

EVALUATION REPORT

Multi-Site Trial: Short-Term Mentoring

Efficacy Trial Report

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About the Youth Endowment Fund

The Youth Endowment Fund (YEF) is a charity with a mission that matters. We exist to prevent children and young people from becoming involved in violence. We do this by finding out what works and building a movement to put this knowledge into practice.

Children and young people at risk of becoming involved in violence deserve services that give them the best chance of a positive future. To make sure that happens, we'll fund promising projects and then use the very best evaluation to find out what works. Just as we benefit from robust trials in medicine, young people deserve support grounded in the evidence. We'll build that knowledge through our various grant rounds and funding activities.

And just as important is understanding children's and young people's lives. Through our Youth Advisory Board and national network of peer researchers, we'll ensure they influence our work and that we understand and are addressing their needs. But none of this will make a difference if all we do is produce reports that stay on a shelf.

Together, we need to look at the evidence and agree on what works, then build a movement to make sure that young people get the very best support possible. Our strategy sets out how we'll do it. At its heart, it says that we will fund good work, find what works, and work for change. You can read it [here](#).

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About the Evaluator

Centre for Evidence and Implementation

The Centre for Evidence and Implementation (CEI) is a global, not-for-profit evidence intermediary dedicated to using the best evidence in practice and policy to improve the lives of children, families, and communities facing adversity. Established in Australia in late 2015, CEI is a multi-disciplinary team that operates across four offices in Singapore, Melbourne, Sydney and London. We work with our clients, including policymakers, governments, practitioners, programme providers, organisation leaders and funders in three key areas of work to:

- Understand the evidence base
- Develop methods and processes to put the evidence into practice
- Trial, test and evaluate policies and programmes to drive more effective decisions and deliver better outcomes

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The Centre for Youth Impact at YMCA George Williams College

YMCA George Williams College (the College) is an independent charity affiliated with the YMCA Federation of England & Wales. For over fifty years, the College has delivered training and education for youth workers. More recently, the College has started supporting and developing all practitioners working with and for children, young people, and families. The College merged with the Centre for Youth Impact in April 2022. Now one of the College's three centres of expertise, the Centre for Youth Impact supports organisations in generating and acting on evidence of the impact of their provision. We focus on designing and testing shared approaches to quality and impact that facilitate collective insight and learning, and we also offer open-access resources and training.

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Bryson Purdon Social Research

Bryson Purdon Social Research LLP is an independent research partnership that was set up in 2009, specialising in policy and programme impact evaluation and survey methodology. We work on evaluations across a wide range of policy areas, including early intervention and support for families, health and disability, and ageing. We collaborate with academics, research organisations, consultants and third sector organisations, typically leading the design and analysis of the impact evaluation. We specialise in quasi-experimental and randomised controlled trial designs.

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The project

This project tested the impact of a short-term model of mentoring delivered by 17 small organisations in a randomised controlled trial (RCT). Most rigorous impact evaluations of youth sector provision focus on manualised programmes delivered by single organisations. These evaluations require large sample sizes, and this can exclude small, community-led organisations from participating. Smaller organisations may be more likely to be led by individuals from racially minoritised communities, may provide specialist and non-manualised services, and deliver the majority of services to young people in England and Wales. This creates a gap between evidence and practice, and this project aimed to test a method of robustly evaluating smaller organisations’ provision. Specifically, the project used a multi-site trial (MST) to test the effectiveness of mentoring delivered by small community organisations. An MST combines the reach of multiple small organisations (delivery partner organisations or ‘DPOs’) to create a sample large enough for an impact evaluation. Following a feasibility study (which established the feasibility of the MST), this trial tested an approach to short-term mentoring delivered by 17 DPOs. Each DPO delivered a shared practice model of mentoring to 10- to 17-year-olds who had at least one risk factor for involvement in violence (including, but not limited to, having a previous criminal conviction, being registered as a Child in Need, being looked after, or being excluded from school). Children were not included in the evaluation if they were at immediate risk of involvement in violence. Each child was to be offered a minimum of 12 45-minute one-to-one mentoring sessions over 12 weeks from a paid, trained adult. Key components of the mentoring included an initial meeting to be held prior to the start of mentoring, a written plan used during mentoring and a DPO-defined closure process at the end of mentoring. Children’s participation was voluntary.

This evaluation aimed to ascertain the impact of this short-term, shared practice model of mentoring, when delivered by small organisations, on behavioural and emotional problems among at-risk 10- to 17-year-olds (as measured by the self-reported Strengths and Difficulties Questionnaire [SDQ]). The evaluation included an RCT involving 744 children from across England and Wales: 372 received mentoring immediately, and 372 were assigned to the waitlist control group and received mentoring after the evaluation. The evaluation also featured an implementation and process evaluation comprising a mentee feedback survey (with 299 mentees), a mentor survey (with 26 mentors) and in-depth interviews with 16 DPO managers, 16 mentors and 19 mentees. These qualitative methods explored the implementation and feasibility of the shared practice model, the barriers and enablers to delivery, and perceptions of mentoring. The trial ran from February 2023 to March 2024.

Key conclusions

Short-term mentoring showed **no impact** on reducing children’s self-reported behavioural and emotional problems. After the mentoring, children in the intervention group had the same level of behavioural or emotional difficulty as their counterparts in the control group who had not yet received mentoring. This result has a **moderate security rating**.

Short-term mentoring showed a positive impact on a range of secondary outcomes, including self-confidence, problem-solving and decision-making, teamwork and social skills, and resilience and emotional regulation. These are the secondary outcomes, which are less robust than the primary outcome and should be interpreted with more caution.

DPOs broadly delivered the shared practice model as was originally intended. They worked with the children that the programme was designed to support and provided trained and consistent mentors who built trust, set goals for mentees and provided a physically and emotionally safe space.

The shared practice model was feasible and acceptable to mentors. Children interviewed in the study had overwhelmingly positive perceptions of the mentoring model.

The project achieved its primary purpose in demonstrating the feasibility of using an MST approach to test the impact of interventions delivered by small organisations. The evaluators provided extensive and vital support to DPOs, and DPOs showed great willingness and flexibility to support trial delivery. This model provides a precedent for robustly testing other interventions delivered by small, community-led organisations.

YEF security rating

These findings have a **moderate security rating**. The trial was a well-designed RCT. The trial was large enough to detect meaningful impacts and larger than most previous evaluations of mentoring. 23.7% of the children who started the trial were not included in the final analysis, as they did not complete the follow-up survey. We do not know if the effect found for short-term mentoring would be the same if the children missing from the final analysis were included. The children in the intervention group were similar to those in the control group.

Interpretation


Short-term mentoring showed **no impact** on reducing children's self-reported behavioural and emotional problems. After the mentoring, children in the intervention group had the same level of behavioural or emotional difficulty as their counterparts in the control group who had not yet received mentoring. This result has a **moderate security rating**. Additional analysis suggests that this result was not impacted by when the follow-up test occurred or by non-compliance in the intervention or control group. Reducing behavioural and emotional difficulties is linked to reducing offending (and violent offending), and evidence of association supports this. Short-term mentoring showed a positive impact on a range of secondary outcomes, including self-confidence, problem-solving and decision-making, teamwork and social skills, and resilience and emotional regulation. These are the secondary outcomes, which are less robust than the primary outcome and should be interpreted with more caution. Exploratory analysis did show a moderate positive impact on the prosocial subscale of the SDQ (but no impact on internalising or externalising behaviour subscales).

DPOs delivered the shared practice model as was originally intended. They worked with the children the programme was designed to support (74% of participating children had an identified risk factor), and they provided trained and consistent mentors who built trust, set goals for mentees and provided a physically and emotionally safe space. Ninety percent of surveyed mentees reported trusting their mentor, 70% of mentees had a written mentoring plan for their sessions and 62% of surveyed mentees were aware of when their mentoring would end. Ninety-six percent of young people attended at least one session, and 74% attended eight or more of the intended 12 sessions. Forty-five percent attended the target number of 12 or more sessions. The shared practice model was also deemed to be feasible and acceptable to mentors, and this was largely due to how closely it aligned with their current practice. The children interviewed in the study had overwhelmingly positive perceptions of the model.

The project achieved its primary purpose in demonstrating the feasibility of using an MST approach to test the impact of interventions delivered by small organisations. Seven hundred and forty-four children were recruited (compared to a target of 850), and obtaining consent from children was challenging. However, DPOs overcame these challenges and greatly supported data collection. The evaluator also provided extensive and vital support (including preparatory workshops with DPOs, fortnightly one-to-one meetings, weekly email updates, ongoing responsive problem-solving and a data portal) to ensure the trial could be delivered.

Previous international reviews of mentoring have identified more positive impacts on outcomes related to children's involvement in violence. This may be due to the shorter duration of mentoring delivered in this trial. However, the result in this study does align with the UK evidence; other mentoring studies in the UK and Ireland have failed to demonstrate an impact on offending or behaviours associated with offending. There is also a high level of variation in estimates of the impact of mentoring. This report and the primary and secondary outcome findings only present the findings of one study. When considering implications, frontline professionals, policymakers and service commissioners should carefully consider the process evaluation, the wider evidence base and their own professional judgement. YEF has no plans for further evaluation of this model of mentoring.

Summary of impact table

Outcome/ Group	Effect size (95% confidence interval)	Impact	Evidence security	No. of children	P Value
SDQ Total Difficulties Score/All participants	0.01 (-0.12, 0.14)	No impact		568	0.915

Introduction

Study rationale

Most rigorous impact evaluations focus on well-defined manualised programmes, often delivered at a single site or by a single organisation. However, much youth work in England and Wales is provided by small, local and often voluntary organisations and consists of non-manualised, yet widespread, approaches, such as mentoring and semi-structured group skills-development activities. Manualised interventions are often regarded by youth work organisations as insufficiently flexible for mainstream delivery or as having onerous training or resourcing requirements that make them unfeasible for large-scale sustained delivery. In addition, few smaller organisations would typically take part in a randomised controlled trial (RCT) or other rigorous evaluation of the impact of their provision or services because of the resource requirements and the numbers of young people needed for analytical purposes. This means the current evidence base does not fully reflect the actual work of youth agencies and is not sufficiently useful to them in shaping their practice.

To address this imbalance, this study had the dual aims of testing the feasibility of engaging multiple small youth organisations in a high-quality evaluation of a common provision – short-term mentoring – and assessing its effectiveness.

Mentoring was chosen as the focus practice area for a number of reasons. It is a very common feature of youth provision, both as a stand-alone intervention and as an element of broader service offers (Children's Commissioner, 2018). It is relatively well understood by the sector in terms of practices and approaches and provided crucial support to young people during the COVID-19 pandemic (Kaufman et al., 2021). There is consistent evidence of its effectiveness, including from several systematic reviews and meta-analyses (DuBois et al., 2011; Edwards et al., 2015; Gaffney, Jolliffe and White, 2022; Raposa et al., 2019), which have found mild to moderate impact across a range of youth outcomes, including academic achievement; social relationships; health, cognitive and psychological outcomes; attitudes; self-efficacy; and behaviour (Lindsay, Kolne and Cagliostro, 2018; Wood and Mayo-Wilson, 2012). It is rated as having a 'moderate' impact on violent crime in the Youth Endowment Fund (YEF) toolkit (Gaffney, Jolliffe and White, 2022).

