discretionary referral mechanisms showed a trend toward a substantial mean reduction in crime and associated negative outcomes ($\hat{\mu} = -0.71$, $p = 0.06$), though this finding was not statistically significant.

The overall model explained a significant portion of the variance in effect sizes ($QM(df=10) = 100.13$, $p < .0001$), though as in previous models, there was no evidence of residual heterogeneity ($QE(df=11) = 106.35$, $p < .0001$) indicating that most of the variability in outcomes was accounted for by the moderators included in the model.

Moderator Analysis 4. Outcome Moderators

Characteristics added to model 4 include:

- YEF's Outcome Category

The meta-regression examining outcome-level moderators found that the type of outcome measured significantly influenced the reported effectiveness of pre-court diversion interventions.

Table 13: Results from moderator analysis 4 with outcome moderators

Moderator	Estimate	SE	95% CI Lower	95% CI Upper	P-value	Sig
Outcome Category: Crime and Offending	-0.34	0.07	-0.48	-0.21	0.00	***
Outcome Category: Criminal Peers	-0.89	0.22	-1.33	-0.45	0.00	***
Outcome Category:	-0.20	0.42	-1.02	0.63	0.64	

Family Relationships and Support						
Outcome Category: Positive and prosocial identity	-0.15	0.42	-0.98	0.68	0.72	
Outcome Category: School engagement	-0.25	0.42	-1.07	0.58	0.56	
Outcome Category: Youth justice stigma	-0.25	0.25	-0.75	0.24	0.31	
Data sources: SCQ	0.05	0.20	-0.34	0.44	0.80	

Interventions that targeted criminal offending or law-breaking behaviour demonstrated a moderate and statistically significant reduction in crime-related outcomes ($\hat{\mu} = -0.34$, $p < .001$). Even stronger effects were observed for the intervention which addressed associations with criminal peers ($\hat{\mu} = -0.89$, $p < .001$) suggesting that reductions in peer-related risk factors may be particularly impactful in reducing overall offending.

The overall test of moderators was statistically significant ($QM(df=7) = 99.18$, $p < .0001$), demonstrating that outcome type explains a meaningful portion of between-study variability. In this particular model, the residual heterogeneity test ($QE(df=60) = 24.48$, $p = 1.00$) was not significant, suggesting that, within this specified model, outcome type adequately accounts for the variation observed across studies. However, we acknowledge that this does not imply that all heterogeneity is captured across different model specifications.

Publication Bias

To assess the presence of publication bias in the meta-analysis, several statistical tests were employed to detect funnel plot asymmetry, which can be indicative of such bias.

Funnel Plot Assessment: A funnel plot was generated to visually inspect for publication bias. In the absence of bias, the plot should resemble a symmetrical inverted funnel, with effect sizes from smaller studies scattering widely at the

bottom and larger studies clustering near the top. Our funnel plot appeared symmetrical, suggesting no visual evidence of publication bias (see Figure 4).

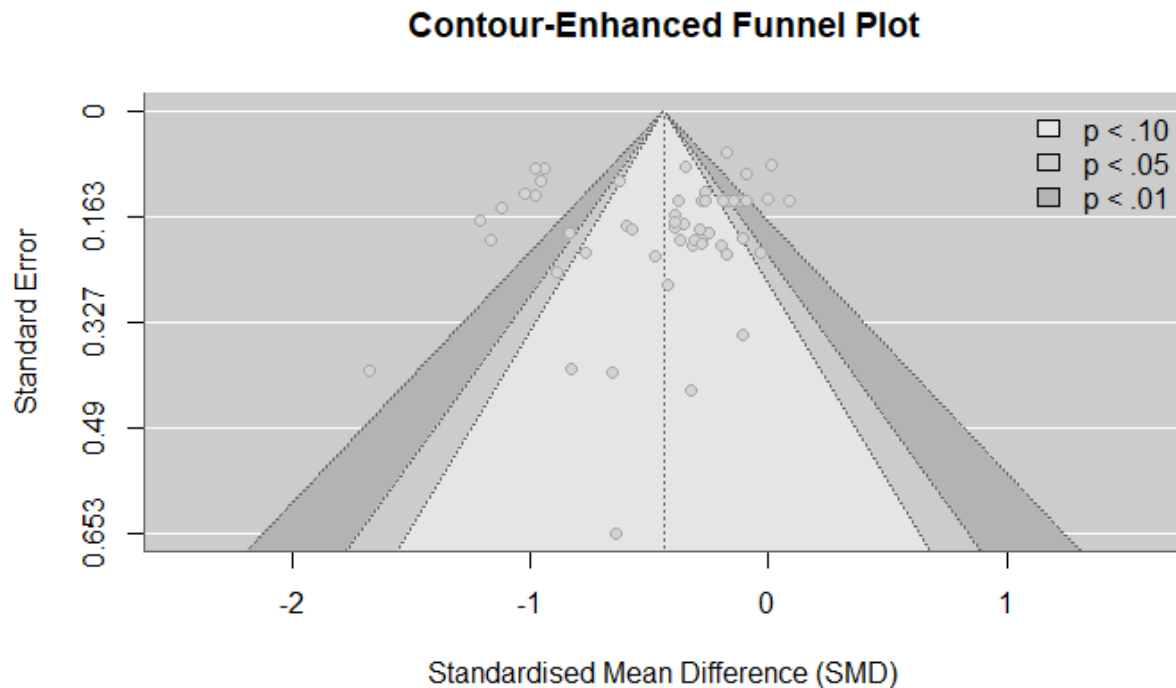


Figure 4: Funnel plot of effect sizes against standard errors

The Egger's test also did not detect significant asymmetry in the funnel plot, suggesting no strong evidence of publication bias or small-study effects ($t = -0.78$, $df = 65$, $p = 0.44$). The limit estimate as the standard error approaches zero was $b = -0.3449$, with a 95% confidence interval of -0.57 to -0.13 .

Regression-based tests for publication bias using both the Precision Effect Test (PET) and the Precision Effect Estimate with Standard Error (PEESE) approach were conducted. The PET model regressed effect sizes on their standard errors and yielded a statistically significant moderator effect ($z = -2.4004$, $p = 0.0164$). However, the intercept estimate (i.e., the predicted effect size when standard error approaches zero) was $\beta = -0.1098$ (95% CI: -0.3115 to 0.0920), which was not statistically significant ($p = 0.2864$), suggesting the absence of a true effect.

The PEESE model, which regressed effect sizes on sampling variance (SE^2), also identified a significant moderator effect ($z = -2.2625$, $p = 0.0237$). The intercept

(the estimated effect size when SE^2 approaches zero) was $\beta = -0.2507$ (95% CI: -0.3596 to -0.1417), which was statistically significant ($p < .0001$).

Taken together, these results suggest the potential presence of small-study effects. Although the PET intercept was non-significant, the PEESE intercept was significantly negative, indicating that smaller studies may be inflating effect size estimates and that the underlying true effect may be negative or null when accounting for precision.

Finally, applying Duval and Tweedie's trim-and-fill method indicated no missing studies ($k_0 = 0$; $SE = 4.66$), and as a result, the pooled SMD remained unchanged. In simple terms, the trim-and-fill method provides no evidence of "missing" small studies capable of pulling the estimate toward the null.

In conclusion, the observed effectiveness of informal diversion is unlikely to be due to publication bias.

Sensitivity Analyses

A leave-one-out sensitivity analysis to assess the robustness of the meta-analytic findings was employed. First, each outcome was systematically removed from the model one at a time. The largest change in the pooled effect estimate when omitting a single outcome was 0.013. No outcomes were identified as potentially influential (Cook's distance > 0.06).

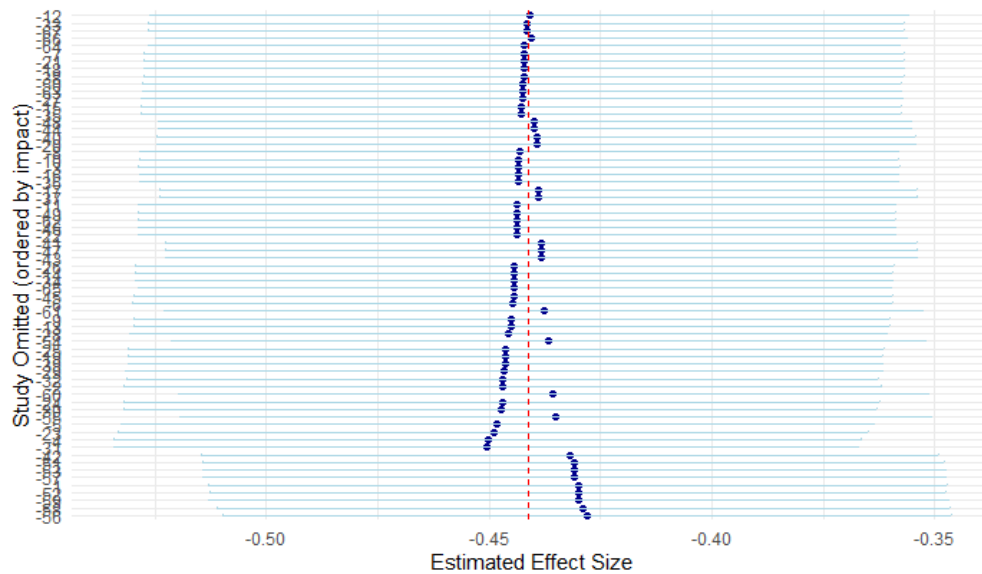


Figure 5: Results from leave-one-out sensitivity analysis⁹

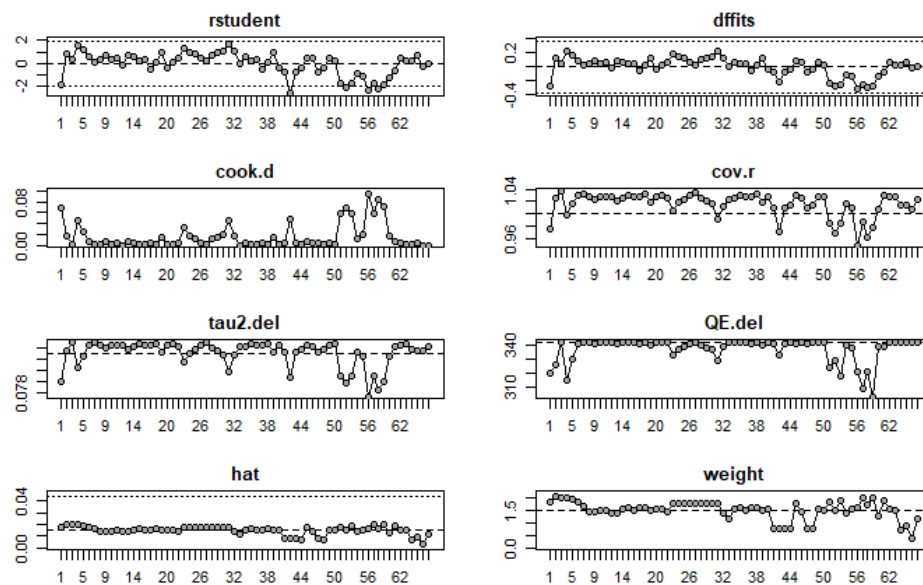


Figure 6: Influence diagnostics for individual studies in the meta-analysis

⁹ This plot shows the effect size estimates for each leave-one-out iteration, with the original pooled effect size (red dashed line) for reference. None of the individual removals caused a significant shift in the overall estimate.

Next, the analysis also confirmed that no single outcome substantially influenced the heterogeneity observed.

Although the original meta-analysis indicated moderate between-study heterogeneity ($I^2 = 77.7\%$), recalculating I^2 during leave-one-out sensitivity analyses revealed consistent values (ranging from 76.1% to 78.2%, mean = 77.7%). These findings suggest that the overall effect estimate is not unduly influenced by any individual study, and no individual effect size materially altered the direction or precision of the overall result.

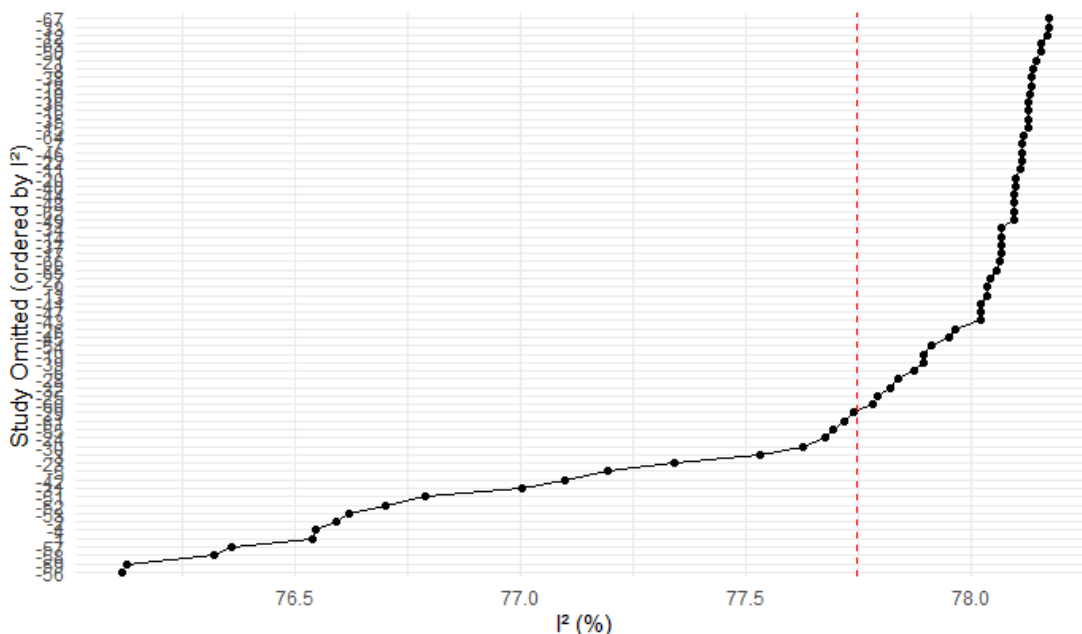


Figure 7: Heterogeneity (I^2) Across Leave-One-Out Iterations

Figure 7 demonstrates how heterogeneity changes across the leave-one-out iterations. The original I^2 value is shown as a red dashed line, and the variation across studies suggests that the full set of studies contributes more coherent heterogeneity.

These results suggest that the overall findings are robust and not driven by any single influential study.

How Secure is the Evidence?

Crime and Offending Outcomes

Our confidence in the findings of informal diversion on crime and offending is Low. The meta-analysis included 42 crime and offending related outcomes drawn from nine studies that assessed the impact of informal diversion programmes on children and young people.

Study quality, as assessed using the YEF-EQA, ranged from low to moderate. The studies included:

- Four RCTs: Of these, three were rated as low quality (**Type D**), and one was rated as moderate quality (**Type C**).
- Five QEDs: Two were rated as low quality (**Type D**) and three were rated as moderate quality (**Type C**).

As a result, a **Level 2** evidence security rating was applied.

While moderate heterogeneity (54%) is evident in the meta-analysis, subsequent moderator analyses account for much of this variation. As a result, the initial evidence security rating was not downgraded, and **an evidence security rating of 2 out of 5 is maintained.**

All outcomes

Our confidence in the findings of informal diversion on all outcomes is Low. The meta-analysis included 67 outcomes drawn from eleven studies that assessed the impact of informal diversion programmes on children and young people.

Study quality, as assessed using the YEF-EQA, ranged from low to high. The studies included:

- Four RCTs: Of these, three were rated as low quality (**Type D**), and one was rated as moderate quality (**Type C**).

- Seven QEDs: Of these, three were rated as low quality (**Type D**), three were rated as moderate quality (**Type C**) and one rated as high quality (**Type B**).

As a result, a **Level 2** evidence security rating was applied.

While substantial heterogeneity (78%) is evident in the meta-analysis of all outcomes, reflected in the RVE adjustment and broad range of observed effects, subsequent moderator analyses account for much of this variation, especially when investigating the type of outcome measured. As a result, the initial evidence security rating was not downgraded, and **an evidence security rating of 2 out of 5 is maintained.**

Who does it work for?

Two studies provided detail in relation to personal characteristics which help to understand who informal pre-court diversion programmes work for (Fader et al., 2015; Rowan et al., 2023). These covered gender and ethnicity. Both studies were from the US. Using the YEF-EQA tool, one study was rated as moderate quality (Fader et al., 2015), and one as high quality (Rowan et al., 2023). Studies where personal characteristics of the sample were described (e.g., gender), but not specifically related to outcomes of interest or do not contribute to the understanding of who informal diversion programmes work for, have not been included in this section. No studies explored socioeconomic status, SEND, education, care-experience, intersectionality, place of residence or neurodiversity.

Gender

One study in the US evaluated the effects of gender on outcomes following an informal diversion programme. Fader et al. (2015) evaluated the WISE Arrest Diversion program in a high school and two middle schools in Utica, New York. They found that the WISE Arrest Diversion program was more effective for boys than girls. Notably, pre-post data showed a significant reduction in disciplinary referrals for boys (from 2.76 to 1.39), while referrals for girls increased slightly (from 1.74 to 2.22), indicating a gender disparity in effectiveness. Although the study does not examine the reasons for this difference in depth, authors suggest that

the predominantly male programme staff may have contributed to higher engagement among boys than girls.

Ethnicity

One study in the US examined how ethnicity influenced outcomes of engagement in informal diversion programmes, focusing specifically on peer relationship dynamics (Rowan et al., 2023). Findings indicate that Black and Hispanic children and young people were less likely than white children and young people to discontinue friendships with peers who engaged in 'deviant' behaviours. However, Black, Hispanic and children and young people identifying as an 'Other' ethnicity were more likely to form new friendships with 'nondeviant' peers, than white children and young people. As such, the overall effect of engagement in an informal diversion programme on friendship patterns did not significantly differ by ethnicity.

Notably, Rowan et al. (2023) found that diversion supports positive peer changes amongst children and young people who are Black, Hispanic or identify as an 'Other' ethnicity, with no disparities in impact. These differences may reflect the distinct aspects of informal diversion being measured, specifically system-level equity versus interpersonal outcomes, suggesting that whilst engagement in informal diversion programmes may support equitably relationship-level benefits, it does not automatically resolve broader structural barriers in referral or access.

What factors affect implementation?

Fourteen studies provided evidence related to implementation, of which four also provided effectiveness data used in the meta-analysis above (see [Appendix 5](#) for details of the studies providing evidence on implementation). Six studies were from the UK (Boden, 2019; Haines et al., 2013; Hoffman & Macdonald, 2010; Institute for Criminal Policy Research, 2012; Kemp et al., 2002; Tyrrell et al., 2017), one from Norway (Sandøy et al., 2022), with the remainder from the United States (Barrett et al., 2022; Davidson et al., 1977; Fader et al., 2015; NeMoyer et al., 2022, 2024; Stratton, 2009; Sullivan et al., 2010; Venezia, 1972). One study was classed as very low quality (Haines et al., 2013), six as low quality (Boden, 2019; Hoffman & Macdonald,

2010; Home Office, 2012; Stratton, 2009; Tyrrell et al., 2017; Venezia, 1972), and the remaining eight as moderate quality (Barrett et al., 2022; Davidson et al., 1977; Fader et al., 2015; Kemp et al., 2002; NeMoyer et al., 2022, 2024; Sandøy et al., 2022).

Factors that influenced the implementation of informal diversion approaches are organised using Proctor's Implementation Outcome Framework (2011). [Appendix 6](#) highlights the availability of evidence according to each of Proctor's implementation outcomes. Where studies reported on the experiences or perspectives of children and young people, these views are summarised with appropriate direct quotations from primary studies given where available.

To summarise, key themes from this section highlight that for informal diversion strategies to be most effective and accepted by children and young people, families, and professionals, the following should be established during implementation:

- Informal diversion programmes should be presented clearly as a positive and voluntary choice, with any implications that it is mandatory avoided.
- Where possible, children and young people should be involved in shaping their own support, ensuring interventions are personally meaningful and relevant.
- Strengths-based and relationship-driven approaches should be prioritised, rather than focusing solely on managing risk and correcting behaviour.
- Clear guidance, communication and training are needed for all professionals, ensuring that informal diversion programmes are fully adhered to, whilst also supporting cultural and attitudinal shifts towards early prevention.
- High quality multi-agency collaboration with strong, trusting relationships, committed leadership, good information sharing and open communication channels is essential.
- Consistent, stable and long-term financial and resource investment is needed.

Acceptability

Across studies, informal diversion was widely perceived as a fairer approach than enforcement to children and young people and parents. Factors including building trust and respect between professionals and the young person, presenting diversion activities as a positive choice rather than a punitive threat, and provision of high quality, immediate support enhanced the acceptability of informal diversion approaches (e.g., Haines et al., 2013; Hoffman & Macdonald, 2010; Stratton, 2009; Tyrrell et al., 2017). In addition, clearly communicating the voluntary nature of engaging in informal diversion empowered children and young people and parents/carers, increasing the acceptability of this approach (Tyrrell et al., 2017).

The acceptability of diversion services run by a Local Authority Youth Offending Team in England was strongly influenced by its relational, strengths-based ethos and emphasis on genuine co-construction with young people. Practitioners highlighted that children and young people were more likely to engage when they felt respected, heard, and involved in shaping their own support, with tools like a Good Lives Plan promoted. This fostered trust, agency, and a sense of ownership, making the intervention feel more relevant and meaningful. Acceptability was further enhanced when practitioners took a trauma-aware, sensitive approach grounded in the young person's lived experiences and aspirations, rather than focusing solely on managing risk or correcting behaviour (Boden, 2019). However, the author did not provide detail on what a trauma-aware approach looked like in practice, meaning these findings should be interpreted with caution.

Relationship-driven practices, including community-based engagement in familiar and non-clinical environments (e.g., boxing gyms, music sessions, or casual outings), helped dismantle stigma, foster emotional safety, and reduce the barriers of distrust and fear. However, the quality and depth of initial information about the young person was critical; without it, missteps could compromise trust, making informed, empathetic engagement essential from the outset (Boden, 2019).

Informal diversion approaches were particularly acceptable to children and young people as they helped them avoid legal consequences, such as a

permanent criminal record, and preserved their future opportunities in employment, education, or travel (Sandøy et al., 2022). However, it is notable that acceptance of informal diversion approaches by children and young people was framed as a pragmatic step rather than a moral or psychological turning point (Sandøy et al., 2022). Interestingly, Sandøy et al. (2022) found that the acceptability of 'alternative penal sanctions' was rooted in the effect these had on family relationships. Many participants, especially those living in stable homes, expressed that their involvement in the programmes helped them restore trust with their parents, which they found deeply meaningful. Children and young people viewed the process of attending drug tests or supervision not as self-improvement, but as concrete ways of repairing relationships with parents. The intervention's acceptability to children and young people, therefore, depended on whether it facilitated informal social rehabilitation or helped maintain valued social bonds particularly with adults, rather than peers who often normalised drug use (Sandøy, 2022).

Hoffman and Macdonald (2010) found that agencies, such as Youth Offending Teams, perceived informal diversion as an acceptable and fair approach, enabling young people to have the chance to change their behaviour. This view was echoed in Tyrrell et al.'s, (2017) evaluation of the Suffolk Youth Offending Service Diversion Programme, finding that 94% of Youth Offending Service practitioners and 81% of Children and Young People's Service professionals agreed on the importance of offering alternatives to formal charges and would recommend the service to others. Furthermore, a high response rate of 90% to a survey on informal probation amongst probation officers, with 72% of respondents regularly using informal probation, indicates a strong level of engagement and interest (Venezia, 1972). Whilst this is an older study, it still suggests that the concept of informal probation has been widely accepted within the professional community.

The acceptability of informal diversion varied across stakeholder groups. For instance, Hoffman and Macdonald (2010) found that police officers viewed informal diversion as a "soft option", possibly indicative of underlying punitive attitudes. This view was not consistent across all studies, with Barrett et al. (2022) highlighting that police officers felt a personal commitment to the ethos of

informal diversion, influenced by the close ties they had to the community they worked in. Given that Barrett et al.'s (2022) research emphasised that implementation of the informal diversion 'Safety Net Programme' was supported by training police officers, this may have contributed to more positive attitudes and acceptance of informal diversion strategies.

Whilst the Philadelphia police school diversion program was broadly accepted by administrators, police personnel, and school district staff, who supported its mission to keep youth out of the legal system, barriers were also raised. Staff flagged concerns surrounding students exploiting the program, the sufficiency and enforcement of service referrals, and the clarity of messaging around accountability. Some school district staff questioned whether voluntary participation in support services was adequate and expressed doubt about the depth of behavioural change without more structured intervention. While most stakeholders remained supportive overall, these concerns pointed to areas where clarity, consistency, and implementation support could be strengthened (NeMoyer et al., 2024).

Adoption

Effective adoption of informal diversion approaches was facilitated by providing professionals with training (e.g., Barrett et al., 2022; Institute for Criminal Policy Research, 2012; NeMoyer et al., 2024). For example, Barrett et al. (2022) found that ongoing training of police officers on interacting with children and young people and their families, casework skills, data collection, and mental health issues, facilitated the initial and continued implementation of informal diversion approaches. Although, it was recommended that training was made broader, incorporating patrol officers who have initial contact with children and young people, enabling them to also adopt the ethos of informal diversion. In addition, ensuring staff had a clear understanding of the programme and its associated criteria supported adoption (Tyrrell et al., 2017). To further support ongoing adoption, custody officers reported that receiving timely feedback on the impact of informal diversion services for children and young people they referred motivated them to refer more young people to the scheme (Institute for Criminal Policy Research, 2012).

Whilst it is vital to include leadership at early stages, NeMoyer et al. (2024) flag the importance of also engaging with non-leadership personnel in early stages of implementation, rather than simply mandating change. As this failed to happen when implementing a police school diversion programme in Philadelphia, early adoption was hindered by communication gaps and a lack of initial buy-in from staff. Similarly, whilst there was strong institutional uptake of an arrest diversion programme in New York at the school and police levels, adoption was less evident among teachers, who were not properly integrated into the referral or implementation processes (Fader et al., 2015).

Multi-agency collaboration was consistently flagged as critical to the effective adoption and implementation of informal diversion strategies. Having a shared commitment to acting in the best interests of the child or young person helped to bring agencies together to achieve this goal. Strong, trusting relationships and enthusiastic, committed leadership helped agencies to communicate openly and respectfully to work through any conflicts (Hoffman & Macdonald, 2010). Existing relationships between organisations (e.g., intervention workers and custody officers; Institute for Criminal Policy Research, 2012) or the use of secondments (Tyrrell et al., 2017) meant informal diversion strategies were more readily adopted.

Barriers to multi-agency collaboration were identified, impacting on the adoption of informal diversion strategies. Barriers include conflicts in priorities and targets between professionals, high staff turnover, lack of consistent awareness of informal diversion options amongst staff, and logistical challenges arranging meetings (e.g., Barrett et al., 2022; Hoffman & Macdonald, 2010; Institute for Criminal Policy Research, 2012; Tyrrell et al., 2017). In addition, the culture of an organisation can act as a facilitator or barrier to adoption of informal diversion strategies (Hoffman & Macdonald, 2010). For example, informal diversion strategies faced resistance from police officers due to the impact on their performance targets, with interviewees suggesting it would be better adopted if outcomes could be recorded and valued as a disposal, rather than as 'no further action'. The Youth Offending Team played an important role in persuading the police of the value of the scheme, by explaining the aims and the long-term benefits. This helped to shift the culture among police officers, leading to them

having more empathy and recognising the needs of the offender (Institute for Criminal Policy Research, 2012).

The adoption of the strengths-based, co-constructed model from a Local Authority Youth Offending Team in England was influenced by individual practitioner alignment with a Child First approach, but inconsistencies in organisational culture, especially risk-focused or punitive environments, created barriers. As one participant highlighted, “school X is forced to take this kid on”, revealing the need for negotiated commitment across settings to fully adopt child-centred practices. While practitioners were generally open to flexible, community-based approaches, the adoption process was often self-initiated and lacked systemic support, highlighting the need for structural integration and formal training (Boden, 2019).

Barrett et al. (2022) evaluated the Safety Net programme, highlighting that collaboration between schools and police could be challenging, with staff not initially supportive of a police presence in the school. These challenges were mitigated during interagency meetings, where all parties could come together to agree on roles/responsibilities and agree on a best course of action for children and young people. Critically, given that diversion services are informal, parental consent was required to discuss children and young people at interagency meetings, which can be hard to obtain due to a hesitancy to have police in the family household, blocking communication between parties. However, a police school diversion programme in Philadelphia was adopted more easily, with this credited to strong interagency coordination, early commitment, and reallocating staff to support referral demand (NeMoyer et al., 2022). All agencies embraced the program as a viable alternative to punitive school discipline, demonstrating that institutional buy-in and administrative alignment were key enablers of adoption.