In terms of what works, for whom and how, a recent meta-analysis (Raposa et al., 2019) of 70 studies of youth mentoring suggests larger effect sizes for programmes that include a greater proportion of young males, services that employ a larger percentage of male mentors or those with a helping professional background (e.g. social worker, counsellor, psychotherapist), and initiatives designed with shorter meeting times. There is little rigorous research on the specific impacts of mentoring on young people of colour, but a recent systematic review (Sánchez et al., 2018) highlights that mentoring can support young Black males with academic outcomes, reduce risky behaviour and encourage positive internalised racial identity. However, the effectiveness of mentoring for young Black males is mediated by the cultural appropriateness of the programme, parent/carer involvement and the ethnicity of the mentor, among other factors.

There are diverse forms of mentoring delivered across organisations, but the evidence suggests that various forms can be effective (DuBois et al., 2011; Raposa et al., 2019), providing it is of high quality (Armitage et al., 2020; DuBois et al., 2011; Garringer et al., 2015; Podmore, Fonagy and Munk, 2018).

Many of the studies included in these reviews were of manualised models with a duration of mentoring of 6–12 months or longer. However, several programmes have shown positive outcomes over 6–16 weeks, particularly on peer social skills and self-management ability (Plourde, Thomas and Nanda, 2020; Wyman et al., 2010). The evidence that short-term mentoring can be effective was important because early consultation with youth organisations indicated that a waitlist RTC design was acceptable while an inactive control might not be, so the intervention needed to be one of sufficiently short duration for a waitlist to be appropriate.

Feasibility study

A feasibility study (Hall et al., 2023) was first undertaken. This involved a smaller-scale RCT involving nine youth agencies (referred to as delivery partner organisations [DPOs]) and 93 young people who were randomised either to receive a short-term mentoring provision or to a waitlist. An implementation and process evaluation (IPE) was also undertaken.

A shared practice model was developed for the feasibility trial with the full cohort of 17 DPOs to create a model of mentoring practice sufficiently consistent for a trial but flexible enough to align with the DPOs' usual practices. We stayed in touch with the DPOs not involved in the feasibility trial so that we could involve them in the efficacy trial.

Extensive support was provided to the participating DPOs during the feasibility trial, including weekly one-to-one meetings with a named contact in the study team, as well as workshops and guidance resources. A bespoke online data portal was used to manage consent, randomisation and data collection. The IPE involved qualitative research with DPO staff and mentees, as well as the collection of data to assess fidelity to the shared practice model, including a short feedback survey completed during mentoring by mentees, a mentor survey and programme administrative data.

Eight criteria were agreed upon between the evaluation team and YEF for progression to the next evaluation stage, and those criteria were fully met. Given the success of the feasibility trial, the decision was made to proceed directly to an efficacy trial rather than to a pilot trial as had initially been planned.

The feasibility study provided essential learning for this efficacy trial. The efficacy trial involved the nine DPOs that had taken part in the feasibility trial, plus a further eight that had joined the feasibility study from the start and been involved in the early design work but had not taken part in the feasibility trial.

Some changes were made in moving from the feasibility to the efficacy trial, details of which are provided in full in Appendix F:

- The mentoring intervention model was adapted to provide a minimum of 12 mentoring sessions over 12 weeks rather than eight sessions over 12 weeks as per the feasibility study. This change was made in response to feedback from DPOs and young people.
- The trial design was largely unchanged, but more time was allowed for onboarding, consent and baseline measurement.
- The secondary outcomes measure was changed to a measure thought to be more sensitive and able to detect short-term change (see the Methods section below).

- The support arrangements were changed slightly, again in response to feedback. Weekly individual sessions were retained, drop-in sessions were replaced with a pair or 'buddy' arrangement between DPOs, emails were used in place of Slack for centralised messaging and some improvements were made to the data portal.

Overview of evaluation

The efficacy trial involved 17 DPOs. The RCT involved two arms per DPO: an intervention arm and a waitlist control arm. Young people aged 10–17 who met at least one of a set of 'unmet needs' (Appendix A) were eligible to take part. The unmet needs were identified by YEF based on evidence about disadvantage and risk of exposure to and involvement in youth violence and included aspects of the young people's family and personal circumstances, school-based behaviours and involvement in risky or criminal activity.

Randomisation occurred on an individual basis, with allocation within each DPO at a ratio of 50:50 per DPO. A total of 744 young people took part in the trial. The primary outcome measure was the Strengths and Difficulties Questionnaire (SDQ) total difficulties score, and secondary socio-emotional skills development outcome measures drew on items used in evaluations of the National Citizen Service (NCS; Fitzpatrick et al., 2021). The four NCS measures were selected based on the theory of change that was co-developed with participating delivery organisations and the primary perceived outcomes identified through interviews in the previous feasibility study.¹ This design provided a robust assessment of the impact of a short-term mentoring model, and the feasibility study suggested it would be viable at the scale required.

The IPE involved programme administrative data, data from support sessions, a survey of mentors, a mentee feedback survey and in-depth interviews with DPO managers, mentors and mentees. This provided the data needed to address the research questions, and drawing on multiple sources rather than a single data source allowed for triangulation and increased the robustness of the design.

Intervention

The intervention (a shared practice model of short-term mentoring), delivered between March 2023 and January 2024, is detailed below. We have chosen to describe the approach to mentoring using the structure of our shared practice model, as it allows us to report on all the key themes of the approach while covering all elements outlined in Step 1 of the Early Intervention Foundation's ten steps to evaluation success.

To develop and deliver a mentoring model that aligned with grassroots community provision, 17 DPOs were recruited across England and Wales. The efficacy trial involved 17 DPOs located in:

- Greater London (4)
- South East (2)
- South West (2)
- West Midlands (2)

¹ NCS was chosen following a wide exploration of available validated scales and the YEF outcomes database. This did not identify any validated scales that were as closely aligned with the theory of change, fitted the age range and were sufficiently condensed to be appropriate.

- Yorkshire (2)
- East Anglia (1)
- East Midlands (1)
- North West (1)
- South Wales (1)
- Pan-Wales (1)

Recruitment of DPOs for the study began in mid-September 2021, prior to the feasibility trial (see earlier and Hall et al., 2023). Youth organisations were invited to submit an expression of interest (EOI) to become research project DPOs, some of which would be involved in both the feasibility and efficacy trial,² with others only getting involved at the efficacy stage. The aim was to recruit DPOs that had prior mentoring experience from a range of contexts and settings (e.g. education, criminal justice, and work with girls and young women). These invitations were conveyed proactively via email (e.g. to partners, networks and delivery organisations), pages on partner websites (e.g. YEF, Centre for Evidence and Implementation [CEI] and YMCA George William College [the College]), pages on stakeholder websites (e.g. National Youth Agency, UK Youth, Comic Relief and BBC Children in Need) and via Twitter (now X). The parameters for participating organisations were communicated clearly in order to reduce the number of speculative or ineligible EOIs. A high level of information was shared in a variety of formats to support potential DPOs in considering deeply whether participation in the trial was the right choice for them. This included briefing papers, frequently asked questions and a pre-EOI checklist.

Fifty youth agencies submitted EOIs. All interested organisations were invited to sign up for one of two information sessions that were scheduled for the end of September 2021, with the final deadline for confirmation of interest set as 13 October 2021. Following the deadline, 25 youth organisations were shortlisted, all of which then attended an interview. Interviews were held online, with potential DPOs represented by both the CEO (or equivalent) and the lead staff member for mentoring delivery. Two members of the study team participated in each interview. All interviews were scored via a common scoring system (Appendix E), and two assessment panel meetings were held to select the final 18 DPOs to participate in the project (out of 50 who submitted an initial EOI).³ One DPO withdrew prior to the start of the feasibility trial, leaving a cohort of 17 organisations.⁴

The 17 DPOs represented a range of youth work provision and delivery with a variety of populations. For some DPOs, mentoring was their primary or only offer; for some, it was the highest level of support available, while for others, it was the lowest level of support available. DPOs also represented a mix of rural and urban locations. Most DPOs delivered mentoring from a central location or youth centre, while some delivered within schools or other community-based settings.

Development of the shared practice model

² At the time, DPOs were invited to take part in a feasibility and/or pilot trial. However, the success of the feasibility trial led to a decision to go straight to an efficacy trial without a pilot stage.

³ Details about the criteria used to recruit, shortlist and select DPOs for the trial can be found in the Feasibility Study Report (Hall et al., 2023).

⁴ Nine of the 17 DPOs were randomly selected to take part in the feasibility trial, with the remaining eight coming on board at the efficacy trial stage.

Central to the delivery of the feasibility and efficacy trials was the development of and adherence to a shared practice model of mentoring (the intervention). The shared practice model was initially developed for the feasibility trial with all 17 DPOs that participated in the efficacy trial involved. The aim was to develop a model of practice sufficiently consistent for a trial but that captured the key components of the DPOs' usual flexible or responsive practice. The resulting model, while not manualised, specifies clear core elements for mentoring organisations to work to in order to ensure quality and consistency while allowing for variation depending on the delivery context.

The approach to developing the shared practice model was practice-led and evidence-informed, developed first by conducting a rapid review of academic, grey and practice literature relating to mentoring practices, models and impacts (Appendix J). This focused on systematic reviews, meta-analyses and empirically supported quality and practice frameworks. This review was initiated in August 2021 and completed in November 2021, and it identified key quality dimensions in mentoring programmes. The shared practice model draws heavily on this review and also on Garringer et al.'s (2015) *Elements of Effective Practice for Mentoring TM* (4th Edition), which consolidates the most common evidence-informed elements of mentoring models. This text was majored on as very few studies outline specific features of mentoring that are linked to effectiveness while at the same time recognising that these features can be implemented in non-manualised provision. Garringer et al. (2015) was the only source found that identified a number of empirically based best practices for mentoring. The main structural features of the shared practice model (i.e. recruitment, screening, training, matching and initiation, support, and closure) were described by Garringer et al. (2015) as evidence-based standards. Within each of these standards are the specific elements, or benchmarks, by which the quality of the mentoring process can be assessed.

For this study, mentoring is defined as a formal, supportive developmental relationship between a young person and an adult that is intended to support and intentionally target young people's behaviours, emotions, and relationships and positive socio-emotional skill growth. Mentors can offer support, guidance and concrete assistance to the mentees and should model positive socio-emotional behaviours for young people.

The basic programme structure for the shared practice model of mentoring was developed based on the evidence review phase, which was then further refined through collaborative online workshops with all 17 DPOs. Three workshops were organised with DPOs as part of the development phase with representatives from all seventeen DPOs. The workshops focused on building an understanding of the trial and shared practice model and how they relate to the participants' mentoring practice before asking DPOs to describe their mentoring approach. The workshops utilised an online whiteboard platform (Miro) and small discussion groups to enable DPO representatives to provide information about their mentors, service users and activities over the course of a mentoring relationship and establish key points of similarity and difference in their practice. The common elements were then considered the core components of the shared practice model unless they did not align with the study requirements and/or there was evidence that they were harmful.

Using participants' responses from the workshops, combined with evidence from the literature review (Appendix J), the draft shared practice model was adapted and shared with the DPOs in early January 2022. During this workshop, the DPOs reviewed the shared practice model, assessing it against their own approach. The key dimensions of quality and fidelity were discussed in some detail. Through this process, we established core and flexible components of the model that define the quality and intended impact of

mentoring practice. The components were organised within the structure of recruitment, screening, training, support and closure. Refining the shared practice model with the DPOs was important and helped to secure their buy-in to the approach.