Critically, research based in the UK highlighted that the implementation of multiple schemes to reduce offending within a single area could act as a hindrance to uptake of informal diversion services (Home Office, 2012; Kemp et al., 2002). For example, the introduction of community resolutions in the UK reduced the number of children and young people being referred to an informal diversion

service (Triage Scheme) by 20%, with stakeholders concerned that the needs of vulnerable children and young people were then not being met (Home Office, 2012). Similarly, research in Northamptonshire, UK, found that cautions could be given quickly to children and young people, compared to the lengthier process of passing files on for review for informal diversion services (Kemp et al., 2002). As such, the pressurised environment in the custody suite precluded a considered and reflective approach and reduced uptake of informal diversion. Importantly, clear definitions of available schemes, including eligibility criteria, were identified as factors which can help with decision-making and uptake of informal diversion services (Home Office, 2012).

Appropriateness

Informal diversion strategies were generally perceived as appropriate by children and young people, parents/carers and stakeholders due to their proportionate responses to low-level offending (e.g., Barrett et al., 2022; Fader et al., 2015; Sandøy et al., 2022; Tyrrell et al., 2017). For example, US-based school diversion programmes were praised as a necessary and appropriate response to high rates of school-based arrests for minor infractions, which disproportionately affect Black and Global Majority and low-income young people (Fader et al., 2015; NeMoyer et al., 2022). By targeting non-violent, low-level offences such as harassment and disorderly conduct, schools-based informal diversion programmes aligned with goals to reduce unnecessary justice system involvement. However, Fader et al. (2015) highlighted that expansion of schools-based informal diversion programmes into elementary and middle schools, where arrest rates were minimal, raised concerns about appropriateness and potential net-widening amongst staff. This highlights the need for informal diversion programmes to be well-justified prior to implementation.

Research exploring the implementation of an informal diversion programme in Wales, UK, highlighted that stakeholders felt this was an appropriate approach for children and young people (Haines et al., 2013). Specifically, informal diversion was commended as a positive approach to youth justice, stopping young people being perceived as a 'problem to be managed'. Stakeholders also highlighted that they believe the approach taken whereby each young person is given the

correct intervention at the correct time, and only where necessary, was particularly appropriate to reduce reoffending.

The focus on early intervention and voluntary engagement was widely regarded as appropriate for reducing offending (Kemp et al., 2002; Tyrrell et al., 2017). The voluntary nature was flagged by stakeholders as particularly appropriate, given that self-motivated behaviour change tends to be more effective at reducing offending than changes imposed by others (Hoffman & Macdonald, 2010).

Providing constructive activities, such as cadets or Duke of Edinburgh programmes, was highlighted as an appropriate response, providing an alternative way for young people to spend their time, thus reducing the opportunity for antisocial activities (Hoffman & Macdonald, 2010). Such interventions equip the children and young people with new skills and promote positive behavioural change (Barrett et al., 2022). However, programme providers indicate that appropriate responses should also include interventions targeting the family, as well as the individual young person, to promote long-term change. Embedding family group conferencing or a similar approach was suggested as an appropriate way to address more deep-seated problems (Hoffman & Macdonald, 2010).

The use of developmental and person-centred informal diversion approaches in a UK Local Authority Youth Offending Team was seen as highly appropriate for young people with complex needs or trauma histories, as it allowed for tailored support through therapeutic, practical, and educational methods that aligned with individual goals and capacities (Boden, 2019). The intervention's appropriateness depended on contextual awareness, especially when systemic pressures like school reintegration or youth justice protocols conflicted with its ethos. Further barriers to the appropriateness of the approach were identified, including a lack of adequate supervision, training, or information which risked misapplication or re-traumatisation of children and young people, highlighting the need for structured support and reflective practice. Community-embedded, interest-led, and relational approaches were viewed as more culturally and developmentally appropriate for the cohort, aligning with young people's psychological states, social environments, and communication styles. Additionally, the use of 'graduated' support was highlighted as particularly

appropriate in the context, with informal services acting as a bridge to more formal services, enabling practitioners to co-create support strategies that were responsive to individual needs.

Hoffman and Macdonald (2010) highlighted that the multiagency approach used in Wales, UK, was appropriate for addressing antisocial behaviour. Being able to draw on a range of perspectives and specialist knowledge from different fields helped to create effective solutions for antisocial behaviour, which may have a wide variety of underlying causes. Shared responsibility also meant that challenging cases were not simply passed on to other agencies, with the group having to work together to find a solution. Information sharing also helped agencies to develop a more holistic picture of the children and young people. However, some felt that expertise from key agencies was missing, with no representation from education or social services, impacting on the appropriateness of the interventions provided to each child or young person.

Feasibility

The feasibility of informal diversion programmes was primarily discussed in terms of barriers to successful implementation, with one notable exception. Fader et al. (2015) evaluated a school-based arrest diversion programme in New York, US, finding a high completion rate amongst participants over a two-year period. Specifically, 78 out of 85 students (92%) successfully fulfilled their program contracts, which typically required consistent participation and the avoidance of further disruptive behaviour throughout the school year. This demonstrates that an informal diversion programme can be successfully implemented in a school environment. Comparatively, Stratton (2009) found that a significant portion of families resisted participation in a US-based family crisis intervention, preferring counsellors to direct their advice only to the child, rejecting the family-inclusive counselling approach. However, given high acceptability amongst children and young people, parents/carers and professionals for informal diversion programmes (as outlined above), this resistance may be specific to the family crisis intervention evaluated by Stratton (2009).

Barriers to the feasibility of informal diversion programmes included systemic pressures, resource and funding constraints, lack of supervision for professionals,

challenges in multi-agency working and communication difficulties (Boden, 2019; Hoffman & Macdonald, 2010; Kemp et al., 2002; Tyrrell et al., 2017; Venezia, 1972). For example, despite stakeholder support for the Suffolk Youth Offending Service Diversion Programme in the UK, feasibility was challenged by systemic pressures. Only 22% of Youth Offending Service staff were able to meet timescales for referrals, citing staff shortages, high caseloads and issues with lengthy assessments. Police delays in referral submissions and increasing recognition of young people at risk of gang involvement and in need of informal diversion services further strained delivery of the programme¹⁰. Despite these issues, most staff still rated the operational practice of the programme as very good (Tyrrell et al., 2017).

Similarly, feasibility of the informal diversionary practices employed by a Local Authority Youth Offending Team in the UK was heavily influenced by time constraints, relationships, and access to community resources. Practitioners noted that increasing service demands limited their ability to build trust and gather the necessary personal narratives for effective planning, with tailored communication and engagement strategies crucial. Structural and resource constraints, such as lack of transport, communication difficulties, and limited parental availability, also hindered consistent engagement. Despite these challenges, practitioners demonstrated creativity in adapting their approaches to individual needs, but emphasised the need for more training, multi-agency support, and accessible community resources to enhance feasibility (Boden, 2019).

Hoffman and Macdonald (2010) highlighted facilitators for the successful implementation of an informal diversion programme in Wales, UK. Specifically, the success of multi-agency working was attributed to the size of the area. Swansea has a single police division and a single Local Authority, making it easier to navigate, innovate, and build trusting personal relationships. This enabled the implementation of effective information sharing protocols, with all partners willing

¹⁰ This intervention targets young people *at risk of* gang involvement and not currently gang involved. With an increase in the number of young people identified as at risk of gang involvement, this leads to increased demands on staff, caseloads, and timescales.

to share data. Partnership links in Swansea were described as much stronger than those in London due to the less transient population, suggesting that the feasibility of informal diversion programmes may differ across locations.

In larger Local Authorities in the UK, access to community links, particularly those known to practitioners, was vital but needed to grow to meet demand (Boden, 2019; Kemp et al., 2002). Good multi-agency collaboration, co-location, and preparatory meetings improved feasibility by streamlining coordination and reducing duplication of effort. However, system-level confusion around roles and language remained a barrier (Boden, 2019), while agencies did not always allocate sufficient budget for interventions, meaning the required support for children and young people was not readily available (Kemp et al., 2002).

Fidelity

Fidelity to an informal diversion approach differed across programmes. Research exploring the implementation of an informal diversion programme in Wales, UK, highlighted that stakeholders disagreed on the extent to which engagement of children and young people was voluntary (Hoffman & Macdonald, 2010). Some stakeholders acknowledged that children and young people felt they had no choice but to engage, whilst others actively downplayed the voluntary nature to ensure children and young people participated. Furthermore, a couple of staff members reported that some children and young people were taken to court regardless of their participation in an informal diversion programme (Hoffman & Macdonald, 2010). This suggests that some young people who could be eligible for entry to the programme are not being referred into the programme initially which indicates low fidelity to a voluntary, informal diversion programme.

The important role of effective monitoring to facilitate fidelity to programme delivery was highlighted across multiple studies (e.g., Fader et al., 2015; Kemp et al., 2002; NeMoyer et al., 2024). The Philadelphia Police School Diversion program was implemented with high fidelity, closely aligning to its original design (NeMoyer et al., 2024). Clear programme guidelines and protocols, supported by a system of checks and balances, including daily reviews and inter-agency collaboration, helped correct occasional missteps. As a result, instances of

ineligible arrests significantly decreased over time, with 91.5% of eligible students diverted in the first five years.

Comparatively, research conducted in Northamptonshire, UK, found that data collection and information systems were not adequately monitored for quality, resulting in incomplete, inconsistent, or non-standard data (Kemp et al., 2002). A lack of relevant data prevented the effective targeting of resources and meant staff compliance and fidelity to programme delivery could not be effectively monitored. The breadth of informal diversion activities offered by the Youth Offending Team and the range of agencies involved also presented a challenge for managers supervising caseworkers, impacting on programme fidelity.

Structured intake procedures, clear behavioural contracts, and a multi-stakeholder review process helped ensure fidelity in implementation of a school-based diversion programme in the US (Fader et al., 2015). However, gaps in communication, particularly between school staff, police, and program personnel, sometimes limited the fidelity of monitoring and follow-up. For example, student resource officers were not always informed of a student's progress or contract terms, which impeded coordinated enforcement and support.

In one informal diversion programme, adherence to the programme had to be balanced with responsiveness to the needs of individual children and young people (Boden, 2019). For example, Youth Offending Team practitioners in England and Wales adapted their approaches to better meet the needs of children and young people, sometimes deviating from protocol, such as overlooking minor breaches of court orders, to maintain therapeutic progress (Boden, 2019).

Enabling flexibility in informal diversion programmes requires good professional judgement, strong supervision and ethical oversight to avoid drift or unintended harm. Critically, two authors reported that fidelity was compromised when practitioners were asked to take on specialist roles, such as trauma work, mediation and cognitive-behavioural approaches, without the necessary expertise, support or supervision (Boden, 2019; Kemp et al., 2002). This highlights the need for structured training and reflective supervision to ensure consistency.

Reach/Penetration

Only two studies explored the reach and penetration of informal diversion programmes, both of which had meaningful reach but struggled with inconsistent penetration (Boden, 2019; NeMoyer et al., 2024). For example, informal diversionary practices in a Youth Offending Team in England and Wales had strong reach within the youth offending context but had difficulty embedding into broader systems like education, health, and the voluntary and community sectors (Boden, 2019). Integration was facilitated by working groups, resource-sharing, and co-located services, which helped reduce barriers and promote shared understanding. However, the complexity of multi-agency systems and varying alignment with 'Child First' principles limited broader uptake. Stigma, particularly in school reintegration contexts, created bottlenecks in implementation. Penetration was strongest when practitioners connected young people to services and scaffolded complex systems by having a single-trusted-worker approach helping maintain continuity. While community-based interventions showed promise, their reach was uneven, dependent on practitioner initiative or local availability of resources, and the informal nature of many interventions limited their systematic recording and wider adoption.

The Philadelphia Police School Diversion Program eventually achieved strong penetration and is now codified as official departmental policy with widespread officer support. However, initial failures to involve school district personnel in program development led to lingering scepticism among staff, with concerns about the program's impact and effectiveness impacting upon early penetration. To address this gap, steps had to be taken to increase integration with schools, including relocating Diversion Liaison Officers to school offices and expanding outreach efforts through events and town halls to build trust and awareness among educators and school staff (NeMoyer et al., 2024).

Sustainability

Of the studies which discussed sustainability, most framed these in terms of the barriers experienced. A key exception to this was research conducted by Davidson et al. (1977) exploring a community-based informal diversion

programme, which successfully transitioned from a research-driven initiative to a community-embedded program with local agencies taking ownership of its operation. Effective training on how to sustain and deliver the programme was credited for the transfer of responsibility and continued implementation, including integration into existing service structures. Comparatively, barriers in the provision of effective training, communication, and cross-agency collaboration, were identified as risks to the successful integration and sustainability of various informal diversion programmes (e.g., NeMoyer et al., 2024; Tyrrell et al., 2017).

The sustainability of informal diversion programmes in England was closely tied to systemic and workforce capacity, resource availability and staff turnaround (Boden, 2019; Tyrrell et al., 2017). Tyrrell et al. (2017) highlighted that practitioner's implementing informal diversion in Suffolk Youth Offending Service expressed concern that the resource intensive nature of the programme prevented optimal ongoing delivery. Boden (2019) identified that 'Communities of Practice', such as intervention working groups and resettlement panels, played a crucial role in embedding shared approaches, fostering reflective learning, and producing tools that supported continuity. However, sustainability was threatened by workforce burnout, resource cuts, and unclear role expectations. Continued training, supervision, and cross-agency collaboration were seen as essential for long-term growth of informal diversion.

In line with resource constraints, the sustainability of informal diversion programmes was impacted by limited and uncertain funding (e.g., Institute for Criminal Policy Research, 2012). For example, an informal triage scheme implemented in the UK was affected by service cuts across the youth justice, health, and social care sectors (Home Office, 2012). Uncertainty over funding made it difficult to develop the service and carry out long-term planning. Short-term contracts led to high staff turnover and increased the time taken to respond to referrals. In one area, interviewees were considering devolving some roles to trained volunteers in the face of funding cuts. Given the effectiveness of informal diversion programmes, this highlights the need for consistent, ongoing and stable investment.

Experiences of Children and Young People

Four studies explored the experiences of children and young people who had engaged in informal diversion programmes (Fader et al., 2015; Sandøy et al., 2022; Stratton, 2009; Tyrrell et al., 2017), of which one was from the UK (Tyrrell et al., 2017). Overall, views of children and young people were generally positive towards informal diversion. For example, children and young people who engaged in the Suffolk Youth Offending Service Diversion Programme, UK, reported that the voluntary nature of the programme was clearly communicated and empowering (Tyrrell et al., 2017). The programme was perceived as a supportive alternative to formal criminal charges by the children and young people, leading to strong engagement and satisfaction.