The shared practice model was used in the feasibility trial (Hall et al., 2023) and slightly modified before transitioning from the feasibility trial to the efficacy trial. Potential changes to the core elements of the model were proposed and discussed with DPOs, allowing space for reflection through one-to-one discussions. The key change we considered was the duration of mentoring, balancing the need to make it long enough to have the best possible chance of effectiveness against not losing participants by making the waitlist period unattractive. We considered extending the duration to between 12 and 16 weeks. All DPOs were invited through email, phone or Zoom to share their views on the implications for their organisation, their capacity to deliver, and the potential impact on young people on the waiting list. Following this, a minimum of 12 sessions in 12 weeks was agreed.

In summary, the shared practice model of mentoring included:

- Dosage: a minimum of 12 sessions of at least 45 minutes over the course of 12 weeks. A driving consideration for the selection of 12 weeks as the minimum period was that DPOs had been recruited based on an RCT involving a waitlist design, and 12 weeks was considered an acceptable length of time for the control group to wait for mentoring without adverse effects. In addition, there is evidence that initial positive changes can be achieved from mentoring and similar interventions in this period, and the DPOs concurred that they considered it feasible to initiate positive change for young people over this period.
- Target population: mentees aged 10–17, with the requirement that at least 70% should be 10–14 years old; and mentees exhibiting at least one of the YEF-identified unmet needs related to their disadvantage but not at a point of crisis for youth violence (Appendix A).
- This population was selected as representative of the young people already engaging in provision with the DPOs, and it is in line with YEF's focus.
- Mentors: adult (rather than peer) mentors who are paid (rather than volunteers) and have received a minimum of two hours of training, with the same mentor to deliver mentoring to the mentee for consistency. These requirements were set as the literature shows that they minimise the variability in the quality of mentoring practice (Garringer et al., 2015) and as common practice in the selected DPOs. Additionally, the evaluation requirements required significant time from mentors, which would typically be outside the scope of a volunteer's role.
- Mentoring components: an initial mentor–mentee meeting to be held prior to the start of mentoring, a written plan used during mentoring and a DPO-defined closure process followed at the end of mentoring. These were identified in the review as key components of quality mentoring and were confirmed as common and good practices by the DPOs in the workshops.
- Mentoring interactions: mentoring delivered on a one-to-one basis in a safe space, trust building, goal setting used as part of delivery and voluntary participation of the mentee. Again, these key components of quality mentoring were identified in the review and agreed on as common and good practices by the DPOs in the workshops.

Table 3 shows how key practice elements are organised within the main structural features of the shared practice model: recruitment, screening, training, matching and initiation, support, and closure. The easy-read and full shared practice model are shown in Appendices C and D.

Table 3: Key practice elements

Recruitment	<ol style="list-style-type: none"> 1. DPOs will recruit young people for mentoring through their existing work, relationships and referral pathways that enable them to reach young people they believe to be eligible. 2. DPOs will have written recruitment materials to advertise the mentoring offer, including information about structure, eligibility and being part of a trial. 3. A ‘champion’ will be appointed within each DPO, ideally at a senior level within the organisation, to oversee and support recruitment. 4. DPOs will have a process for accepting referrals and registrations of interest to take part in mentoring.
Screening	<ol style="list-style-type: none"> 1. Written criteria for assessing young people’s eligibility for the mentoring offer are used. 2. Young people are not to be disqualified on the basis of having complex needs, but those in need of immediate support will not be eligible. 3. Onboarding to the programme will be formalised in writing following successful screening.⁵
Training	<ol style="list-style-type: none"> 1. Mentors will have received a minimum of two hours of training prior to starting relationships, which includes the DPO’s mentoring approach, safeguarding policies, and procedures and risk management processes.
Matching and initiation	<ol style="list-style-type: none"> 1. DPOs will have a process for reflecting on mentor–mentee matchings and considering the qualities of the match. 2. An initial meeting will take place that includes relationship building and discussion of boundaries.
Support	<ol style="list-style-type: none"> 1. DPOs will have a written programme plan to guide the 12+ week mentoring relationship. 2. Key quality dimensions are intentionally attended to through the mentoring relationship.

⁵ This component was subsequently dropped as unnecessary.

- Young people feel able to trust their mentor.
 - Relationships between mentors and mentees are high quality.
 - Spaces where mentoring takes place are emotionally and physically safe.
 - With the support of their mentor, young people set and review goals.
3. Young people have the same mentor for the 12+ week period.
 4. A mentoring session is a minimum of 45 minutes long and includes a discussion relevant to the mentoring programme and the young person's goals.
 5. Over the 12+ week period, there should be a minimum of 12 sessions.
 6. If the mentoring is extended beyond 12 weeks, reasons should be documented.
 7. Mentors will be supported throughout the mentoring programme by a line manager for practice development and resolution of risks and issues.
 8. Mentoring will predominantly be delivered in face-to-face sessions, although a minority of sessions can be delivered online where appropriate.
 9. Mentoring can take place in any setting, providing it is conducive to a minimum 45-minute duration mentoring session.

Closure

1. DPOs will have a closure process that includes giving notice of closure to the young person, agreeing to it in advance of the final session and reviewing any scope and boundaries for post-mentoring contact.
2. Closing documentation is issued to the young person at the final session, clearly communicating that mentoring has finished.
3. Early withdrawal or exit is recorded, along with any known reasons and relevant mentor reflections.

Theory of change

An associated theory of change was developed alongside the shared practice model of mentoring (see Appendix B). In May 2022, a theory of change workshop was held for all nine DPOs participating in the feasibility study, during which we collaboratively created and refined a collective theory of change for the shared practice model that was applicable to all DPOs. This theory of change identified several target outcomes, including socio-emotional skill growth, improved relationships, improved behaviours and emotions, and a reduction in violent behaviours, among others.

According to the theory of change, as reflected in effective youth provision in general (McNeil and Stuart, 2022), young people who experience high-quality mentoring practices are expected to develop positive relationships with mentors and demonstrate increases in wellbeing and socio-emotional skills. The mechanisms of change associated with mentoring include high-quality relationships between mentor and mentee, trust building, consistency of support, goal setting, and meeting in a safe space. Collectively, this grouping of positive personal and social factors was expected to decrease young people's vulnerability to violence and increase their confidence, resilience and prosocial behaviours. As indicated in Appendix B, the theory of change highlights how young people with unmet needs or at risk for exposure to or involvement with violence benefit from high-quality supportive relationships with adults.

Mentoring relationships are nested within organisations and the wider community (Garringer et al., 2015). Consequently, mentors who receive the most support from their organisations (e.g. material resources, supervision and professional development training) are expected to implement the highest-quality mentoring practices and have the most significant and enduring effects on young people's behaviours, relationships, emotions and socio-emotional skill growth.

In summary, the theory of change outlines a chain of causal effects that flow from mentoring practices with organisational support to young people's engagement, socio-emotional skill growth, prosocial behaviour and wellbeing. The shared practice model is designed to strengthen core links in this chain of causal effects, thereby promoting young people's skill growth.

Support provided to delivery partner organisations

The evaluation team provided extensive support to DPOs during the efficacy trial. Support for the implementation of the mentoring model, and to adhere to the trial requirements, was provided by the evaluation team, guided by the findings of a rapid review of multi-site trials (MSTs) (Appendix I). The review highlighted the importance of communication to identify and mitigate any arising challenges. Key support approaches were engaging delivery staff in the purpose of the trial, providing training and materials for any data collection activities, and monitoring progress and fidelity.

Support in the set-up phase included two workshops, one in January 2023, ahead of the launch of the trial and the second in February 2023, at the start of the trial. The first workshop covered shared learnings from the feasibility study, including recruitment tips, and prepared DPOs ahead of the launch with an overview of the trial aims and an overview of the portal that would be used in the trial. The second workshop revisited the shared practice model and went through this, the trial procedures, and the support available to DPOs.

Further support was provided to DPOs for delivering mentoring during the trial and building on the support provided during the feasibility trial. This included a set of guidance documents shared with DPOs at the workshops and then compiled in a shared folder for ease of access. These documents included:

- A detailed outline of the shared practice model (including a one-page infographic) (see Appendix C)
- The Delivery Handbook (see below);
- The Data Portal Manual (see below);
- The theory of change (Appendix B);
- Information sheets and consent forms;
- A glossary of research terms; and
- Recordings of all key workshops and briefings.

The Delivery Handbook provided detailed information about the mentee recruitment process, the measurement instruments, procedures (including data collection timelines) and how to support mentees during the data collection process. The data portal manual outlined how to set up the mentor and mentee profiles, complete the consent process and enter the outcome and other survey data.

Additionally, the evaluation team provided extensive support to DPOs during the trial, which included:

- Short videos describing the trial requirements for DPO staff to review content and support the onboarding of new staff;
- A bespoke online data portal to manage consent, randomisation and data collection;
- Portal support available via email or phone;
- Fortnightly one-to-one meetings with a named contact in the study team;
- ‘Buddy pods’ of three or four DPOs to provide peer support and share successful approaches to trial delivery;
- A weekly centralised update from a dedicated YMCA George Williams College email address, which covered key progress, actions required and signposted to documents in the shared folder at relevant time points; and
- A dedicated YMCA George Williams College email address to signpost parents/carers to so they could reach out to the study team if they wanted to discuss anything relating to the trial and consent process.

The shared practice model was generally delivered with high fidelity by all 17 DPOs based on bespoke fidelity scoring criteria and reported in the IPE findings section. The evaluation team provided significant support to DPOs throughout on the trial arrangements. The majority of issues were experienced during the recruitment phase of the trial, with some pertaining to elements of delivery and data collection. These issues are discussed in detail in the report.

Evaluation objectives

The objectives of this study were:

- To test whether it is possible to support a group of community-based youth organisations to deliver an RCT and to understand the capacity and support needs of youth organisations to do so.
- To test whether it is feasible to develop and support the delivery of a shared model of practice, which is described and applied with sufficient consistency for a trial and which aligns with existing youth agency practices.
- To test the impact of short-term mentoring on the behaviours, emotions, relationships and socio-emotional skills development⁶ of young people at risk of youth violence.

The study aims to generate important learning about how to undertake MSTs with small youth organisations and of non-manualised practices. These objectives have been approached by addressing the following research questions.

Research questions

- RQ1:** What is the impact of short-term mentoring on a) behavioural, emotional and relationship problems and b) socio-emotional skills of young people at risk of youth violence, compared with services as usual?
- RQ2:** Has the mentoring practice model been delivered as intended and as per the specified core components? What adaptations are made and why?
- RQ3:** How feasible is the practice model? What barriers and enablers were encountered in working to the practice model; how were these addressed?
- RQ4:** Is the model viewed as acceptable and an improvement on services as usual by the delivery partners, and is it acceptable to young people?
- RQ5:** How does it differ from the mentoring approach/es previously used by DPOs and from other services as usual?
- RQ6:** How feasible are the requirements for recruitment, consent, randomisation and data collection? What barriers and enablers were encountered; how were these addressed?
- RQ7:** Are the efficacy trial arrangements viewed as acceptable by DPO staff and by young people?