Children and young people who participated in the WISE arrest diversion program in New York, US, which aimed to reduce school-based arrests and improve student experiences reported finding the program enjoyable and beneficial. They described it as a safe and engaging alternative to negative peer influences, noting that it helped keep them "off the streets" and out of trouble (Fader et al., 2015). For children and young people who had contact with counsellors at police stations in Los Angeles, US, the high quality counselling provided and its perceived value led to an extremely favourable view of informal diversion overall (Stratton, 2009).

Sandøy et al. (2022) found that children and young people in Norway held positive views of 'alternative penal sanctions' for those with substance use histories, with these viewed as a "good deal" to avoid harsher consequences. Many children and young people, especially those living in stable homes, expressed that their involvement in the programme helped them restore trust with their parents, which they found deeply meaningful. Children and young people viewed the process of attending drug tests or supervision not as self-improvement, but as concrete ways of repairing these relationships with parents. While some children and young people believed "there are many who need this kind of help", it was acknowledged that "this kind of help is not for everyone," suggesting that while the intervention aligns well with the needs of some, it may not be universally applicable.

How much does it cost?

Eight studies provided data on cost, of which two were from the UK (Haines et al., 2013; Tyrell et al., 2017) and six were from the US (Baron, 1976; Hodges et al., 2011; Myers W C et al., 2000; NeMoyer et al., 2022; Stratton, 2009; Venezia, 1972). Most studies conducted were over 10 years old, with two over 50 years old, with the exception of NeMoyer et al. (2022) and Tyrell et al. (2017), which means costs are likely to have significantly increased overall due to inflation since these were published. Despite this, all seven studies indicate that informal diversion programmes were more cost-effective than formal processing.

A Cost Avoidance Analysis conducted by the Centre for Justice Innovation demonstrated the financial efficiency of the Suffolk Youth Offending Service Diversion Programme in the UK (Tyrell et al., 2017). By diverting 242 young people from formal criminal justice processes between October 2016 and September 2017, the programme enabled significant savings for both the police and the wider CJS. Estimated cost avoidance included £146,741 in police-related expenses and £158,415 in CJS processing costs. After accounting for operational costs, the programme delivered a net benefit of approximately £72,915 during the evaluation period. Similarly, an informal diversion programme implemented in Swansea, UK, led to annual savings to the Local Authority of over £2.8 million (Haines et al., 2013). The programme required no additional staff, whilst the use of more effective interventions saved processing and court costs associated with prolonged engagement of children and young people in the CJS. These findings underscore the programme's potential to generate meaningful public savings while supporting positive outcomes for children and young people.

Improved cost-effectiveness by implementing informal diversion programmes was echoed in findings from the US. The most recent study providing cost-effectiveness data explored the implementation of a police school diversion programme in Philadelphia, US (NeMoyer et al., 2022). Whilst the total programme startup (\$750,105) and annual maintenance (\$706,398) costs were significant, these were modest compared to the substantial benefits realised in reductions in arrests, recidivism, and potential long-term social costs. Specifically, the programme led to more than \$1.6 million in net benefits in its first year of

operation and more than \$1.9 million in net benefits in its fifth year of operation. It is important to note that no new staff were hired for this programme. Instead, personnel were reassigned from areas with declining caseloads, which mitigated potential cost burdens.

Myers et al. (2000) estimated that the cost of implementing an informal diversion programme as \$600 per child, whilst the annual saving at 12-month follow-up was estimated at \$1,800 per child, due to the reduction in reoffending rates amongst those who participated in the programme. Similarly, Stratton (2009) found that costs associated with minors who received crisis intervention services was 2.11 times lower than those processed through standard court and probation procedures. The immediate availability of counsellors reduced reliance on more expensive probation investigations, court appearances, and juvenile detention, suggesting that crisis intervention offered a cost-effective alternative for communities with limited resources and service availability.

Significant cost savings from the closure of two detention facilities in Wayne County, USA, were attributed to the implementation of an informal diversion programme (Hodges et al., 2011). Six months of receiving services through the Youth Assistance Programme was estimated to cost \$1,500 per child or young person, which led to a reduction of 32.6% in probation adjudications, associated with a 53.1% reduction in overall probation costs. The potential saving to Wayne County was estimated to range between \$7,500 and \$22,000 per child and young person, making it a cost-effective programme. Venezia (1972) also highlighted informal probation as a cost-effective alternative to formal adjudication without compromising outcomes, calculating that if just a portion of formal probation cases had been diverted to informal probation, over \$21,000 could have been saved within 18 months. In addition, the observed 50% reduction in future adjudications for those on informal probation suggests that broader implementation could result in substantial long-term savings, potentially offsetting the cost of additional staff needed to ensure proper supervision. Given that Venezia's (1972) study is over 50 years old, the potential cost-savings in today's financial climate could be exponentially higher, however, this interpretation must be treated with caution.

A US cost analysis conducted as part of the evaluation of the Sacramento 601 Diversion Project (Baron, 1976) provides the reader with detailed yearly budgets for staff, training and evaluation. The authors report that the informal diversion programme, delivering immediate family crisis counselling in place of court involvement and detention, substantially reduced operational and system-level costs. The financial data, presented in early 1970s US dollars and not adjusted for inflation, indicate that the informal diversion programme was approximately half the cost of traditional youth justice processing. Compared to traditional processing, the informal diversion programme saved an estimated \$287.62 per child when accounting for handling, detention, and placement costs. Specifically, children and young people involved in the informal diversion programme averaged \$274.01 in total costs versus \$561.63 for children and young people in the comparison group, with notably fewer petitions filed, lower use of detention, and reduced reliance on out-of-home placements. Even after accounting for training and start-up expenses, the informal diversion programme remained significantly less expensive. Whilst we have provided converted costs in Table 14, these should be treated with caution given the age of the original study.

Table 14: *Converted costs for Baron (1976)¹¹*

Reported Costs	1971 USD	2025 USD¹²	2025 GBP^{13*}
Total cost per diverted young person	\$274.01	\$2,147.28	£1,675.63
Total cost per young person not diverted	\$561.63	\$4,403.18	£3,434.48
Cost savings	\$287.62	\$2,254.8	£1,758.80

¹¹ While these figures are informative, they should not be directly interpreted as transferable to the UK context. Differences in public service structures, staffing models, wage levels, and welfare provision between the US and UK mean that cost equivalence is unlikely. However, the findings remain useful for illustrating the potential cost-efficiency of early, family-focused diversion schemes in reducing reliance on more resource-intensive processes.

¹² Multiplied by 7.84. This inflation factor of 7.84 is based on the US inflation calculator: <https://www.usinflationcalculator.com/>

¹³ Multiplied by 0.78. USD to GBP exchange rate of 0.78 for 2025 based on Bank of England rates on 08.05.25

Conclusion and Takeaway Messages

Evidence from this systematic review and meta-analysis indicated that informal pre-court diversion is effective in reducing crime and offending amongst children and young people. However, its effectiveness likely varies based on context, intervention design, and fidelity of implementation.

Informal pre-court diversion resulted in an estimated **30% reduction in crime and offending** outcomes for children and young people. These findings are based on a meta-analysis of nine studies and 42 outcomes. Our robust systematic meta-analysis provides clear evidence that informal pre-court diversion has a high impact on reducing crime and offending. **However, due to the quality and number of studies included the confidence in our findings regarding crime and offending is low.**

This is the first meta-analysis to specifically focus on **informal** pre-court diversion programmes only, with past meta-analyses having wider eligibility criteria, incorporating both formal and informal approaches to pre-court diversion (Petrosino et al., 2018; Wilson et al., 2018). Findings from past systematic reviews and meta-analyses exploring general pre-court diversion have varied in their effectiveness. For example, Wilson et al. (2018) indicated a 12–17% decrease, whilst Petrosino et al. (2018) found an estimated 9–13% decrease in recidivism.

Importantly, we have simultaneously conducted a review of formal pre-court diversion only, which demonstrated a 14% reduction in crime and offending (Mallion et al., 2025). Our finding that informal pre-court diversion is associated with an estimated 30% reduction in crime and offending, suggests that informal approaches are more effective at reducing crime and offending amongst children and young people than formal pre-court diversion.

These findings are consistent with recent research exploring secondary data in England and Wales, finding that informal diversion was more effective at reducing the likelihood of future arrest than formal diversion (Rahal et al., 2025). However, we found a much higher absolute risk reduction in crime and offending of 15%, compared to Rahal et al.'s (2025) reduction in arrests at six months of 4.11%. This

can be attributed to the wider inclusion criteria for this meta-analysis. Specifically, we incorporated international evidence, a wider range of informal pre-court diversion interventions, and various outcome measures for crime and offending (e.g., multiple recidivism, self-report offences, re-arrest at 27 months).

Explaining why informal approaches are more effective than formal pre-court diversion, theorists have argued that an unintended consequence of diversion approaches is that labelling children and young people as 'criminals' or 'delinquents' can occur, which increases the risk of reoffending as they internalise this label and act in ways consistent with this (Smith, 2021). Whilst formal pre-court diversion typically occurs post-arrest, involves a justice component, assessment and intervention with conditions (such as admitting guilt), informal pre-court diversion means children and young people are supported outside of custody environments and do not have formal sanctions (Keenan et al., 2023). As such, labelling is less likely to occur in informal approaches to pre-court diversion than formal approaches.

Despite informal approaches being more effective than formal pre-court diversion, recent research has found children and young people in England and Wales are more likely to receive formal diversions such as cautions (Rahal et al., 2025). This may explain why there are fewer available studies on informal pre-court diversion than formal pre-court diversion. Specifically, we identified nine studies on informal pre-court diversion with crime and offending outcomes, compared to 35 studies in our meta-analysis on formal pre-court diversion (Mallion et al., 2025). Importantly, our review found that informal pre-court diversion is more cost-effective than formal pre-court diversion or traditional processing, suggesting that a shift towards informal pre-court diversion would be beneficial for children and young people, whilst also representing a cost-effective choice.

What Works?

Consistent with best practice guidance (Pollock et al., 2022), subgroup and meta-regression analyses were not conducted specifically on crime and offending outcomes due to the limited number of studies (fewer than 10), which can increase the risk of both Type I and Type II errors due to low statistical power.

However, to explore potential moderating effects, subgroup and meta-regression analyses were conducted using the broader evidence base of all 11 studies included in the overall meta-analysis.

Our findings indicate that the eligibility criteria for involvement in informal pre-court diversion significantly influenced its effectiveness. Specifically, informal pre-court diversion was more effective for children and young people on their first contact with the criminal justice system and those involved in minor offences only. Using discretionary referral mechanisms also showed a trend toward greater reductions in crime and offending. This is consistent with research suggesting that early interventions interrupt the development of 'criminal identities', preventing stigma and system entrenchment, enabling children and young people to be successfully diverted (McAra & McVie, 2007).

Consistent with our findings on formal pre-court diversion (Mallion et al., 2025), there is some evidence that effectiveness of informal pre-court diversion has increased in recent years, with studies published in the 2020's demonstrating the largest effects. This may reflect shifts in attitudes and progression within the youth justice landscape internationally, where there has been a narrative change redefining 'youth offenders' as young people with unmet needs who are in trouble with the law and need support (Case & Haines, 2021). In addition, increased effectiveness in more recent decades may be due to improvements in intervention design, implementation fidelity, or evaluative methodologies.

Studies conducted in the US indicate that informal pre-court diversion is associated with positive outcomes. Only one moderate quality QED was available from England and was added to a subgroup analysis on country. These subgroup results are inconclusive and should be interpreted cautiously, as the effect is small, not statistically significant and there is heterogeneity within this study. Additional research with more balanced cross-national samples would be valuable to better understand contextual influences on programme impact, including the effectiveness of UK-specific programmes.

Who Benefits Most?

Gender was found to significantly moderate the effectiveness of informal pre-court diversion. While positive outcomes are evidenced across all groups (majority male, majority female, some gender balance, no information), stronger effects were observed in studies with predominantly male or female participants, with the strongest effects seen for majority female groups. This highlights the need for gender responsive practices in informal pre-court diversion approaches. Supporting this, the wider evidence-base highlights that gender responsive programmes can more effectively target the specific needs of children and young people. For instance, girls who have offended are more likely than boys to have severe mental health problems, experienced higher rates of abuse and neglect, and more problems with substance use (Day et al., 2015), meaning trauma-informed and relational-focused settings are more needed for girls (Hartsell & Novak, 2022).

Ethnicity was found to significantly moderate the effectiveness of informal pre-court diversion. Programmes showed stronger effects in more ethnically diverse contexts (>50% Black and Global Majority children and young people). These findings differ from past research, including our review of formal pre-court diversion (Mallion et al., 2025), which suggests persistent disparities in both programme access and outcomes for Black and Global Majority children and young people. These also diverge from the findings presented by Brodie et al. (2025) which found disproportionality in terms of diversionary outcomes between white children and Black and Mixed Heritage children, particularly Black boys. For instance, Black boys were found to be twice as likely as their white peers to receive a community resolution or No Further Action (including Outcomes 20, 21 and 22) than their white peers. Whilst this indicates disproportionality in access to the informal diversion system, the interpretation of this is unclear. Brodie et al. (2025) highlights that this could indicate negative practice, with Black boys more likely to be perceived as potential offenders and treated as thus.

Comparatively, Brodie et al. (2025) suggests this could also indicate positive practice, with Black boys receiving diversionary support rather than higher tariff outcomes (e.g., going to court). Consistent with this, our findings may indicate

that the informal nature of these diversionary approaches enables more culturally responsive practices and inclusive implementation strategies beneficial to Black and Global Majority children and young people. However, high heterogeneity warrants future research on why ethnicity contributes to differences in the effectiveness of informal pre-court diversion.

No studies explored the impact of informal pre-court diversion according to the socioeconomic status, SEND, education, care-experience, place of residence, neurodiversity, or intersectionality of children and young people. This is surprising given that children and young people in the justice sector tend to be over-represented for many of these characteristics (e.g., Ramaiah et al., 2025). It is therefore likely that many of those involved in the studies detailed in this report have one or more of these characteristics.