The YEF website published a protocol (Lewis et al., 2023) and statistical analysis plan (Purdon, 2023).

Ethics and trial registration

⁶ We used the term 'social and emotional learning' in the trial protocol but adopted 'socio-emotional skills development' throughout this report as it is more expressive of an outcome.

Ethical approval for the RCT and IPE was obtained from the University of Cumbria Research Ethics Committee (Ref 22/23), and the trial was registered with the ISRCTN registry (ISRCTN76496069).⁷

Informed consent to participate in the trial was obtained, on an individual level, for all participants. Informed consent was required from each young person and their parent/carer before any data collection or mentoring support could proceed. Consents covered participation in the trial, participation, if invited, in the IPE interview, and consent to data archiving. Young people were provided with young-person-friendly materials explaining the study and were given the opportunity to ask questions to a member of the DPO staff before completing a paper or online consent form. The information sheets and consent forms had been developed in consultation with young people with similar characteristics to the intended participant group, who were taking part in a different project with the College. Mentors also verbally checked for ongoing consent throughout the duration of the trial. Parents/carers were sent an information sheet before completing a paper or online consent form. Some DPOs used group sessions to explain the trial and collect consent, and they found this to be very effective.

DPO managers and mentors were also provided with information sheets and provided informed consent via an online form.

Examples of recruitment documentation can be found in Appendix H, and Data Privacy Notices can be found in Appendix K.

Data protection

The Data Protection Impact Assessment undertaken for the feasibility trial was reviewed and updated for the efficacy trial. A Data Privacy Notice, embedded as a link in the information sheet, was made available to study participants informing them of their rights. This also set out the purpose of data processing and data retention periods and which organisations had access to data and arrangements for archiving. The privacy notices are shown in Appendix K.

The lawful basis for processing personal data is legitimate interest (General Data Protection Regulation [GDPR] Article 6). YEF has provided a grant to CEI, Bryson Purdon Social Research (BPSR) and the College to carry out the study. The processing of data collected is expected to have social benefits in relation to understanding how to undertake this type of research and effective services for young people at risk of youth violence, with a limited privacy impact on the individual.

The lawful basis for processing personal data is consent (GDPR Article 9). The special category data collected are racial or ethnic origin, sexual orientation and special educational need and disability (SEND) status, as requested by YEF, to record the reach of the trial. Informed consent was collected from all participants in the research.

CEI, BPSR and the College were joint data controllers. Data were processed during the recruitment, appraisal and selection processes so that the evaluation team could communicate with prospective DPOs and carry out necessary due diligence checks. The minimum necessary data required to carry out each task was collected.

Data sharing agreements (DSAs) were already in place between feasibility trial DPOs and the evaluation team, as well as within the evaluation team, and these covered both feasibility and efficacy trial

⁷ <https://www.isrctn.com/ISRCTN76496069>

arrangements. DSAs between new efficacy trial DPOs and the evaluation team were signed before the start of the study.

The data portal was used to upload and transfer consent forms, programme administrative data and survey data. DPOs had access to their own organisations' programme administrative data. The study team had an overview of all data during the data collection period. Survey data was not available to DPOs and only made available to the evaluation team once the data collection had ended. Survey data were pseudonymised before being shared within the evaluation team for analysis using a unique participant identification number assigned automatically by the portal. Interview data were stored securely, accessible only to the CEI evaluation team and not shared with any other partner. No personal data were shared, stored or accessed outside the UK or EU.

At the end of the project, the evaluation team will produce data sets to enable pseudonymised data to be archived, with the Department for Education pupil matching reference, in the YEF Data Archive. According to YEF's guidance, data will be stored for as long as necessary for the purpose of evaluating the long-term impact of YEF-funded projects. Their approach is in line with GDPR on the principle of scientific research, archiving in the public interest or for statistical purposes. YEF reviews its data storage every five years to assess the continued benefit of data storage.

The evaluation team will securely destroy their data sets two years after completion of the final report.

Project team/stakeholders

Centre for Evidence and Implementation

- Jane Lewis (Managing Director, JL): principal investigator and project lead, involved in all stages, reviewed and edited the report, and accountable for the project overall
- Dr Sweta Gupta (Principal Advisor, SG): responsible for the day-to-day project management and coordination of the impact evaluation
- Dr Stephanie Smith (Principal Advisor, SS): responsible for the design and delivery of the feasibility study
- Jamie Rowland (Advisor, JR): undertook the IPE, provided research support to the evaluation and to DPOs, wrote up the IPE, and reviewed and commented on the report
- Amy Hall (Advisor, AH): undertook and wrote up parts of the IPE, provided research support to the evaluation and to DPOs, undertook and wrote up the fidelity analysis, and reviewed and commented on the report
- Anne-Marie Baan (Principal Advisor, AMB): assisted with IPE data collection
- Paula Verdugo (Senior Research Assistant, PV): assisted with the analysis of IPE data

YMCA George Williams College

- Bethia McNeil (Director of the Centre for Youth Impact, BM): led the development of the shared practice model, provided oversight of and support for GWC input, and reviewed and commented on the report
- Hannah Quail (Qualitative Research Lead, HQ): oversaw and provided logistical and communications support to DPOs, wrote up support arrangements, and reviewed and commented on the report
- Josef Fischer (Data Product Lead, JF): designed and managed the data portal and contributed to support of DPOs and data analysis.
- Zunaira Mahmood (Research and Projects Assistant, ZM): provided logistical and communications support to DPOs

Bryson Purdon Social Research

- Dr Susan Purdon (Partner, trial statistician, SP): jointly led the design, implementation and oversight of the RCT; designed data collection tools and randomisation procedures; undertook the analysis of outcomes data; wrote up trial design, procedures and data analysis; and reviewed and commented on the report.
- Caroline Bryson (Partner, social science researcher, CB): jointly led the design, implementation and oversight of the RCT; designed data collection tools and randomisation procedures; undertook the analysis of outcomes data; wrote up trial design, procedures and data analysis; and reviewed and commented on the report.

Funding for the study was provided by the YEF, which met regularly with the evaluation team to be updated on progress and signed off on the protocol and statistical analysis plan.

Members of the evaluation team have no other potential interests to declare.

Delivery partner organisations

The following are the lead contacts with each of the 17 DPOs, who have key responsibility for delivering the trial and the intervention within their organisation.

- Lea Misan, Executive Director, Act for Change
- Leila Irrobeh, Manager, Education and Skills Development Group (ESDEG)
- Heather Russo, Head of Service, The Enthusiasm Trust
- Emma Rush, Youth Work Coordinator, Mancroft Advice Project (MAP)
- Nick Corrigan, Director, Media Academy Cymru Ltd
- Donna Taylor, Director of Therapy, NAOS (Bristol) CIC
- Krishan Singh, Senior Manager, Positive Youth Foundation
- Megan Rhodes, Head of Schools and Mentoring, Reaching Higher

- Adam Muirhead, Director of Youth Work, The Trust for Developing Communities (TDC)
- Andy Reid, CEO and Founder, Buddy Up
- Alex Kurek, Programme Coordinator, Dame Kelly Holmes Trust
- Andy Sykes, CEO, Emerge
- Flavia Docherty, CEO, Getaway Girls
- Christina Cain, Programme Development Manager, Power2
- Nichola Smith, Head of Fundraising, SOFEA
- Tim Wakefield, Chief Executive Officer, Switch Midlands CIC
- Melanie Ryan, Youth Work Researcher and Coordinator, The Welsh Association of Youth Clubs (Youth Cymru)

Impact Evaluation Methods

Trial design

The efficacy trial was run as a two-armed RCT involving 17 DPOs. Within each DPO, young people were randomly allocated to one of two arms: an intervention arm and a waitlist control arm,⁸ with an allocation ratio of 50:50 per DPO. Each DPO aimed to recruit 50 young people, with a total intended sample size of approximately 850. In practice, a total of 744 young people were recruited and randomised. The trial design is summarised in Table 4.

Young people in the waitlist control group received ‘services as usual’ (that is, the typical provision provided by the DPO or by an agency to which they referred a young person, including group sessions, sports and trips, but excluding formal one-to-one support). The intervention group was similarly expected to receive services as usual, as well as mentoring.

The primary outcome measure was the SDQ total difficulties score, a measure of young people’s behaviour, emotions and relationships. The SDQ is included as a common measure in YEF evaluations, wherever possible, to maximise learning across the projects it funds. A set of secondary outcome measures captured socio-emotional skills closely aligned with short-term outcomes included in the theory of change. These measures are belief-based measures from the evaluation of the (NCS) programme, focusing on (a) self-confidence (leadership and communication), (b) problem-solving and decision-making, (c) teamwork and social skills building and (d) resilience and emotional regulation. All measures are based on young people’s self-reports via online self-completion surveys at baseline (prior to randomisation) and at follow-up. The follow-up was to be completed approximately 12 weeks after randomisation, with the flexibility to extend to 16 weeks to maximise response rates. In practice, many DPOs struggled to engage all of their young people with the survey within this time period, and the time to follow-up was considerably extended to an average (mean) of 17 weeks. Overall, 80% (592) of young people who were randomised into the trial completed a follow-up survey, 77% in the intervention group and 82% in the control group (see Figure 1 later on in the Impact Evaluation Results section).

Table 4: Trial design

Trial design, including number of arms		Two-arm randomised waitlist-controlled trial
Unit of randomisation		Individual young person
Stratification variable(s) (if applicable)		Delivery Partner Organisation (DPO)
Primary outcome	Variable	Behavioural, emotional and relationship problems
	Measure (instrument, scale, source)	Strengths and Difficulties Questionnaire (SDQ) total difficulties score, young person self-report (Goodman, Meltzer and Bailey, 1998), fielded in an online survey 12 weeks after randomisation
Secondary outcome(s)	Variable(s)	<ul style="list-style-type: none">Self-confidence

⁸ The feasibility report looked at the perceived impacts of the mentoring including through interviews with young people, mentors and DPO managers. No unintended negative consequences were highlighted, so it was decided that the control group would be offered mentoring irrespective of the findings on impact.

		<ul style="list-style-type: none"> • Problem-solving/decision-making • Teamwork/social skills building • Resilience/emotional regulation
	Measure(s) (instrument, scale, source)	Self-report items from the Evaluation of the National Citizen Service (NCS) (Fitzpatrick et al., 2021), fielded in an online survey 12 weeks after randomisation
Baseline for primary outcome	Variable	Behavioural, emotional and relationship problems
	Measure (instrument, scale, source)	SDQ total difficulties score, young person self-report (Goodman, Meltzer and Bailey, 1998) fielded in an online survey prior to randomisation
Baseline for secondary outcome(s)	Variable	<ul style="list-style-type: none"> • Self-confidence • Problem-solving/decision-making • Teamwork/social skills building • Resilience/emotional regulation
	Measure (instrument, scale, source)	Self-report items from the Evaluation of the NCS (Fitzpatrick et al., 2021), fielded in an online survey prior to randomisation

Participant selection

Participant selection: recruitment of the young people

Participant eligibility

The eligibility criteria for the trial were that the young people were:

- Aged between 10 and 14 (or up to 17 by exception, with at least 70% of young people aged 10 to 14 in any DPO);
- Exhibiting at least one of the YEF-identified unmet needs related to their disadvantage (list shown in Appendix A); and
- Deemed by DPO staff to be at a suitable level of need for 12 weeks of mentoring. The only exclusion criterion here is that DPOs had to exclude young people facing immediate risk or crisis or for whom being on a waiting list would be potentially harmful.