Limitations

Challenges with the studies measuring effectiveness

This review highlights several methodological and reporting challenges in evaluating the effectiveness of informal pre-court diversion programmes. A common limitation was the inconsistent and incomplete statistical reporting across primary studies, which often restricted the direct inclusion of standardised effect sizes in the meta-analysis. In many cases, key summary statistics such as means, standard deviations, confidence intervals, or reoffending proportions were either missing or inadequately reported. As a result, manual effect size conversions were required from t-tests, odds ratios, or pre-post differences. In some instances, studies had to be excluded from quantitative synthesis due to insufficient information to reliably estimate an effect size.

These challenges are consistent with those documented in other justice-related meta-analyses (e.g., Hinkle et al., 2020, 2024; Turchan & Braga, 2024; Weisburd et al., 2011), reflecting persistent limitations in the transparency and rigour of primary research. Greater consistency in the reporting of effect sizes, improved access to summary statistics, and adherence to open science practices are essential to enhance the quality and comparability of evidence in this field.

It is also worth noting that the effective intervention effects that are observed across the included studies was accompanied by substantial heterogeneity, indicating that variability in study design, population characteristics, and implementation approaches may contribute to differences in outcomes. Future evaluations should aim to systematically examine and report these sources of variation to strengthen both internal and external validity.

Challenges with the studies measuring implementation

There was a lack of implementation data regarding reach and penetration, meaning it was challenging to understand how often informal diversion programmes were utilised. In addition, with most studies that provided implementation information over 10 years old, it is not possible to assess whether there have been changes over time that could contribute to improvements in implementation, such as shifts in culture and attitudes of staff and policy changes. The age of studies was particularly problematic when considering cost-effectiveness. Whilst findings indicate that informal diversion programmes were associated with reduced costs overall, changes in inflation and running costs could not be accounted for.

Only four studies, including one from the UK, assessed the experiences of children and young people who had engaged in informal diversion practices. Whilst these were generally positive, additional insight is needed to fully understand children and young people's experiences. This is especially as informal diversion programmes encompass a wide variety of interventions/approaches. It was not possible, given the limited data on children and young people's experiences to compare which interventions/approaches were preferred by children and young people. Past research similarly identified this barrier, suggesting that children and young people need to be given the opportunity to be heard throughout the diversion process (Keenan et al., 2023).

Final Thoughts and Recommendations

Informal pre-court diversion significantly reduces reoffending compared to formal processing. The success of informal pre-court diversion is dependent on engagement being clearly presented as a positive and voluntary choice. Informal

pre-court diversion should be personally meaningful and relevant, involving children and young people in shaping their own support. Professionals require clear guidance, communication and training, with high quality multi-agency collaborations and committed leadership in place. Children and young people tended to hold positive views on informal pre-court diversion, although evidence is limited. Overall, informal pre-court diversion was found to be more cost-effective than formal processing options.

Based on our understanding of previous meta-analyses and this current research, we make the following key recommendations:

- Our review found informal pre-court diversion works best for children and young people on their first contact with the criminal justice system and those involved in minor offences only. As such, to support behavioural change and prevention of continued offending, we recommend investment in informal pre-court diversion for children and young people when they first come into contact with the criminal justice system.
- We recommend framing engagement as a positive and voluntary choice, engaging children and young people in developing and shaping their own support.
- Our review found no studies that explored the impact of informal pre-court diversion on violence amongst children and young people, as such high-quality evaluations are needed to examine this.
- More high-quality evaluations of the impact of informal pre-court diversion on crime and offending amongst children and young people are needed to determine what works best and for whom, particularly within the UK context.
- Our findings regarding gender and ethnicity are based on a small number of studies. Nonetheless they show stronger effects in more ethnically diverse contexts. Given that these findings are at odds with other published research in particular Brodie et al. (2025) which show differences in both access to diversionary activities and subsequent outcomes more high-quality research is needed to explore differences between groups in-depth.
- Future research should explore how informal diversion programmes affects different demographic groups, and whether these interventions help

reduce or inadvertently reinforce systemic disparities, particularly in terms of ethnicity, socio-economic status, SEND, education, care-experience, place of residence, neurodiversity, or intersectionality of children and young people.

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Appendix 1. Methods of the systematic review

Protocol

Prior to initiating this systematic review, we developed a comprehensive protocol for an Evidence and Gap Map (EGM) outlining the research objectives, eligibility criteria, search strategy, data extraction, quality appraisal, and synthesis methods. This protocol was registered and is available on the Open Science Framework (OSF),¹⁴ ensuring transparency and adherence to predefined methods.

The search strategy and eligibility criteria outlined in the protocol are designed to be sufficiently comprehensive to capture a broad and systematically identified body of literature, enabling the extraction of relevant subsets of studies for inclusion in the Toolkit. The methods described below are aligned with the published protocol ensuring a structured and rigorous approach to evidence synthesis.

Details of screening

For the Informal Pre-Court Diversion Toolkit strand, title and abstract screening was supported by the EPPI-Reviewer robot alongside a human reviewer.

Disagreements between the robot and human decisions were checked by a senior team member with content expertise. Common issues and inconsistencies were noted and discussed in a team meeting to align decision-making criteria.

Following data extraction of 231 studies at the EGM level, 134 studies were identified as eligible for additional extraction for either the Formal Pre-Court Diversion or Informal Pre-Court Diversion Toolkit strand. Of these, 38 were subsequently excluded on study design and 9 were assigned to other Toolkit strands following more detailed review. One study was identified as a duplicate and one was found not to have relevant outcomes. Of these remaining 85 studies, 26 were assigned to Informal Pre-Court Diversion, and 59 were assigned to Formal Pre-Court Diversion (Figure 8).

¹⁴ Protocol is available to access here: <https://osf.io/vamxy>

Therefore, a total of 26 studies were included in the Informal Pre-Court Diversion review, of which 15 contained data on effectiveness. The characteristics of these studies are detailed in [Appendix 3](#) and [Appendix 5](#).

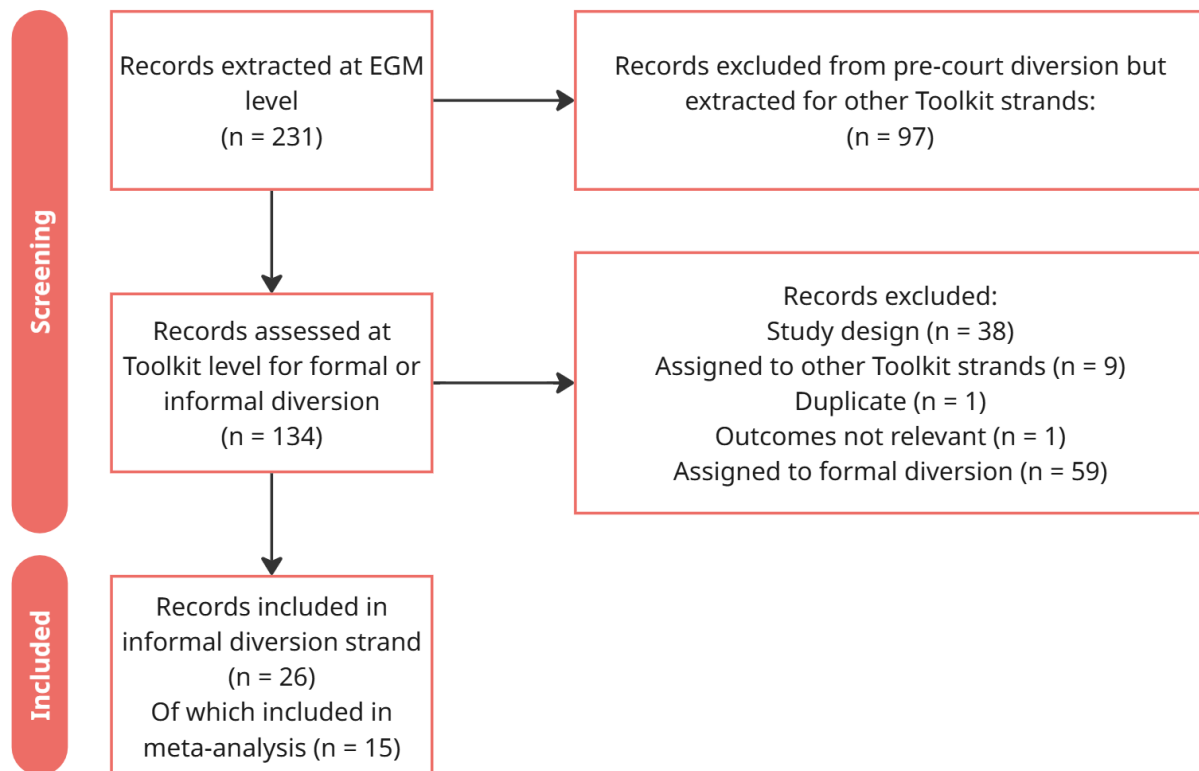


Figure 8: PRISMA flow diagram for the informal pre-court diversion strand

Quality appraisal process

The YEF-EQA tool was used across all 26 Toolkit studies to systematically assess the quality, reliability, and relevance of the research. This tool was applied by one reviewer, with a second reviewer checking their appraisals. In cases where studies had more than one component (i.e., randomised controlled trial and process evaluation) reviewers applied the tool separately for each component.

Table A1: *Quality appraisal ratings for studies included in the Pre-court Diversion: Informal Toolkit strand*

Study ID	Overall quality of the study	Study Design
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Baron, (1976)	Low = QED Low = PE	QED – Quasi-Experimental Designs PE – Process Evaluation
Barrett et al., (2022)	Moderate	PE – Process Evaluation
Bazemore et al., (2004)	Moderate	QED – Quasi-Experimental Designs
Boden (2019)	Low	PE – Process Evaluation
Davidson et al. (1977)	Moderate = RCT Low = PE	RCT – Randomised Controlled Trials PE – Process Evaluation
Fader et al., (2015)	Moderate	PPD – Pre/Post Designs PE – Process Evaluation
Haines et al., (2013)	Very Low	PPD – Pre/Post Designs PE – Process Evaluation
Hoffman & Macdonald, (2010)	Low	PE – Process Evaluation
Hodges et al., (2011)	Moderate	PE – Process Evaluation (cost)
Institute for Criminal Policy Research (2012)	Low	PE – Process Evaluation
Kelley et al., (2003)	Low	RCT – Randomised Controlled Trials
Kemp et al., (2002)	Moderate = QED Very Low = PE	QED – Quasi-Experimental Designs

		PE – Process Evaluation
Klein (1986)	Low	RCT – Randomised Controlled Trials
Koch (1985)	Moderate	RCT – Randomised Controlled Trials
Kubik & Boxer, (2020)	Moderate	QED – Quasi-Experimental Designs
Myers et al., (2000)	Moderate	QED – Quasi-Experimental Designs
NeMoyer et al., (2022)	Moderate	PE – Process Evaluation
NeMoyer et al., (2024)	Moderate	PE – Process Evaluation
Quincy, (1981)	Low	RCT – Randomised Controlled Trials
Regoli et al., (1985)	Low	QED – Quasi-Experimental Designs
Rowan et al., (2023)	High	QED – Quasi-Experimental Designs
Stewart et al., (1986)	Low	QED – Quasi-Experimental Designs
Sandøy et al., (2022)	Moderate	PE – Process Evaluation
Stratton (2009)	Low = RCT Very Low = PE	RCT – Randomised Controlled Trials PE – Process Evaluation
Tyrrell et al., (2017)	Low	PE – Process Evaluation

Venezia, (1972)	Low = RCT Low = PE	RCT – Randomised Controlled Trials PE – Process Evaluation
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How the findings were analysed and combined

Converting Odds Ratios to Standardised Mean Differences (Cohen's d)

In meta-analyses, an Odds Ratios (OR) from binary outcome data can be approximately converted into an equivalent standardized mean difference (SMD). Under the commonly used logistic distribution assumption¹⁵, the conversion is given by a simple constant multiplier. Specifically, Cohen's d (an SMD) is obtained by multiplying the natural log of the OR $\times \frac{\sqrt{3}}{\pi}$ (approximately 0.5513)¹⁶. In practical terms:

$$SMD \text{ (Cohen's } d) \approx \frac{\sqrt{3}}{\pi} \ln(OR) = \frac{\ln(OR)}{1.814}$$

This formula was first proposed by Chinn (2000) and is also presented in the Cochrane Handbook. The R meta package used for this work implements this logistic conversion to transform log-OR values to SMDs in an automated way.

An important caveat is that the OR is context-dependent and depends on baseline risk, whereas the SMD is scale-dependent. Extremely large ORs (or very small ORs) might correspond to an SMD beyond the typical range, which can be hard to interpret. For instance, an initial OR of 4.3 from Davidson et al., (1977) appeared implausibly large due to the way outcomes were framed. Re-entering the data using failure (i.e., police contact) as the event produced more interpretable results which underscores how ORs can be distorted by low event rates and outcome framing.

¹⁵ E.g., assuming the underlying continuous outcome is logistic and both groups have equal variance

¹⁶ Because this transformation is a linear scaling, the standard error of the SMD can be obtained by applying the same $\frac{\sqrt{3}}{\pi}$ factor to the standard error of the log OR

Meta-Regressions vs Subgroup Analyses

Subgroup analysis means stratifying the data by moderator level and computing separate meta-analyses for each subgroup of studies. In contrast, meta-regression incorporates the moderator as a covariate in a single model using all studies. Conceptually, these are two ways to do the same thing. A categorical moderator in a meta-regression, with dummy variables, is statistically equivalent to an ANOVA or between-subgroups test. However, a practical advantage of the meta-regression approach is that all data can be used in one model, and the overall error degrees of freedom is based on the on the total number of clusters (36) minus model parameters¹⁷.

In all meta-regression models, the intercept term was removed to enable direct estimation of effect sizes for each category within the moderator variables. This approach avoids anchoring comparisons to a potentially arbitrary reference group and instead allows for clearer interpretation of how each study or intervention characteristic is independently associated with effect size. It is particularly useful when the overall intercept lacks substantive meaning, and the primary interest lie in understanding the influence of specific moderators on intervention outcomes.

A subgroup analysis will calculate the SMD within each subgroup and then compare effectiveness and heterogeneity with the other subgroups in the category. Subgroup analysis will present details about the variance within the subgroups (Q_w) which is unexplained, and the variance between the subgroups (Q_b), and whether those differences are statistically significant.

Robust Variance Estimation

¹⁷ This approach can sometimes be more powerful than splitting the data into separate subgroups. For example, if Category A includes 4 studies and Category B includes 13, running a meta-regression that includes both groups allows you to compare them using about 15 degrees of freedom (17 studies minus 2 model parameters). In contrast, analysing Category A on its own would give you only 3 degrees of freedom, which is too few to reliably estimate or compare effects. By combining all studies in one model, meta-regression makes better use of the available data and provides a more stable estimate of the difference between groups.