Participant recruitment

The identification and recruitment of young people to the trial was the responsibility of the DPOs, including determining the threshold of cases that they put forward. Over a recruitment period of March 2023 to September 2023, DPOs used a range of referral routes (e.g. schools, Youth Offending Teams [YOTs], Child and Adolescent Mental Health Teams [CAMHS], other health or social care teams, self-referral or existing service users, and friend or family referrals) to identify potentially eligible young people.

Table 5 shows the referral sources of the young people who were randomised into the trial. The most common referral route – for more than half (57.8%) of the young people – was via their school. Referrals

from other professional routes were relatively uncommon: 6.5% of young people randomised were referred by social services, and a further 4.0% came via CAMHS, YOTs, health or other referral routes. Instead, the other young people randomised into the trial were either existing service users of the DPO (15.5%), had self-referred (3.2%) or had been referred by family or friends (12.9%).

Table 5: Referral sources

Referral source	Number (%) of young people
School	417(57.8%)
Existing service user	112(15.5%)
Friends or family referral	93(12.9%)
Social care	47(6.5%)
Self-referral	23(3.2%)
CAMHS, YOT, health route ⁹ and other routes	29(4.0%)
<i>Base: all young people randomised with information on referral sources</i>	721
<i>Missing</i>	23

Each DPO was instructed to recruit 50 young people to the trial (i.e. to recruit, secure consent and baseline data, and randomise 50 young people). The recruitment process was as follows:

1. The DPO introduced the young person to the idea of mentoring and participation in the trial;
2. The young person was given a young-person-friendly information sheet explaining what their participation involved and was provided with opportunities to ask questions;
3. Eligible and interested young people signed a consent form that set out the data that would be collected, how the data would be used and plans for archiving and sought consent for participation in the trial and the qualitative interviews (part of the IPE);
4. The DPO also sought signed consent from parents/carers. This involved the DPO staff explaining to parents/carers what was involved in the young person's participation in the trial (including the potential qualitative interviews), sending them a consent form and information sheets by email or giving them paper copies and visiting their homes to access information sheets and consent form via DPO laptops/tablets; and
5. Once the young person and the parent/carer had provided signed consent forms, the young person was asked to complete a baseline survey (see the Data Collection section below for more detail) prior to randomisation into either the intervention group (to start mentoring immediately) or into the waitlist control group (to start mentoring at least 12 weeks later).

DPOs were encouraged to hold sessions for young people and parents/carers together to explain about mentoring and participation in the trial, respond to queries and concerns, and collect consent.

In the end, 744 young people were recruited and randomised for the study, with the number varying across DPOs from 29 to 51 (see the Participant Profile section for numbers per DPO).

Delivery location and data collection

⁹ These referral sources have been combined because fewer than 10 young people were referred from each of these routes.

The intervention (short-term mentoring) took place on-site at DPOs' premises, in schools or at other appropriate sites in line with DPOs' usual delivery. The protocol allowed for a minority of sessions to be delivered online as appropriate.¹⁰

DPOs were responsible for managing the data collection process, with ongoing support from the study team (described below). The study team provided the DPOs with a bespoke online data portal to manage the data collection process (see Data Collection below), including an embedded randomisation programme (see the Randomisation section for further details).

The DPOs provided demographic data on each young person,¹¹ as well as the referral route and their level of unmet need,¹² information about mentor session attendance among those in the intervention arm and any other services or support received by those in either arm of the trial. The start date of mentoring for the waitlist control group was recorded. The data collected allowed for both the monitoring of the usual (non-mentoring) services provided to the intervention and control groups and the identification of any contamination, with the control arm receiving mentoring prior to completion of the follow-up outcomes.

The DPOs were also responsible for asking young people to complete the baseline and follow-up surveys at the appropriate time points and emailing or providing them with a link to the online self-completion survey. Young people could complete the baseline and follow-up surveys onsite or at home on a smartphone, tablet, laptop or computer or by using a paper version.

Outcome measures

Outcomes data was collected at two time points – baseline (prior to randomisation¹³) and again at a target date of 12 weeks later.

Primary outcome

The primary outcome was measured using the SDQ (Goodman, 2001), a validated scale of 25 items capturing young people's behaviours, emotions and relationships with an established evidence base.

The SDQ is a common measure included wherever possible in YEF evaluations in order to maximise learning across the evidence base being developed by YEF-funded projects. The SDQ measures intermediate risk and protective factors of offending among young people, with its scores known to correlate with levels of offending (van Domburgh et al., 2011). As such, its consistent inclusion in evaluations provides YEF with data about the extent to which its funded projects might reduce the risk of young people remaining or becoming involved in offending behaviours. This is particularly relevant for upstream interventions (including the mentoring funded in this trial), where it would not be feasible to measure offending behaviours over the trial's delivery period.

The trial adopted the self-report version, suitable for 11- to 17-year-olds.¹⁴ It includes five subscales, each with five items, that measure 1. emotional symptoms, 2. conduct problems, 3. hyperactivity/inattention, 4.

¹⁰ The feasibility study showed that online sessions were employed rarely, so no limit was enforced on the number of sessions.

¹¹ Age, gender, ethnicity, SEND, whether a looked after child (LAC) and eligibility for free school meals (FSM).

¹² Using YEF's standard list to check for eligibility for the trial.

¹³ Randomisation was on the same day as the baseline for 51% of young people and within two weeks for 88% of YP. A mentor had to be available to begin the mentoring with anyone who might be allocated to the intervention before randomisation was done.

¹⁴ Parent/carer and teacher versions are also available.

peer problems and 5. prosocial behaviour. Young people score from 0 to 2 on each item using a scale of 'not true', 'somewhat true' or 'certainly true', thus producing a score for each subscale from 0 to 10. For all but the prosocial behaviour subscale, a lower score is a better outcome.

The primary outcome in the analysis of the efficacy trial is the mean of an overall 'total difficulties' score (from 0 to 40), calculated by summing the first four subscales. The calculation of the scores follows the standard SDQ scoring rules. The total difficulties score is only calculated for a young person where all four subscales have a valid score (that is, at least three of the five items have been answered), others being set to missing. Each subscale is calculated as (total subscale score) \times 5/(number answered).

Secondary outcomes

Four secondary outcome measures measured short-term socio-emotional skills, with the questions taken from previous evaluations of the NCS programme (Fitzpatrick et al., 2021). These items were chosen as likely to reflect changes in outcomes after 12 weeks of mentoring.

The decision to use the NCS items was based on (a) the face validity of the items, which speak directly to the theory of change and the 12-week outcomes reported by mentors and mentees in the feasibility trial (including improved confidence, problem-solving, decision-making, and emotional regulation) and (b) while not validated, their proven sensitivity in other studies to change over a three-month period.¹⁵

We included 21 NCS items which, between them, cover the following belief-based domains (as set out in the NCS evaluation report): (a) self-confidence: leadership and communication (seven items), (b) problem-solving and decision-making skills (four items), (c) teamwork and social skills building (six items) and (d) resilience/emotional regulation (four items). Seven items use a five-point confidence scale, from 'very confident' to 'not at all confident', while the others use a five-point Likert scale ('strongly agree' to 'strongly disagree'). The NCS evaluations reported on the impact of the programme on each domain by producing separate impact estimates for each item. In contrast, we used principal axis factor analysis to produce four separate outcomes, one per domain.

For the factor analysis, each item within a domain was scored from 1 to 5, with 5 being the most positive score. Those responding with a 'don't know' were coded as a 3 (that is, coded the same as those responding as 'neither confident nor unconfident' or 'neither agree nor disagree').¹⁶ The baseline items were then standardised to a mean of 0 and a standard deviation of 1, and one factor was extracted per domain. Young people with missing data on any item were set as missing for the factor. The factors for the follow-up survey were generated using the same standardisation as for baseline per question (that is, using the baseline mean and standard deviation) and using the same factor score coefficients. One of the six teamwork items ('hard to say no') was excluded from the calculation of the teamwork factor because it was very poorly correlated with the factor extracted when it was included ($r = 0.13$) and similarly poorly correlated with the other five items.

¹⁵ The NCS evaluations (adopting a quasi-experimental design) identified a range of statistically significant impacts across these domains three months after starting an NCS programme. A number of these items also identified significant impacts after 12 weeks in the QED evaluation of the YEF: <https://npproduction.wpenginepowered.com/wp-content/uploads/2021/05/The-YouthInvestment-Fund-Learning-and-Insight-Paper-Seven.pdf>.

NCS was chosen following a wide exploration of available validated scales and the YEF outcomes database. This did not identify any validated scales that were as closely aligned with the theory of change, fitted the age range and were sufficiently condensed to be appropriate.

¹⁶ Analysis excluding those with 'don't know' answers gave almost identical effect size results. See the section on robustness checks.

The four outcomes created have been assessed for internal consistency using Cronbach's alpha. The alpha value for self-confidence (using baseline data) is 0.847; for problem-solving and decision-making skills, it is 0.759; for teamwork and social skills building, it is 0.670; and for resilience/emotional regulation, it is 0.751. A Cronbach's alpha score of 0.7 or higher is considered 'acceptable' in most social science research situations, a threshold that is met for three of the outcomes, with teamwork and social skills being marginally below it. A confirmatory factor analysis across all 20 items verified that there are four underlying factors consistent with the outcomes (Comparative Fit Index = 0.952, Tucker-Lewis Index = 0.944 and root mean square error of approximation = 0.062).

The full list of items is included in Appendix L.

Exploratory outcomes

Beyond the SDQ total difficulties score (the primary outcome), further SDQ outcomes were included in exploratory analysis. These outcomes are the prosocial SDQ subscale (scored 0 to 10, with a higher score more positive) and two subscales measuring internalising and externalising problems (each scored from 0 to 20, with a lower score denoting fewer problems), known to provide intermediate risk and protective factors for offending. The internalising problems subscale combines emotional and peer symptoms subscales, while the externalising problems subscale combines conduct and hyperactivity symptoms subscales. These analyses had been set out in the Statistical Analysis Plan, and it was considered appropriate to test the impact of mentoring on this measure given that the prosocial subscale is not included within the total difficulties score.

As with the calculation of the SDQ total difficulties score, the internalising and externalising scales are only calculated where both subscales within the scale have a valid score.

Data collection

An online data portal was developed to capture the outcomes data, as well as all other quantitative trial data.

The outcomes data was collected via an online self-completion survey of young people hosted by the evaluation team, with the baseline survey completed prior to randomisation and the follow-up survey completed 12 weeks later (with flexibility to 16 weeks to maximise response rates). The survey was distributed to young people by DPO staff using the portal and completed in TypeForm, an online survey platform. In practice, many DPOs struggled to engage with all of their young people within this time period, and the time to follow-up was considerably longer than intended, at an average (mean) of 17 weeks. The mean was not, however, significantly different for the two arms of the trial (16.7 weeks for the intervention group and 17.4 weeks for the control group; the p-value for the test of difference in the means being 0.08).

In addition, the protocol stipulated that for the waitlist control group, follow-up outcomes must be collected prior to their starting mentoring, although this did not prove to be practical in many cases. Around 30% of the control group started mentoring at least three weeks before they completed their follow-up outcomes, although no data was collected on the number of sessions attended in that period. These two unintended effects – the longer interval between randomisation and follow-up and the contamination of at least a proportion of the control group – could bias the trial effect sizes. Post hoc sensitivity analyses have been conducted to test for this (see the section on robustness checks), which suggest that any such bias is minimal.

For each survey (baseline and follow-up), young people were sent an email by the DPO with a link to the online survey. Where this was not feasible, the DPO loaded the survey (using the unique link) onto an organisational tablet or laptop for the young person to complete or provided a paper copy. Depending on capability and/or internet access, this could be completed on a personal device (smartphone, tablet, computer, etc.) at the young person's home or school or at the DPO site. To facilitate full and accurate data collection, we recommended that DPO staff or a parent/carer provide support to any young people unable to complete the survey on their own. However, the guidance stipulated that answers must be made independently and confidentially. Guidance for DPO staff on how to administer the young people's survey and to provide appropriate support was included in the Delivery Handbook provided. The survey was programmed to allow young people to skip any question they would prefer not to answer.

DPOs were responsible for monitoring whether a young person had completed the baseline and follow-up measures using information on the portal about whether a survey had been completed and submitted. However, the documentation provided to young people made it clear that DPOs had no access to their responses, which were only accessible to the research team for evaluation purposes.

Sample size

Each DPO was set a target of recruiting and randomising 50 young people and delivering mentoring to them, with 50 being set as a challenging but achievable number. The expectation was that across all the DPOs, this would give a trial of around 850 young people, around 425 per arm. In practice, some DPOs found they could not meet the target of 50, and the actual number recruited, baselined and randomised was lower, at 744 (372 in the intervention group and 372 in the control group). Of these, follow-up data was collected for 592 (288 for the intervention group and 304 for the control group). For the primary outcome analysis, there were a small number of invalid scores at either baseline or follow-up, giving a primary analysis sample size of 568. Table 6 displays the sample size information according to the intended, the randomised and the actual sample. Figure 1, later in the report, has the details on the flow of participants through the trial.

For a trial of the planned size of 850, it was estimated that effect sizes of around 0.17 standard deviations would be detectable with 80% power. This is in line with the effect sizes found in other trials of mentoring, where effect sizes that average 0.21 standard deviations (sd) have been found across a range of studies and outcomes (Raposa et al., 2019). The minimum detectable effect size (MDES) was calculated in Excel using the formula:¹⁷

$$MDES = (1.96 + 0.84) \sqrt{\frac{2}{n} (1 - R^2)}$$

where n is the expected achieved sample size per arm (425), and R is the correlation between baseline and follow-up outcomes. For the primary SDQ outcome, R was assumed to be 0.5, this being the value found in the feasibility trial (unpublished statistic). The value 1.96 is the z -value for a type I error rate (α) of 0.05, and 0.84 is the z -value for 80% power (type II error rate of 20%).

¹⁷ See for example Section 7.1.2 of Djimeu, E.W., and Houndolo, D-G. (2016) Power calculation for causal inference in social sciences. International Initiative for Impact Evaluation Working Paper 26.

The MDES for the actual achieved follow-up sample size is slightly larger at 0.195 standard deviations.¹⁸

Table 6: Sample size calculations

		Protocol	Randomisation	Analysis
MDES		0.17sd	0.18sd	0.195sd
Pre-test/post-test correlations	level 1 (participant)	0.5	0.5	0.56
	level 2 (cluster)	0	0	0
Intracluster correlations (ICCs)	level 1 (participant)	0	0	0
	level 2 (cluster)	0	0	0
Alpha		0.05	0.05	0.05
Power		0.8	0.8	0.8
One-sided or two-sided?		Two	Two	Two
Number of participants	intervention	425	372	275
	control	425	372	293
	total	850	744	568

Randomisation

The random allocation of young people to intervention and waitlist control was built into the online data portal used by each DPO. Prior to the start of the trial, a ‘randomisation’ series per DPO was generated in Excel by the trial statistician. This generated a randomly assigned column of 1 (intervention) and 0 (control) digits. The first young person randomised was assigned according to the first digit in the column, the second young person to the second digit and so on. The columns were added to the portal but hidden from all but a few senior members of the evaluation team. A copy of the Excel sheet was archived before the start of the trial so that it was possible to check for any divergence from the randomisation once the trial had started.

The randomisation algorithm was based on a merged block randomisation procedure (van der Pas, 2019), which is appropriate for MSTs. It allows for randomisation to be undertaken over time, rather than in batches but ensures a good balance between the two arms both overall and over time. From the perspective of DPOs, the randomisation button on the data portal was only enabled once consent had been recorded as collected and the young person’s baseline questionnaire completed. Once ‘clicked on’, the randomisation was completed, and the allocation was recorded. There was no possibility of it being changed or re-run, and DPOs could not influence the allocation.

¹⁸ For this calculation the formula used is $MDES = (1.96 + 0.84) \sqrt{\left(\frac{1}{n_1} + \frac{1}{n_2}\right) (1 - R^2)}$, where n_1 and n_2 are the sample sizes of the intervention and control arms, respectively.

Since the trial statistician undertook the randomisation and conducted the statistical analysis, the analysis was not undertaken blind to allocation.

Statistical analysis

The analysis of the trial data has been done on an intention-to-treat (ITT) basis. Estimates of impact per outcome are regression-based, with the baseline version of each outcome being entered as a covariate. DPO has been entered as a fixed effect per model. The analysis was conducted in SPSS v28.0.1.1.

Primary outcome analysis

The primary outcome measure for the trial is the SDQ total difficulties score (Goodman, 2001), a measure of young people's behaviours, emotions and relationships included as a common measure in YEF evaluations wherever possible.

The main regression model specification is as follows:

$$(SDQF)_{i,j} = \alpha + \beta_1 Group_{i,j} + \beta_2 (SDQB)_{i,j} + \beta_3 DPO_j + \varepsilon_i \quad (\text{Eq 1})$$

where i = young person belonging to DPO j , SDQF is the SDQ score at follow-up, SDQB is the SDQ score at baseline, Group is set equal to 1 if a young person within a DPO belonged to the intervention group and 0 otherwise, DPO _{j} represent the organisation level dummy variables capturing the DPO level fixed effects, and ε_i is the individual-level error.

Secondary outcome analysis

Four secondary outcome measures were used to measure short-term socio-emotional skills, with the questions being taken from previous evaluations of the NCS programme (Fitzpatrick et al., 2021). These items were chosen as likely to reflect changes in outcomes after 12 weeks of mentoring.

The outcomes are based on 20¹⁹ questions that were distilled into four outcomes using factor analysis (see outcome measures below):

1. Self-confidence: leadership and communication;
2. Problem-solving and decision-making skills;
3. Teamwork and social skills building; and
4. Resilience and emotional regulation.

The analysis of each of the four factors was conducted following the same model specification as the primary SDQ outcome.

Subgroup analyses

Exploratory analysis was undertaken to establish whether there is evidence of subgroup differences in the efficacy of mentoring across the primary and secondary outcomes by gender (male; female). The expectation was that there would be no difference and that mentoring would benefit both groups, and this analysis was included to confirm or refute this hypothesis.

¹⁹ Twenty-one questions were fielded, but as described in the Outcomes section, one was excluded because the data from it correlated very poorly with other items in the scale.

Differential effect sizes per subgroup were tested for via a regression model with interaction terms (randomisation group by gender) added. Effect sizes by gender for the primary outcome are presented and calculated via gender-specific regressions. A similar analysis was planned for ethnic groups, but the sample sizes per ethnic group were too small for the presentation of subgroup effect sizes.

Exploratory analyses

An exploratory analysis was conducted, looking at the effect sizes for three SDQ subscales: the prosocial subscale, 'internalising problems' scale and 'externalising problems' scale. The analysis of each of these subscales was conducted following the same model specification as the primary SDQ outcome.

Also, as an exploratory analysis, a model was run to test whether there was a significant difference in impacts across the organisations in the trial. This was tested by including an interaction term to the primary and secondary outcomes regression models ($Group_{i,j} * DPO_j$). No evidence of between-DPO differences was identified, and they are not reported on.

Missing data

The trial data has two types of missing data: unit missings, where young people fail to complete a follow-up questionnaire, and item missings, where young people did not answer all of the questions put to them. The item missings may occur at both baseline and follow-up.²⁰

We describe and summarise the extent of missing data per outcome and the reasons for data being missing – to the extent those reasons are known. We document how much missing data is unit non-response and how much is item non-response. In practice, the rate of item non-response is very low, and most missing cases in the analysis are attributable to unit non-response at follow-up.

The main ITT regression analysis for the primary, secondary and exploratory outcomes is based on complete cases, which are those for which all of the variables needed for the model are complete. This assumes that missing data is missing completely at random.

The trial achieved an 80% response rate at follow-up (592 of 744). Given that the missing 20% could lead to non-response bias, we have used the baseline outcome variables and young person characteristics to model (via a logistic regression) the probability of a young person being excluded from the analysis because of missing follow-up data. The regression models were then re-run to include, as covariates, the predictors of non-response that are identified from this logistic regression. This helps to establish whether the effect sizes are influenced by the level and nature of missing data under an assumption of missing at random.

The Statistical Analysis Plan suggested that if a regression model covariate had more than 5% missing, multiple imputation would be used to generate multiple data sets with imputed covariates. In practice, missing data on covariates was minimal and less than this 5% threshold, so imputation has not been done.

Finally, the Statistical Analysis Plan suggested that if there was evidence that outcomes data is missing not at random, we would include some estimates of effect sizes based on a range of extreme assumptions about

²⁰ Another type of missing data not included in these two categories is where both baseline and follow-up data are missing. This is because there was only one such case, where, although the young person completed their baseline and were randomised, they subsequently withdrew consent, and their baseline data was deleted.

the missing outcomes. This has not been done because there is no evidence that the reasons for non-response at follow-up are different per arm of the trial.

Compliance

The trial did not adopt a formal definition of compliance. The feasibility trial suggested that most young people allocated to the intervention group would receive at least some mentoring sessions. (In the feasibility trial, 35 out of 46 in the intervention arm completed the target number of eight mentoring sessions, and a further five completed at least six. All attended some sessions, the minimum being two. Just one out of 47 in the control group received any mentoring during the evaluation period.) The target number of sessions was increased to 12 for the efficacy trial, and it was anticipated that a smaller percentage would meet the target, but we still expected the great majority of those in the intervention group to attend multiple sessions.

Given this anticipated high rate of compliance, a formal complier average causal effect (CACE) analysis was not planned and has not been conducted.²¹ As one of the post hoc robustness checks, however, we have looked at the effect sizes for the DPOs that had at least 75% of young people with 10 or more sessions of mentoring, and an informal exploratory CACE analysis is included to put an upper bound on the effect sizes for a scenario where all young people had a large number (eight or more) of mentoring sessions.