In a meta-analysis with 11 studies and 67 effect sizes, dependent outcomes are nested within studies. To address this, robust variance estimation (RVE) is used (via the `metafor` and `clubSandwich` packages in R) to handle within-study dependence without needing the exact covariance of effects. Tipton & Pustejovsky (2015) demonstrated that while RVE yields accurate inference for overall effects with relatively few studies, statistical tests for moderators can suffer from inflated Type I error rates when the number of studies is low. To correct for this, we implemented the small-sample corrections proposed by Tipton & Pustejovsky (2015), which include bias-reduced variance estimation (the CR2 method) and the use of Satterthwaite-adjusted degrees of freedom for hypothesis testing. These corrections substantially improve the accuracy of standard errors and help maintain appropriate Type I error rates in small-sample settings.

Additionally, given that our moderator variables are categorical, and some levels are unevenly represented across studies, the effective degrees of freedom may be further reduced. Consistent with current best practices, we therefore applied small-sample adjusted RVE methods in all moderator analyses. This was done using the `robust()` function in the `metafor` package, with the `clubSandwich` package providing the CR2 adjustments.

Preparing the data frame for analysis

As is common in meta-analysis, the team encountered several challenges in harmonising effect sizes across studies. First, there was a need to standardise the direction of SMD values so that negative values consistently indicate a favourable intervention effect. For studies where lower scores in the intervention group meant positive effects of the intervention, for example, in Baron (1976), the outcome measuring recidivism decreased more in the treatment group than in the control group ($d = -0.35$), showing a greater improvement in the treatment condition, here we didn't need to change the direction of the effect. However, there were some cases where a positive SMD demonstrated a positive effect in the treatment group, (e.g., school engagement). Since higher scores on this outcome measure reflected a beneficial effect, the SMD required a negative adjustment to align with other outcomes in the same direction of benefit. To achieve this consistently, we

reviewed all effect size direction labels and, where necessary, multiplied positive SMD values by -1 for outcomes where a lower score signified improvement. This ensured that all SMDs reflected the same directional meaning, **that negative SMD values always indicate beneficial effects**. This approach supports clear interpretation and comparability across studies within the meta-analysis.

There were four occasions (Bazenmore (2004); Davidson (1977); Kelley (2003); Quincy (1981)) where the reporting of results and/or variance was insufficient to allow for reliable data transformation or confidence in effect size estimation. In these cases, studies were excluded from the meta-analysis due to issues such as lack of minimum design standards, incomplete or aggregated statistical reporting, or absence of the basic descriptive information (e.g., group-level means, standard deviations, or standard errors) required for calculation of effect sizes.

Meta-analysis

A random-effects model was fitted to the data. The amount of heterogeneity (i.e., τ^2), was estimated using the restricted maximum-likelihood estimator (Viechtbauer, 2005). In addition to the estimate of τ^2 , the Q-test for heterogeneity (Cochran, 1954) and the I^2 statistic (Higgins & Thompson, 2002) are reported. In case any amount of heterogeneity is detected, a prediction interval for the true outcomes is also provided (Riley et al., 2011).

Sensitivity analyses

Studentized residuals and Cook's distances are used to examine whether studies may be outliers and/or influential in the context of the model (Viechtbauer & Cheung, 2010). Studies with a studentized residual larger than the $100 \times (1 - 0.05 / (2 \times k))$ th percentile of a standard normal distribution are considered potential outliers (i.e., using a Bonferroni correction with two-sided $\alpha = 0.05$ for k studies included in the meta-analysis). Studies with a Cook's distance larger than the median plus six times the interquartile range of the Cook's distances are considered to be influential. The rank correlation test (Begg & Mazumdar, 1994) and the regression test (Sterne & Egger, 2005), using the standard error of the observed outcomes as predictor, are used to

check for funnel plot asymmetry. The analysis was carried out using R (version 4.4.2) (R Core Team, 2020) and the metafor package (version 4.8.0) (Viechtbauer, 2010).

Implementation data

Information on factors that influenced, or was perceived to influence, implementation was extracted from studies where this was reported by study authors.

To capture implementation outcomes the toolkit data extraction made use of Proctor et al's (2011) Implementation Outcomes Framework to capture and categorise the barriers and facilitators to achieving good implementation.

The data extraction for the toolkit is an extension of what is already captured in the EGM. For the EGM the focus was on whether or not implementation outcomes were measured. In other words, does a study report on indicators of how well the programme/intervention was implemented or not. For toolkit data extraction we capture why implementation did or did not go well, what influenced implementation? This is typically thought of as barriers and facilitators to implementation. Information on barriers and facilitators will be presented using Proctor et al's (2011) Implementation Outcomes as headings so that the reader can understand the evidence, and gaps in the evidence, on the following implementation outcomes:

- **Acceptability:** Stakeholders' perceptions that the intervention or change is agreeable, palatable, or satisfactory.
 - Example indicators: Children's views on the intervention, participant engagement, satisfaction with content or delivery.
- **Adoption:** The decision or action to employ an intervention or implementation target.
 - Example indicators: Uptake of the intervention by services, schools, or communities.
- **Appropriateness:** The perceived fit or relevance of the intervention to the given context or problem.

- Example indicators: Adaptations made to improve the intervention's fit with the context, perceived usefulness.
- **Feasibility:** The extent to which the intervention can be successfully implemented in a specific setting.
 - Example indicators: Evidence of practicality or utility, ability to deliver the intervention in the target environment.
- **Fidelity:** The degree to which the intervention was delivered as intended.
 - Example indicators: Training quality, dosage and intensity of the intervention, adherence to the prescribed approach.
- **Reach/Penetration:** The extent to which the intervention has been integrated into a service setting or reached eligible recipients.
 - Example indicators: Ratio of recipients served to the target population, evidence of saturation or integration.
- **Sustainability:** The ability to maintain or institutionalise the intervention over time.
 - Example indicators: Evidence of routinisation, integration into policies or practices, durability of implementation efforts.

To be included in the data extraction, process evaluations had to meet the following criteria, in line with Proctor et al.'s (2011) framework:

- Be an empirical study of implementation (qualitative, quantitative, or mixed methods).
- Include a clearly defined intervention, with implementation measurable against intended design.
- Involve active data collection about the implementation process (not reliant solely on author opinion).
- Include stakeholder perspectives—such as from implementers (e.g., police, professionals), recipients (e.g., children, parents, communities), or commissioners—to capture the complexity of implementation experience.

- Explore factors that influenced how and why the intervention worked or did not work.

Studies were excluded from the implementation extraction if they only included:

- Observations without evaluation design,
- Case studies without systematic data collection, or
- Interviews with a single individual.

The information extracted on each implementation outcome was narratively summarised. Further analysis and integration of implementation information with the meta-analysis and meta-regression was limited because of a lack of detailed evaluations of implementation. Cost data was treated separately. Any study reporting actual financial figures was included in a separate cost data extraction, even if it did not qualify for implementation analysis. Where implementation barriers/facilitators or influences on an implementation outcome were not measured and/or reported, this is stated.

Appendix 2. Location Details

	Number of UK Studies	Number (and Location) of International Studies
Overall, for Strand	1	10 (United States)
Evidence Quality	1	8 (United States)
Estimated Impact on Violence ¹⁸	N/A	N/A
Estimated Impact on Crime and Offending	1	8 (United States)
EDIE	0	2 (United States)
Implementation	6	7 (United States) 1 (Norway)
Cost	2	6 (United States)

¹⁸ There were no studies that provided violence outcomes

Appendix 3. Characteristics of included studies for effectiveness

Authors (Year)	Country	Study Design	Intervention	Population/ Place	Comparison	Outcomes Measured	Quality Level	Findings
Baron (1976)	USA	QED	Sacramento 601 and 602 Diversion Projects which involved family crisis counselling upon intake, intake assessment and evaluation, follow-up sessions, 24/7 telephone crisis intervention service, referrals to voluntary, temporary alternative placements and ongoing staff training and consultation.	674 children and young people in Sacramento County charged with 601/602 offenses (e.g., truancy, runaway, petty theft)	Traditional processing	Court petition rates, overnight detention, recidivism (overall and serious), cost per youth	Low	Diversion programme reduced court petitions by 80%, overnight detention by over 50%, and serious recidivism by 40.7%. Cost per youth was less than half compared to traditional

								system. Considered a promising and replicable approach.
Kemp et al., (2002)	England	QED	Under the 'caution-plus' scheme, a children and young people is given an informal action receives an individually tailored piece of work, based on an assessment. This aims to resolve the offence and address the underlying cause(s) of the offending behaviour.	Young offenders aged 10-17 processed in Northamptonshire, analysis included only first-time offenders.	Prosecuted through the formal justice system route	<ul style="list-style-type: none"> • Crime and offending 	Moderate	Prosecution was linked with higher rates of reoffending; caution-plus and informal actions were associated with lower subsequent offending.
Klein, (1986)	USA	RCT	Diversion programme where children and young	Young offenders referred to police in a diversion	Formal prosecution and outright	<ul style="list-style-type: none"> • Crime and offending 	Low	Petitioned children and young

			people were randomly assigned to one of four conditions: outright release, referral, referral with purchased services or petition to juvenile court; interventions emphasised counselling (individual, family, group)	context and services took place in community-based agencies	release with no further action.			people had the highest recidivism rates; referrals (with or without purchased services) had lower rearrest rates than petitioning, but higher than outright release.
Koch, (1985)	USA	RCT	Community Service Program where an intake meeting occurs within 7 days of referral and children and young people take part in	Young offenders aged 12–16 who are first- or second-time offenders normally referred to court.	Traditional court processing	<ul style="list-style-type: none"> • Crime and offending • Meaningful relationships • School engagement 	Moderate	Significant reduction in juvenile justice contacts for the diversion without

			<p>an arbitration meeting with victims and parents to arrange restitution and service plan. Community-based service placement is selected based on children and young people interests/preferences and are intended to provide prosocial engagement, skill-building and restitution to the community.</p>	<p>Intervention primarily delivered at community service provider locations with some activities occurring at home and intake worker offices. Young offenders who were currently on probation, involved with court programmes, or residing in institutions, or had committed offenses including arson, homicide and sexual assault</p>		<ul style="list-style-type: none"> • Family relationships and support • Positive and prosocial identity • Youth justice stigma 		<p>services group vs traditional processing. No significant differences between groups on commitment to school, attachment to parents and prosocial beliefs. No significant group differences in recidivism rates 16-weeks post-intake.</p>
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				were excluded from the diversion programme.				
Kubik & Boxer, (2020)	USA	QED	eCallOut Program for Youth (COPY) which involves identifying young people with first-time eligible arrests, referral to neighbourhood-based services by a team of officers and social service agency representatives and tracking youth over time to assess outcomes. Services include Big Brother Big Sisters (BBBS) mentoring programme and	Young offenders with first-time eligible arrests which include robbery, weapon possession, receiving stolen property.	Young people who met the COPY eligibility criteria before the programme began	<ul style="list-style-type: none"> • Crime and offending • Criminal peers 	Moderate	At 3 months, referral to services significantly reduced re-arrest odds. No children and young people who engaged in services was re-arrested at 3 months. At 5-7 months, no significant effects from either referral or engagement

			Multisystemic Therapy.					t indicating short-term benefits from referrals but no sustained effect.
Myers et al., (2000)	USA	QED	Project Back-on-Track (BOT) which is an after-school diversion programme designed to divert children and young people from committing future crimes. Intervention targets multiple factors, including ineffective parenting, impaired parent-child communication,	Young offenders in the early stages of delinquency. Sample was drawn from participants at a child and adolescent psychiatry outpatient clinic	children and young people processed through juvenile court and placed on community control.	<ul style="list-style-type: none"> • Crime and offending 	Moderate	At 12 months, fewer BOT completers reoffended vs control. BOT completers committed significantly fewer offenses than the control group.

			negative peer influences and low self-esteem. The main components included child-specific, parent-specific, combined parent-child interventions and structures milestones (community service, apologies to victims)					
Regoli et al., (1985)	USA	QED	Denver Metropolitan Area Diversion Programs comprising of six-state funded diversion programmes operating across Denver. Programs varied in structure and implementation.	Young people with a history of offending or at risk of offending.	Comparison made with the baseline recidivism rates of non-diverted youth in the wider juvenile justice system.	<ul style="list-style-type: none"> Youth Justice Stigma 	Low	Overall recidivism for the diverted youth was 26% lower than the expected baseline rate. Among the six diversion

								programme s, four were successful in reducing recidivism and two did not achieve significant results.
Rowan et al., (2023)	USA	QED	Informal processing where young offenders were diverted from formal court processing and instead had their cases handled informally through probation services.	Male children and young people from the Crossroads Study, recruited from three sites in Orange County, Philadelphia, Jefferson Parish. Participants were first-time arrestees for low-level offenses.	Traditional court processing	<ul style="list-style-type: none"> • Criminal peers • Meaningful peers 	High	Formally processed children and young people experienced a 17% increase in the rate of acquiring new deviant peers compared with informally

				Interventions appear to occur at the community-level within probation settings in three US jurisdictions.				processed children and young people. They also showed a 10% decrease in acquiring new non-deviant peers. No significant differences in discontinuing deviant or non-deviant friendships between groups.
Stewart et al., (1986)	USA	QED	Original/First Incurrigibility Programme and Revised Incurrigibility	First time status offenders (truancy, incurrigibility,	Traditional processing	<ul style="list-style-type: none"> Crime and offending 	Low	Revised programme showed significant