Robustness checks

A range of post hoc analyses has been undertaken to test the sensitivity of the effect sizes for the primary and secondary outcomes to a number of unanticipated trial issues, in particular the longer-than-planned average interval between randomisation and follow-up and the fact that around 30% of the control group started mentoring at least three weeks before completing the follow-up questionnaire. These were:

- An analysis restricting the data to those young people completing their follow-up within the period stated in the trial protocol (between 12 and 16 weeks after randomisation);
- An analysis controlling for the time interval between randomisation and follow-up;
- An analysis restricting the data to those DPOs for whom at least 85% of their young people completed their follow-up within the period stated in the trial protocol (between 12 and 16 weeks after randomisation);
- An analysis restricting the data to those DPOs where no more than 15% of the control group started mentoring more than three weeks before completing the follow-up questionnaire;
- An analysis restricting the data to those DPOs where at least 75% of young people in the intervention arm completed at least 10 sessions of mentoring; and
- A simple CACE analysis that aims to generate an upper bound for the effect sizes that might have been achieved had the intervention group all completed at least eight sessions of mentoring and all of the control group had at most seven sessions.

In addition, as is described in the outcomes section, those responding with a 'don't know' on any of the items used to generate a secondary analysis were coded the same as those responding to the middle, neutral category. An analysis was conducted excluding those responding with a 'don't know' on items within each of the four secondary outcome domains to test whether this affected the effect sizes.

²¹ A related reason is that we would not expect to be able to generate unbiased CACE estimates. For unbiased estimation the number of sessions attended would need to be strongly associated with the pre-programme young people characteristics and/or DPO characteristics. Our expectation, borne out, was that a lot of the partial compliance would be attributable to other, unrelated, factors, such as staff absences rather than being related to the characteristics of the young people.

Presentation of outcomes

Effect sizes have been calculated using Hedges' g , as specified in the following equation:

$$ES = \frac{(\underline{Y}_T - \underline{Y}_C)_{adjusted}}{s}$$

where \underline{Y}_T is the regression-adjusted mean for the treatment group, \underline{Y}_C is the regression-adjusted mean for the control group (computed using Eq 1) and s is the pooled unconditional standard deviation of the two groups.

Effect sizes are reported along with confidence intervals and p-values to reflect statistical uncertainty. The 95% confidence intervals are calculated using the upper and lower 95% confidence limits for the adjusted mean difference divided by the pooled unconditional standard deviation. No adjustments for multiple testing were made.

Implementation and Process Evaluation Methods

Role of the implementation and process evaluation

The IPE focused on selected implementation dimensions: feasibility and acceptability of both the shared practice model and the trial arrangements, as well as fidelity. Feasibility and acceptability are identified as ‘leading’ implementation outcomes relevant at the early stages of evaluation (Proctor et al., 2011). We also explored the barriers and enablers DPOs encountered and how they were addressed (see the full set of research questions in the Evaluation objectives section earlier).

Implementation and process evaluation data collection methods

The IPE involved various methods of data collection, which are summarised in Table 7. All data collection processes and instruments were initially developed for the feasibility trial (Hall et al., 2023). They were then refined based on feedback from mentees, mentors and managers, as well as project team reflections, to ensure rich topic coverage while also putting a minimum burden on research participants.

Table 7: Implementation and process evaluation methods overview

Research methods	Data collection methods	Participants/data sources (type, number)	Data analysis methods	Research questions addressed	Implementation dimension
Programme administrative data	Entered by DPOs	All DPOs	Descriptive quantitative analysis	4	Fidelity
Mentor survey	Online survey	Mentors who delivered mentoring as part of the trial (26)	Descriptive quantitative analysis	2–7	Feasibility, acceptability, fidelity, implementation barriers and enablers
Mentee feedback survey	Online survey	Intervention group mentees (299)	Descriptive quantitative analysis	4–6	Acceptability, fidelity
In-depth interviews with DPO managers	Qualitative interview	Managers who led the delivery of the trial in their service (16)	Qualitative thematic analysis	2–7	Feasibility and acceptability of trial and intervention, implementation barriers and enablers
In-depth interviews with mentors	Qualitative interview	Mentors who delivered mentoring as part of the trial (16)	Qualitative thematic analysis	2–7	Feasibility and acceptability of trial and intervention, implementation barriers and enablers plus perceived impacts
In-depth interviews with mentees	Qualitative interview	Young people who received mentoring as part of the trial (21)	Qualitative thematic analysis	2–6	Feasibility and acceptability of trial and intervention, implementation barriers and enablers plus perceived impacts

Programme administrative data

This data was collected via the purpose-built portal, where DPO staff (mentors, managers or administrators as appropriate) systematically recorded key delivery information at predefined stages, including recruitment numbers, date of start of mentoring, attendance, key delivery elements, mentor profiles, young person demographics and other services accessed by young people. The demographic information collected was age at date of consent, sex, gender,²² ethnicity, referral route and whether the young person is a looked-after young person, entitled to free school meals (FSM) or has SEND.

Administrative data was provided by all DPOs, covering 98% of all young people onboarded to the trial (including both the mentoring group and waiting list group).

This data was used to assess the feasibility of the trial (RQ3), adherence to the trial requirements (RQ4) and fidelity to the shared practice model (RQ2). It also provided information about the reach of mentoring and the trial to minoritised ethnic groups and other young people with characteristics relevant to equity.

Support data

The evaluation team kept logs of the frequency and type of support provided to DPOs to capture key activities, events and challenges experienced while delivering the evaluation. However, contact was often ad hoc, with emails and phone calls between fortnightly one-to-one sessions, and the issues raised were duplicated several times across all the DPOs, meaning that systematic and detailed records were not always kept.

Mentor survey

All mentors were invited to complete an online survey at the end of the trial delivery period. The survey was distributed to mentors by email and administered in TypeForm, an online survey platform, and took up to 10 minutes to complete. The mentor survey was used to assess RQs 2–7, namely adherence to the shared practice model, quality of the mentoring delivery, acceptability and feasibility of the shared practice model, and perceived impacts of the mentoring. The survey incorporated a psychometrically tested pragmatic measure of feasibility and acceptability (Weiner et al., 2017). The mentor feedback survey was completed by 26 mentors (of a total of 66), representing 12 of the DPOs.

Mentee feedback survey

All young people in the mentoring group were asked to complete a short online survey, administered in TypeForm and distributed by mentors via the portal in week eight of mentoring. It was designed to take less than five minutes to complete. The mentee feedback survey was used to answer RQs 4–6, with a particular focus on fidelity to the shared practice model, quality of mentoring, and acceptability of the trial and shared practice model to young people. The survey was designed at an appropriate reading level to enable full engagement from young people, and it could be completed either independently or confidentially with support from an adult who would reassure them that their responses were confidential. DPO staff were advised to encourage young people to give their answers confidentially to minimise bias. The survey was adapted and condensed from that used in the feasibility study.

²² It is YEF policy to collect data on the sex of all programme recipients, while collecting data on gender is optional. We chose to include it to ensure that we represented gender identities where these were important to young people.

The mentee feedback survey was completed by 299 mentees (80.6% of mentees in the mentoring group), representing all DPOs.

In-depth interviews with DPO managers, mentors and mentees

The interviews were conducted by phone or online video platform (Zoom or Teams) and audio recorded on secure laptops or encrypted recording devices. Trained interviewers from the CEI team used semi-structured interview guides to ensure key topic coverage, and interviews were flexible according to the focus of the participants, particularly in the young people's interviews. Interview guides were those used in the feasibility stage modified based on feedback and reflections. DPO staff interviews lasted between 30–60 minutes, while young people's interviews lasted 20–40 minutes, depending on their engagement. To ensure the interviews were accessible to young people, we were careful to consider the appropriateness of the interview duration and vocabulary used and incorporated engaging visual cues. Interviews were conducted towards the end of the delivery period so that participants could reflect on the entire process.

One manager from each DPO (total $n = 16$ of a target of 17) and one mentor from each DPO (total $n = 16$ of a target of 25²³) were interviewed towards the end of the delivery period. Where there was more than one mentor involved in delivery, we spoke to the mentor who had mentored the most young people and/or who had led the coordination of mentoring. We had intended to interview at least one mentor and manager from each DPO, but in two cases, the relevant staff member had left the organisation and was not available for an interview. However, we interviewed at least one staff member from each organisation and were able to explore all relevant topics.

We conducted interviews with 19 of a target of 25 young people, representing 14 of the DPOs, shortly after the completion of their mentoring (this timing was chosen to prevent interference in the mentoring relationship). Young people were recruited through mentors. In order to ensure a representative sample of young people, we developed a purposive sampling framework. Each organisation was asked to provide the ID numbers of 10 young people they thought appropriate to invite to participate in an interview, including young people who had been less engaged or stopped mentoring before 12 weeks. DPO staff were asked to use their judgement and not to include young people who might find an interview or further contact distressing or very annoying and to include those likely to be able to engage in a short, informal interview.

The study team then checked which of those young people (and parents/carers) had given consent to be interviewed at the start of the trial and selected two IDs based on their demographics to ensure a balance of interviews across gender, SEND status, ethnicity and age. Young people were only invited to interview once they had been selected to prevent any feelings of rejection. The evaluation team then notified the mentors about which young people had been selected. The interviews with young people were scheduled and facilitated by mentors, and in most cases, the mentor provided support by setting the young person up with the call and providing an introduction to the interviewer to put the young person at ease. Young people who took part in an interview were sent a £20 Love2Shop gift voucher as a thank-you for their time.

In practice, this element of the evaluation was challenging. Mentors found it time-consuming to make contact with young people, particularly once mentoring had ended. It took a considerable amount of liaison time before details of young people were shared, and in some cases, there was little scope for sample selection, for example, because organisations only offered two young people's ID numbers, or the young

²³ We aimed to interview one mentor from DPOs involved in the feasibility trial and two from those new to the efficacy trial, although this proved too onerous for DPOs.

people selected did not agree to be interviewed. In these cases, interviews were held with alternative young people who consented to the interview. In three cases, the selected young people were keen to express themselves but did not want to take part in an interview. Here, a short set of questions was shared, and they provided written (typed) feedback. Table 8 shows the profile of the young people interviewed.

Interviews were used to answer RQs 1–6, assessing the feasibility, acceptability and appropriateness of the trial arrangements and shared practice model, as well as the key implementation barriers and facilitators faced by DPO staff. They explored successes, challenges and mitigations faced in recruitment; young people’s engagement; leadership, staff and organisation buy-in; the support required by DPOs; the shared practice model; and data collection procedures. Data collection instruments used in the feasibility trial (Hall et al., 2023) were adapted as necessary, mainly to reduce length, and were not piloted, since they had been used in that study.

Table 8: Demographics of interviewed young people

Gender	Female = 11 Male = 9 Unavailable = 2
Ethnicity	White = 11 Other ethnicities* = 9 Unavailable = 2
Age	10–14 = 16 >14 = 4 Unavailable = 2
SEND status	No SEND = 13 Has SEND = 7 Unavailable = 2

*Note: base = 22; Demographics for two young people who sent their responses as written feedback were not provided; *Other ethnicities not categorised further due to small sample size*

Compliance and fidelity

Compliance with the trial was monitored through the data portal and through fortnightly (or more frequent) liaison with each DPO. Direct contact with DPOs individually was used to address any issues of non-compliance. We monitored the recruitment of young people, consent processes and the completion of baseline data, mentoring sessions and outcomes data completion.