			<p>Programme. Interventions delivered by probation officers and incorporated crisis intervention and informal referrals. The intervention aimed to modify the environment (family, school) and included both direct interventions (e.g. counselling) and supportive tools (e.g. behaviour contracts).</p>	<p>running away) with no prior or concurrent criminal charge and only one status offense charge.</p>				<p>reductions in criminal recidivism and was more effective overall. Better results in the Revised programme was attributed to crisis intervention counselling which was more effective than minimal contact probation, and access</p>
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								to support systems and encouraging non-legal problem-solving within families.
Stratton, (2009)	USA	RCT	Family Crisis Intervention Counselling where shortly after initial police contact, families take part in counselling and family crisis intervention methods to deal with offences related to 601 Welfare and Institutions Code (truancy, incorrigibles, and	children and young people offenders referred to the San Fernando City Police Department in relation to 601 Welfare and Institutions Code (truancy, incorrigibles, and runaways, classified as predelinquent	Traditional processing	<ul style="list-style-type: none"> • Crime and offending 	Low	No statistically significant effect of the intervention on the number of rearrests, number of minors receiving probation services and total number of

			runaways, classified as predelinquent youngsters) and minor 602 Welfare and Institutions Code (offenses that would be classified as misdemeanours if committed by adults). The counselling techniques included a) immediacy of response to the family after arrest of the minor, with sessions usually being conducted within one to two hours of arrest; b) active involvement on the part of the counsellor; c) emphasis on the	youngsters) and minor 602 Welfare and Institutions Code (offenses that would be classified as misdemeanours if committed by adults) Some children and young people had been arrested at the time of initial contact, others were referred by families, schools, and other agencies.				days spent detained.
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			present problem, dealing with its effects on the individual arrested and family members; d) a problem-solving approach.					
Venezia, (1972)	USA	RCT	Informal/unofficial probation for children referred to the Yolo County Probation Department. Unofficial probation involves reducing the number of children and young people appearing in court by diverting them towards community-based programmes	Informal probation initiated by probation or court staff as an alternative to adjudication. The children and young people must admit guilt and provide consent alongside their parents.	Traditional processing	<ul style="list-style-type: none"> • Crime and offending 	Low	No statistically significant differences in rereferral rates between the experimental and control groups, although the experimental group consistently showed better outcomes

								including fewer rereferrals and petitions filed and longer time to rereferral. Formal probation group significantly outperformed the control group in recidivism outcomes suggesting effectiveness of structured supervision across risk levels.
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Appendix 4. Measured outcomes across included studies for effectiveness

YEF outcome framework category	Measured outcomes (descriptions by study authors)	Studies
Category description (as described in the framework)		
Crime and offending <i>Criminal behaviours including non-violent acts (e.g., shoplifting), sexually violent crimes, and violent acts (e.g., assault, robbery).</i>	Referral or petitions to court processing; any recidivism; reoffending after first, second, third, or fourth proceedings; number of self-report offences; seriousness of self-report offences; multiple recidivism; re-arrest at three, five, six, seven, 15, or 27 months; serious recidivism; simple recidivism; likelihood of committing subsequent offence at 12 months; number of offences committed at 12 months; number of youths with subsequent offences at nine or 12 months; criminal recidivism; felony offences; misdemeanour offences; 601 offenders; number of referrals to probation during six-month follow-up	(n=9, k=42, 62.7%) Baron (1976); Kemp (2002); Klein (1986); Koch (1985); Kubik (2020); Myers (2000); Stewart (1986); Stratton (2009); Venezia (1972)
School engagement	Commitment to school	(n=1, k=1, 1.5%)

<p><i>School engagement is a multifaceted construct including affective, behavioural, and cognitive components. The sub-outcomes below are different indicators of school engagement.</i></p>		Koch (1985)
<p>Criminal peers</p> <p><i>Also called 'delinquent* peers' Having a close group of people who take part in and promote criminal behaviour – criminal behaviour may be an important part of the group's identity.</i></p> <p><i>*The term 'delinquent' is falling out of use to reduce stigma</i></p>	<p>Add deviant friends; Discontinue deviant friends; Add nondeviant friends</p>	<p>(n=1, k=16, 23.9%)</p> <p>Rowan (2023)</p>
<p>Family relationships and support</p> <p><i>Positive and supportive relationships with family members.</i></p>	<p>Attachment to parents</p>	<p>(n=1, k=1, 1.5%)</p> <p>Koch (1985)</p>

<p>Positive and prosocial identity</p> <p><i>Viewing yourself as someone who engages in positive and meaningful activities and not in criminal activities.</i></p>	<p>Prosocial beliefs</p>	<p>(n=1, k=1, 1.5%)</p> <p>Koch (1985)</p>
<p>Youth justice stigma</p> <p><i>The stigma of being involved and perceived as likely to be involved in the youth justice system, which narrows opportunities and resources for young people and may cement them on a pathway towards youth crime and violence rather than away from it.</i></p>	<p>Label spread; Label applications; Perceived negative labelling; Label acceptance; Number of juvenile justice contacts; Delinquency labelling; number of juvenile justice contacts within 16 weeks after project intake</p>	<p>(n=2, k=6, 9%)</p> <p>Koch (1985); Regoli (1985)</p>

Appendix 5: Characteristics of included studies for implementation

Authors (Year)	Countr y	Study Design	Intervention	Quality Level	Implementation Outcomes	Experiences of children and young people
Baron (1976)	USA	QED and PE	The Sacramento 601 Diversion Project was a family-based diversion programme in California, targeting children and young people charged with low-level offences. Instead of entering the formal justice system, eligible children and young people were referred to a specialist counselling unit staffed by trained probation officers. These officers delivered	Low	Cost: The programme demonstrated significant cost savings, reduced use of detention and formal supervision contributed to overall lower expenditures, while still achieving positive outcomes for children and young people.	N/A

			immediate and intensive family-focused crisis intervention, including in-home visits, 24/7 telephone support, and coordination with wider support services.			
Barrett et al. (2022)	USA	PE	The Safety Net Collaborative works with youth at their first point of contact with police. It aims to identify any underlying behavioural health issues that may have led to the young person breaking the law. Young people are then directed to relevant and appropriate services to address these underlying issues and	Moderate	<p>Acceptability: Police and YRO's were happy with content and level of training, but felt training could be more specific for patrol officers.</p> <p>Adoption: Overall, interagency collaboration was positive, however logistical challenges, such as getting the parents on board, were highlighted as a barrier.</p> <p>Appropriateness: Although there were challenges in incorporating Safety Net into police working culture, all stakeholders felt</p>	N/A

			divert them from any further criminal justice involvement.		it was an appropriate and relevant programme.	
Boden (2019)	England	PE	Local Authority Youth Offending Team implemented a strengths-based diversionary programme guided by the Good Lives Model, aiming to improve the wellbeing of children and young people, whilst simultaneously reducing risk. children and young people were involved in shaping their own support package.	Low	<p>Acceptability: Acceptability was enhanced through trauma-informed, strengths-based, and relationship-driven practices that promoted trust, youth agency, and engagement in familiar, non-judgmental environments. No substantive details are provided on what effective trauma informed practices look like in practice.</p> <p>Adoption: Adoption of the strengths-based, co-constructed model was shaped by practitioner alignment with a Child First approach, but inconsistent organisational cultures and lack of systemic support hindered broader integration.</p>	N/A

					<p>Appropriateness: The developmental, person-centred approach was widely considered appropriate for young people with complex needs, but its effectiveness depended on contextual awareness, proper support, and training, with community-embedded, relational methods being seen as particularly fitting for the cohort's diverse needs.</p> <p>Feasibility: Feasibility was shaped by good relationship-building, with multi-agency collaboration improving coordination. However, structural barriers, a need for more training and community resources, and limited time remained significant challenges.</p> <p>Fidelity: Fidelity to the model was challenged by systemic constraints and resource limitations, requiring flexibility from practitioners, but this necessitated</p>	
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				<p>strong supervision and support to maintain the integrity of the approach, underscoring the need for structured training and oversight.</p> <p>Reach/penetration: The intervention demonstrated meaningful reach within youth offending services but had uneven penetration into broader systems, with integration enhanced by collaborative efforts, though barriers like stigma and inconsistent resourcing hindering broader adoption.</p> <p>Sustainability: Sustainability of the intervention depended on systemic capacity, continued practitioner support, and a shared vision, but was vulnerable to workforce burnout, resource cuts, and lack of clear roles, requiring ongoing training, cross-agency collaboration, and</p>	
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					investment in professional development for long-term viability.	
Davidson et al. (1977)	USA	RCT & PE	Implemented a community-based Adolescent Diversion Project. Using a one-to-one approach, college volunteers from a psychology department worked with children and young people who had contact with the youth justice system.	Low	<p>Feasibility: The Community-Based Adolescent Diversion Projects successful transition from a research project to a local agency operation demonstrates its feasibility for longer-term community-based implementation.</p> <p>Sustainability: Local agencies have adopted the programme, with trained professionals and police collaborating to offer a sustainable, community-based alternative to court involvement for youth.</p>	N/A
Fader et al., (2015)	USA	PPD and PE	The WISE Program is a school-based arrest diversion initiative in Utica, New York, targeting students who commit low-level, non-violent offenses	Moderate	<p>Acceptability: children and young people expressed appreciation for the Underground Café and its role in keeping them off the streets, while the SRO liaison became a strong advocate over time. However, teachers and parents were less</p>	The authors interviewed 17 children and young people, and they highlighted how

		<p>on school grounds. Instead of arrest, eligible students are reviewed by a team (school, police, diversion staff) and, if accepted, agree to a behavioural contract. They then receive in-school support (e.g., check-ins, mentoring) and attend the Underground Café, an after-school programme offering academic help and activities. The programme aims to reduce arrests and improve student behaviour through support rather than punishment.</p>	<p>engaged or unaware, limiting broader acceptability.</p> <p>Adoption: Police and school administrators participated actively in reviewing referrals, and the programme became embedded in the daily routine at Upstate High School. Buy-in from the police chief was crucial, secured through assurances about case review criteria and follow-up on non-compliance.</p> <p>Appropriateness: Stakeholders agreed the programme offered a more suitable alternative to zero-tolerance policies for minor infractions, helping address misconduct without escalating to arrest. Concerns about targeting middle/elementary schools were raised, with evidence suggesting net-widening.</p> <p>Feasibility: The programme used existing structures and partnerships (e.g., walkie-</p>	<p>the programme, especially the café element kept them out of trouble and gave them a safe place to go after school.</p>
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					<p>talkie alerts, after-school programmes) to respond quickly to incidents. However, data-sharing restrictions due to FERPA laws and limited parental involvement posed ongoing feasibility challenges.</p> <p>Fidelity: Limited data tracking and service documentation made it difficult to assess fidelity. One stakeholder noted that police were not always updated on students' progress, undermining consistent case management.</p>	
Haines et al. (2013)	Wales	PPD & PE	The Swansea Bureau is a child-first initiative aimed at diverting children and young people from the formal justice system, with those involved receiving no formal sanctions. The Bureau's process has 5 stages: 1) arrest and bail;	Very low	<p>Acceptability: This was highlighted by parents' clear engagement with the Bureau's processes, in particular due to parental involvement being entirely voluntary.</p> <p>Appropriateness: Stakeholders indicated that the child-first, positive approach from the Bureau was most appropriate to</p>	N/A

			2) assessment of young people; 3) assessing the needs of victims; 4) panel meeting; 5) the Bureau Clinic.		ensure each child received the correct care and to reduce reoffending. Cost: The use of existing staff and effective interventions means the Bureau has saved £2.8m of public money in Swansea alone.	
Hodges et al. (2011)	USA	PPD & Cost	The Correct Course programme diverts young people whose case might have otherwise been dismissed. Staff from the Juvenile Assessment Center (JAC) carry out a urine alcohol and other drug screening test and the young person and their caregiver complete a Juvenile Inventory for Functioning (JIFF) assessment. The JIFF score	Moderate	Cost: The cost of 6 months of services in a Youth Assistance program was \$1,500 per youth, while the evaluation estimated the cost savings of diversion at \$7,500 to \$22,000 per youth in 2008.	N/A

			<p>informs the service plan. The young person is then referred to their local Youth Assistance Program which provides the planned services.</p>			
Hoffman & Macdonald (2010)	Wales	PE	<p>The Safer Swansea Partnership's tiered approach follows a four-stage process in response to incidents of antisocial behaviour. At stage 1, a warning letter is sent. At stage 2, a second warning letter is sent, and a home visit is conducted, after which the young person signs a Personal Warning and services are offered. At stage 3, a case</p>	Low	<p>Acceptability: YOT workers and children and young people saw diversion as a positive, fair approach, whereas some police officers preferred an enforcement approach to deal quickly with incidents of antisocial behaviour.</p> <p>Adoption: The multi-agency approach was key to encouraging adoption of diversion, as YOT workers could persuade police officers of the efficacy of the approach. Strong, trusting relationships and a shared goal were key to</p>	N/A

			<p>conference is called to decide on informal interventions, for example Family Group Conferencing or a Parenting Contract. The final stage (stage 4) is to apply for an ASBO.</p>	<p>overcoming conflicting priorities between agencies.</p> <p>Appropriateness: Drawing on specialist knowledge and information from different agencies was effective in dealing with antisocial behaviour. Having voluntary interventions with constructive activities was important to motivate children and young people to change their behaviour and to provide alternative ways to spend their time.</p> <p>Feasibility: Multi-agency working was feasible in Swansea due to its smaller size, existing strong partnership links, and information sharing protocols.</p> <p>Fidelity: Agencies were generally committed to diverting children and young people, though there were a few cases where the police took a young person to court without informing the YOT.</p>	
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					Not all practitioners informed young people that diversion was voluntary.	
Institute for Criminal Policy Research (2012)	UK	PE	Triage schemes were implemented in some UK police stations. A Triage worker, usually from the YOT, works with police officers from the custody suite to identify and engage young people who have been arrested. Triage Level 1 engaged children and young people who committed low-level, less serious and often first-time offences and mainly comprised restorative work. Triage Level 2 involved a needs assessment and referral to	Low	<p>Acceptability: Interviewees highly valued the early intervention and diversionary approach taken by the Triage schemes.</p> <p>Adoption: Police officers were resistant to the Triage scheme due to its impact on their performance targets. YOT workers played an important role in the adoption of Triage by persuading police officers of its effectiveness. Close working relationships between Triage workers and custody officers also aided the adoption of the scheme. The introduction of community resolutions may hinder the use of informal diversion schemes such as Triage if young people are not referred to services.</p>	N/A

			supportive interventions. Although, children and young people at Level 2 are not always diverted. At Triage Level 3, the children and young people is fast-tracked through the CJS.		Sustainability: Uncertain funding and service cuts negatively impacted service development and delivery, with high staff turnover being a particular challenge.	
Kemp et al. (2002)	England	QED & PE	Under the 'caution-plus' scheme, a children and young people is given an informal action receives an individually tailored piece of work, based on an assessment. This aims to resolve the offence and address the underlying cause(s) of the offending behaviour.	Very low	<p>Adoption: New justice reforms that use a more formal, rigid approach affected the adoption of this scheme, particularly as giving cautions was quicker than the lengthier process of completing files for informal diversion services.</p> <p>Appropriateness: The voluntary and flexible approach of the 'caution-plus' scheme was appropriate in responding to youth offending, with a more informal approach reducing reoffending rates and costs. However, the emphasis on reducing delays was not appropriate as it</p>	N/A

					<p>prevented custody officers from making considered and reflective decisions.</p> <p>Feasibility: Where multiple agencies were involved, this helped in avoiding duplication of effort and ensuring a holistic approach. However, budgetary constraints at other agencies also meant that interventions were sometimes not provided when needed.</p> <p>Fidelity: Poor quality data collection presented a challenge to monitoring staff compliance. Additional training in supervision, mediation and cognitive-behavioural approaches could help to ensure high-quality services.</p>	
Myers et al. (2000)	USA	QED	Project Back-on-Track (BOT) was an after-school diversion programme aimed at preventing	Moderate	Cost: The cost of the programme was equivalent to the cost of the community control group. After 12 months, the savings	N/A

			further offending amongst young people. It incorporated a variety of interventions such as community service, anger management, parenting courses and assertiveness training.		from avoiding reoffending were estimated to be \$1,800 per child / young person.	
NeMoyer et al. (2022)	USA	PE	Philadelphia Police School Diversion Program was a city-wide policy to divert students away from arrest for certain misdemeanour school-based offenses. children and young people and families who agreed to participate in the community-based services worked directly with the relevant service	Moderate	<p>Adoption: The Philadelphia Police School Diversion Program was adopted with minimal structural change by reallocating existing personnel in the Philadelphia Police Department and Department of Human Services, requiring no new hires or operational shifts within the School District, indicating streamlined integration into existing systems.</p> <p>Cost: The Philadelphia Police School Diversion Program's implementation incurred an estimated startup cost of</p>	N/A

			provider (academic support, substance use counselling, mentoring) for an initial 90 days and an additional 90 days if needed.		\$750,105 and an annual mature operating cost of \$706,398, primarily driven by Philadelphia's Department of Human Services increasing contracts with community organizations and the Philadelphia Police Department staffing one additional intake officer; the School District of Philadelphia incurred no direct costs.	
NeMoyer et al. (2024)	USA	PE	Philadelphia Police School Diversion Program was a partnership between school districts and police departments which aimed at reducing school-based arrests. The primary goal of the diversion programme was to reduce the number of school-based arrests across the	Moder-ate	<p>Acceptability: Stakeholders broadly supported the programme's goal of diverting youth from the legal system, though some expressed concerns about accountability, service effectiveness, and the potential for misuse.</p> <p>Adoption: Strong top-down leadership enabled swift adoption of the Diversion Program, but lack of early engagement with school staff created communication and buy-in challenges</p>	N/A

			<p>city, without compromising school safety. children and young people and families who agreed to participate in the community-based services worked directly with the relevant service provider (academic support, substance use counselling, mentoring) for an initial 90 days and an additional 90 days if needed.</p>	<p>Appropriateness: Stakeholders saw the Philadelphia Police School Diversion Program as a needed and fitting response to excessive, punitive school-based arrests, especially in marginalized communities.</p> <p>Fidelity: The Philadelphia Police School Diversion Program has been implemented with strong fidelity, diverting 91.5% of eligible students and supported by effective cross-agency coordination and ongoing quality checks</p> <p>Reach / penetration: The Philadelphia Police School Diversion Program is well embedded within the police department but continues to face mixed buy-in from school staff, prompting new efforts to improve collaboration and outreach within schools.</p>	
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					<p>Sustainability: The Philadelphia Police School Diversion Program has sustained and expanded over time but faces ongoing challenges related to stakeholder understanding, communication, and clarity around follow-up and multiple diversions.</p>	
<p>Sandøy et al. (2022)</p>	Norway	PE	<p>Alternative and voluntary sanctions were provided to children and young people for minor drug offences, rather than processing through the CJS. Examples included attending drug tests, ongoing supervision, and family rehabilitation.</p>	Moderate	<p>Acceptability: While many adolescents viewed the programme as a “good deal” to avoid harsher consequences, their acceptance was often strategic and superficial, with limited personal commitment to abstinence or reform</p> <p>Appropriateness: The intervention was seen as suitable for minor drug use cases, particularly when it helped repair relationships or avoid criminal records, though its relevance varied depending on personal and social contexts</p>	<p>children and young people viewed the interventions as strategically beneficial rather than morally transformative, valuing them for avoiding legal consequences and repairing family</p>

					<p>Feasibility: The programme was largely seen as easy to comply with and practically beneficial, especially when legal or familial incentives aligned with minimal effort or behavioural change.</p>	relationships, and clearly articulated these views with insight into their social and personal contexts
Stratton et al. (2009)	USA	RCT & PE	Family Crisis Intervention Counselling where shortly after initial police contact, families take part in counselling and family crisis intervention methods to deal with offences related to 601 Welfare and Institutions Code (truancy, incorrigibles, and runaways, classified as predelinquent youngsters) and minor 602 Welfare	Very Low	<p>Acceptability: children and young people and parents/carers had favourable attitudes toward having a counsellor at the police station, though responses may have been influenced by participants' desire to please authority figures.</p> <p>Feasibility: Counsellors adapted to significant challenges like missed appointments and cultural resistance to family-based counselling, but full adherence to the original intervention model was difficult.</p>	children and young people responded positively to crisis intervention counselling at police stations, valuing its immediacy and support, though cultural barriers and power dynamics may

			<p>and Institutions Code (offences that would be classified as misdemeanours if committed by adults). The counselling techniques included a) immediacy of response to the family after arrest of the minor, with sessions usually being conducted within one to two hours of arrest; b) active involvement on the part of the counsellor; c) emphasis on the present problem, dealing with its effects on the individual arrested and family members; d) a problem-solving approach.</p>		<p>Cost: Crisis intervention services cost 2.11 times less than traditional juvenile justice processing, making it a cost-effective alternative.</p>	<p>have limited full engagement and openness</p>
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Tyrrell et al. (2017)	England	PE	<p>The Suffolk Youth Offending Service Diversion Programme involves an integrated decision-making process between Suffolk youth offending teams and seconded police officers. It's aim is to avoid formal sanctions against minor delinquency amongst 10-17-year-olds, diminish the number of first time entrants into the criminal justice system and reduce reoffending rates across the county. children and young peoples receive either level 1 or level 2 interventions based on</p>	Low	<p>Acceptability: The Suffolk Youth Offending Service Diversion Programme was widely supported and valued by staff and practitioners, young people and parents for its clarity, voluntary nature and positive aims.</p> <p>Adoption: High levels of awareness and recommendation among staff and police alongside strong multi-agency collaboration supported broad uptake.</p> <p>Appropriateness: The Suffolk Youth Offending Service Diversion Programme was viewed as a well-suited and timely intervention that addressed young people's needs through voluntary, child-centred and supportive engagement.</p> <p>Feasibility: While valued, the programme faced practical challenges due to staff capacity and assessment requirements.</p>	<p>children and young people felt empowered by the clear, voluntary nature of the Suffolk Diversion Programme and were able to express positive views about its supportive, non-punitive approach.</p>
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			<p>their assessed level of risk. Level 1 = low-risk of offending/reoffending, short intervention plans with restorative element; or Level 2 = medium to high risk of offending/reoffending, more detailed assessments and intervention programme.</p>		<p>Sustainability: Strong cross-agency support underpinned long-term potential, but staffing pressures and communication gaps pose ongoing risks.</p> <p>Cost: Suffolk Youth Offending Service Diversion Programme generated an estimated net benefit of £72,915 by avoiding police and justice system costs for 242 diverted young people.</p>	
Venezia et al (1972)	USA	RCT & PE	<p>Informal/unofficial probation for children referred to the Yolo County Probation Department. Unofficial probation involves reducing the number of children and young people appearing in court by diverting them</p>	Low	<p>Acceptability: A 90% response rate and 72% reported usage suggest that informal probation is widely accepted among probation administrators.</p> <p>Adoption: Informal probation has been adopted by most departments, with 97% of users providing regular supervision.</p>	N/A

			towards community-based programmes.		<p>Feasibility: While widely implemented, the effectiveness of informal probation depends on adequate staffing and resources to ensure proper supervision</p> <p>Cost: Diverting eligible youth to informal probation could save over \$21,000 in adjudication-related costs in 18 months and reduce future court processing costs by up to 50%</p>	
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Appendix 6: Availability of evidence according to each of Proctor et al. (2011)'s implementation outcomes

Authors (Year)	Acceptability	Adoption	Appropriateness	Feasibility	Fidelity	Reach/ penetration	Sustainability	Cost
Baron (1976)	No	No	No	No	No	No	No	Yes
Barrett et al. (2022)	Yes	Yes	Yes	No	No	No	No	No
Boden (2019)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Davidson et al. (1977)	No	No	No	Yes	No	No	Yes	No

Fader et al. (2015)	Yes	Yes	Yes	Yes	Yes	No	No	No
Haines et al. (2013)	Yes	No	Yes	No	No	No	No	Yes
Hodges et al. (2011)	No	No	No	No	No	No	No	Yes
Hoffman & Macdonald (2010)	Yes	Yes	Yes	Yes	Yes	No	No	No
Institute for Criminal Policy Research (2012)	Yes	Yes	No	No	No	No	Yes	No
Kemp et al. (2002)	No	Yes	Yes	Yes	Yes	No	No	No
Myers et al. (2000)	No	No	No	No	No	No	No	Yes
NeMoyer et al. (2022)	No	Yes	No	No	No	No	No	Yes
NeMoyer et al. (2024)	Yes	Yes	Yes	No	Yes	Yes	Yes	No
Sandøy et al. (2022)	Yes	No	Yes	Yes	No	No	No	No
Stratton et al. (2009)	Yes	No	No	Yes	No	No	No	Yes

Tyrrell et al. (2017)	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Venezia et al (1972)	Yes	Yes	No	Yes	No	No	No	Yes

Appendix 7: Moderator categories

Funding category

Category	Description	Examples
1. National Government – Health / Social Science	National-level public health or research funding bodies	NIH (National Institute of Mental Health); Public Health Service grant
2. National Government – Justice / Criminal Justice	National criminal justice departments or agencies	U.S. Dept. of Justice, Law Enforcement Assistance Administration
3. State / Local Government – Justice or Youth Services	State or local justice agencies, youth justice bodies	California Council on Criminal Justice; Florida Dept. of Juvenile Justice; State Office of Criminal Justice Programs
4. Local Authority / Youth Offending Team (UK-specific)	Local UK public bodies focused on youth offending	Northamptonshire Youth Offending Team

5. Academic / University-Sourced	University centres, internal grants, or consortia	Collaborative on Children, Families, and Communities at University of South Florida
6. Federal Grants (General/Unspecified)	U.S. federal grant support not clearly linked to a specific agency	"Funded by a federal grant" (e.g. Boise, Idaho case)
7. Not Reported / Unclear	No funding info available or unclear source	

Intensity of intervention

Category	Description	Examples
Low	Up to 1 month/ One-time/ or infrequent sessions	Brief interventions with minimal engagement.
Medium	1 to 3 months/ Regular sessions (e.g., weekly)	Moderate-term programs with consistent participation.
High	Over 3 months/ Frequent sessions (e.g., multiple times per week)	Long-term programs requiring substantial commitment.

Intervention components

Category	Included components
Accountability & Restoration	<p>Definition: Programs that seek to hold children and young people accountable for their actions through reparative measures, aiming to restore harm to victims and the community.</p> <p>Included Components:</p> <ul style="list-style-type: none"> • Community Service • Restitution to victims • Restorative justice practices
Developmental Interventions	<p>Definition: Programs designed to promote skills, personal development, mentoring, and behavioural growth in children and young people.</p> <p>Included Components:</p> <ul style="list-style-type: none"> • Skill-Building / Education • Mentoring / Coaching
Supportive Casework	<p>Definition: Structured case management including assessments, tailored plans, referrals, and check-ins, often described as the system's 'soft-touch' alternative to legal processing.</p>

	Included Components: <ul style="list-style-type: none"> • Case Management / Referral • Assessment / Intake & Planning
Therapeutic Support	<p>Definition: Direct interventions focused on family and individual counselling, crisis response, mental health support, and problem-solving.</p> <p>Included Components:</p> <ul style="list-style-type: none"> • Counselling & Family Support • Crisis Response / Immediate Intervention • Parent-Focused Interventions

Intervention setting

Category	Description
Justice System-Based Settings	<p>Definition: Interventions delivered at or near police stations, juvenile halls, or within court-affiliated facilities.</p> <p>Examples:</p> <ul style="list-style-type: none"> • "Wing of the juvenile hall near intake facilities" • "Truancy Unit" • "Police station"
Community-Based Settings	<p>Definition: Delivered through community locations such as schools, parks, recreation departments, and nonprofit centers.</p> <p>Examples:</p> <ul style="list-style-type: none"> • "City Parks and Recreation" • "Community service sites" • "Recreational and employment referrals"

Home or Hybrid Settings	<p>Definition: A mix of home visits, phone check-ins, or flexible arrangements combining home, community, and agency touchpoints.</p> <p>Examples:</p> <ul style="list-style-type: none"> • "Check-ins at young person's home and via phone" • "MST intensive home- and community-based program"
Clinical or Therapeutic Settings	<p>Definition: Delivered in outpatient clinics, psychiatry centers, or therapeutic environments focused on mental health or behavioral treatment.</p> <p>Examples:</p> <ul style="list-style-type: none"> • "Child and adolescent psychiatry outpatient clinic" • "Therapeutic youth service bureau"

Inclusion criteria

Category	Description
FTE only	Definition: Where the intervention only includes children and young people with no prior offenses/ describe them as FTE
Minor offenses only	<p>Definition: Where the intervention only includes children and young people committing 'minor' offences (e.g., shoplifting, underage drinking) and are referred by the school or agency.</p> <p>Please note – this may also include FTE children and young people but the intervention does not describe this clearly</p>
Discretionary Referral	Definition: Cases where referral to the intervention is based on practitioner, agency, or system discretion rather than strict eligibility criteria (e.g., prior record, offense severity). These referrals may include a mix of youth (first-time, repeat, minor, or moderate offenses), but eligibility is not clearly defined in terms of offense history or type.

Ethnicity

Category	Description
Majority white Sample	Definition: >85% of sample identified as white
Some Diversity	Definition: Between 15–49% of participants identified as Black and Global Majority (i.e., Black, Hispanic/Latinx, Asian, Indigenous, etc.)
Diverse / Balanced	Definition: 50% or more Black and Global Majority youth in the sample

Sex/Gender

Category	Description
Majority Female Sample	Definition: > 60% of the sample is female May also include completely Female samples
Majority Male Sample	Definition: > 70% of the sample is male May also include completely Male samples
Some Gender Balance	Definition: 40–70% male and 30–60% female