Fidelity to the shared practice model was assessed for each DPO. Several sources of data were used to create a composite fidelity score for each DPO. Specific fidelity criteria were set and assessed against 11 elements categorised under five dimensions, and these assessments were combined in a composite fidelity score, as summarised in Table 9:

Table 9: Fidelity scoring criteria

Fidelity dimension	Assessment criteria	Assessment data source
Dosage		
Duration	Mentoring should last for at least 12 weeks from the first session.	Administrative data – percentage of mentees* who did not finish mentoring before 12 weeks
Number of sessions	Mentees should receive at least 10 sessions. ²⁴	Administrative data – percentage of mentees who received at least 10 mentoring sessions
Target population		
Age	Mentees should predominantly be aged 10–14, with no more than 30% aged 15–17.	Administrative data – percentage of young people [†] within the defined age range
Eligibility	Mentees should meet at least one of YEF’s criteria for unmet needs.	Administrative data – percentage of young people identified as fulfilling the criteria
Quality – mentor		
Mentor consistency	Young people should have the same mentor for the 12-week period.	Administrative data – percentage of mentees who had the same mentoring for the duration of the trial
Mentor training	Mentors should receive at least two hours of training prior to starting mentoring for this trial, including: <ul style="list-style-type: none"> • The DPO’s mentoring approach • The DPO’s safeguarding policies and procedures • The DPO’s risk management processes 	Mentor survey – percentage of mentor survey respondents who received the relevant training
Quality – delivery components		
Written plan	DPOs should have a written programme plan to guide the 12-week mentoring relationship.	Administrative data – percentage of mentees for whom there was a written plan
Closure process	DPOs will have a closure process that includes: <ul style="list-style-type: none"> • Giving notice of closure to the young person and agreeing it in advance of the final session • Reviewing any scope and boundaries for post-mentoring contact 	Mentee survey – percentage of mentee survey respondents who knew when their mentoring would end and what closure would entail
Quality – mentor–mentee interactions		
Trust	Mentees feel able to trust their mentor.	Mentee survey – percentage of mentee survey respondents who felt they could trust their mentor

²⁴ The shared practice model specified a minimum of 12 sessions, but 10 was selected as sufficient for fidelity.

Fidelity dimension	Assessment criteria	Assessment data source
Safe space	Mentees feel that the spaces where mentoring takes place are emotionally and physically safe.	Mentee survey – percentage of mentee survey respondents who felt safe during their mentoring
Goal setting	Mentees set and review goals with the support of their mentor.	Mentee survey – percentage of mentee survey respondents who set and monitored goals with their mentor

Note: *‘mentees’ is used to refer to young people assigned to the intervention group; †‘young people’ is used to refer to all young people recruited to the trial

To assess fidelity, we identified the percentage rate at which the criterion was met for each element for each DPO, as described in Table 9. Scores were then averaged across all the items within each of the five dimensions. Finally, we categorised the level of fidelity for each dimension per DPO according to the percentage rate: high fidelity (>80%), medium fidelity (60–80%) or low fidelity (<60%).

Usual practice

The provision received by the intervention and control groups during the trial period consisted of ‘services as usual’, i.e. the typical provision provided by DPOs or by an agency to which they refer young people, with the exception of mentoring. This included group sessions, sports and trips, but mentors were asked to exclude any one-to-one support. The provision received by each group was logged for each individual young person in the programme administrative data.

Analysis

Data from each of the above research methods were analysed separately, then triangulated and integrated in order to identify areas of difference and reinforcement and to use multiple data sources to substantiate and explain findings. In the findings section, we indicate the data sources relevant to each finding.

The mentor and mentee feedback surveys were analysed with descriptive statistics using Excel software to inform our assessment of the feasibility and acceptability of the trial arrangements and shared practice model.

Qualitative data were digitally audio-recorded and transcribed verbatim through a secure portal. Thematic analysis was undertaken. A coding framework was developed, with themes developed both deductively (reflecting the research questions) and inductively (to include topics identified through the initial reading of transcripts, to include unexpected issues). Data were coded using Dedoose software.²⁵ The coded data were then reviewed through repeated analysis, exploring individual themes and individual cases and examining differences between cases.

When addressing perceived impacts, the qualitative data were drawn on to test the theory of change, which was developed in consultation with DPOs at the start of the project and revised for the impact trial. We

²⁵ Dedoose was used, rather than undertaking Framework analysis in Excel as initially intended. Both involve the systematic application of thematic codes and the analysis of individual cases and individual themes. Dedoose involves applying codes to full verbatim text, while Framework involves summarising verbatim text. Dedoose was used by preference, both to aid the capture of operational details in DPO staff accounts and to retain the verbatim words of mentees in what were often short interviews.

particularly focused on how the perceived impacts of mentoring reported by mentees and mentors compared with the outcomes set out in the theory of change and how accounts supported or questioned the mechanisms of change in the theory of change. The impacts identified using different items within the outcome measures were also compared with the theory of change outcomes.

Timeline

The study required a little longer than had been planned. In particular:

- More time needed to be allowed for recruitment. The recruitment period was extended by four weeks (to the 15th of September 2023) to give organisations that received their referrals from schools some extra time to complete recruitment once the Autumn 2023 term started.
- More time needed to be allowed for outcome data collection. It had been intended that all outcome data collection would be completed within 16 weeks of randomisation. In practice, 22% of surveys were completed 21 or more weeks after randomisation. The data collection deadline was extended by four weeks to the 18th of January 2024 to ensure high levels of follow-up data completion.

Table 10: Timeline

Dates	Activity	Staff responsible/leading
December 2022	Development of ethical approval application and all consent and data collection documentation	SG, AH, JR, CB, SP, JL
December 2022–February 2023	Ethical approval application submitted DPO consultation, onboarding, and briefing	SG, JL, HQ, JF, CB, SP
February 2023–January 2024	Rolling delivery period of efficacy trial including recruitment, baseline data collection, randomisation, mentoring provision and follow-up data collection	SG, JL, HQ, JF, CB, SP
February 2023–January 2024	Provision of support to DPOs and oversight of their progress	SG, HQ, ZM, AH, JR
February 2023–January 2024	IPE data collection	SG, AH, JR, AMB
September 2023	Hard stop to recruitment	SG, HQ
September 2023–January 2024	Final 12 weeks of support to intervention group mentees	SG, HQ
September 2023–January 2024	Final follow-up data collection	HQ
September 2023–January 2024	Final IPE data collection	SG, AH, JR
September 2023–January 2024	Final 12 weeks of DPO support	HQ

January 24– March 2024	Final 12 weeks of support to control group mentees	HQ
January 24– March 2024	Data analysis and write-up	All
March 2024	Draft trial learnings report delivered	All

Impact Evaluation Results

RQ1: What is the impact of short-term mentoring on a) behavioural, emotional and relationship problems and b) socio-emotional skills of young people at risk of youth violence, compared with services as usual?

Participant flow, including losses and exclusions

Figure 1 shows what happened to the 981 young people identified as potentially eligible for the trial.²⁶ Of these, 764 young people completed baseline data, and 744 went on to be randomised.

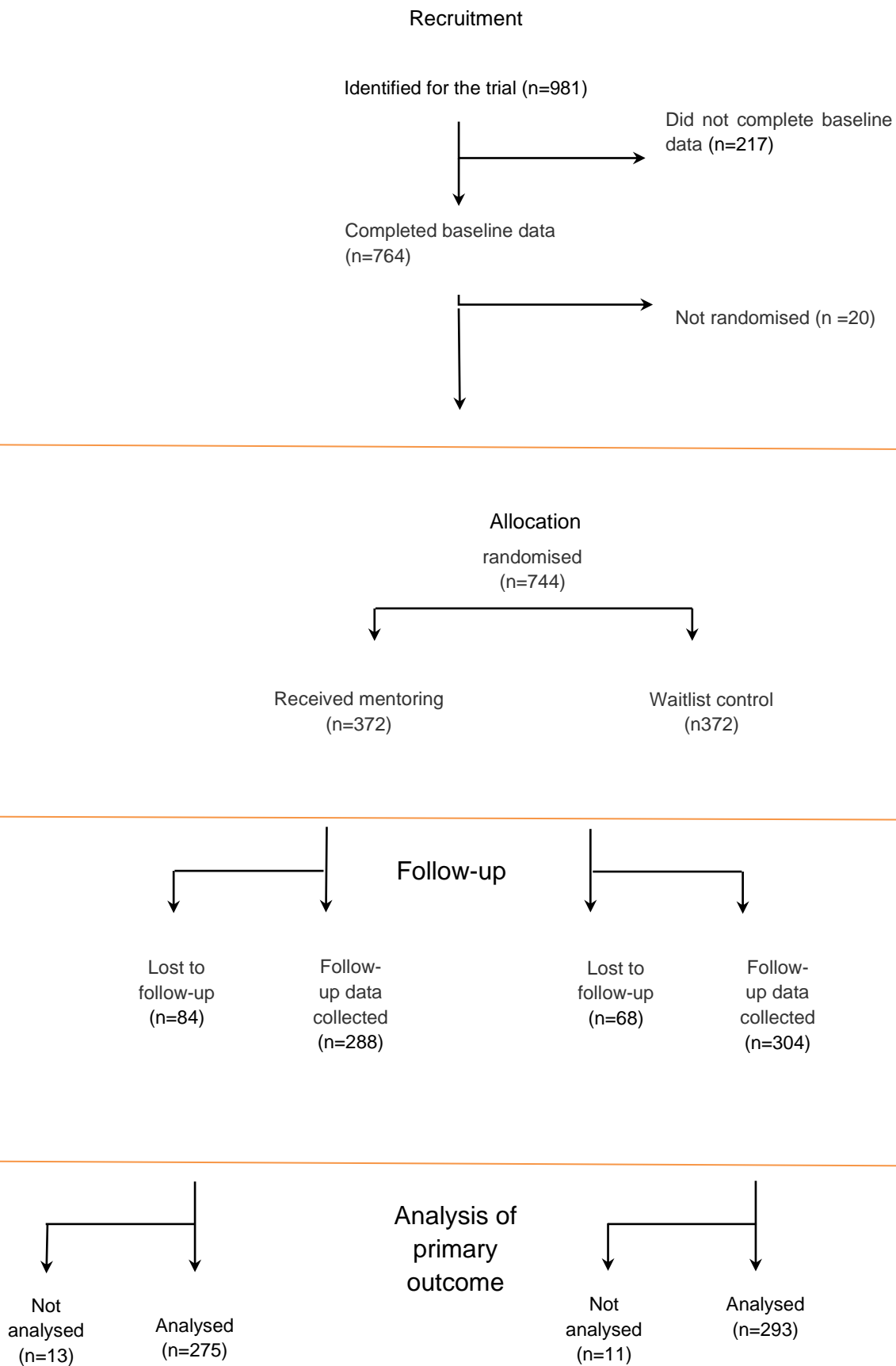
Of the 744 young people who were randomised, 372 were allocated to each trial arm. Of these, 288 young people in the intervention arm and 304 young people in the control arm provided follow-up outcomes data. This meant that 84 young people in the intervention arm and 68 young people in the control arm were lost from the trial by this point.²⁷

The analysis of the primary outcome relied on a level of completion of the SDQ scale specified by the developers (see outcome measures). With 13 young people in the intervention arm and 11 young people in the control arm not meeting these requirements, the primary analysis was based on 275 young people in the intervention arm and 293 young people in the control arm.

²⁶ This is the number of young people for whom basic details were entered onto the data collection and randomisation portal. We encouraged DPOs to do this to provide early indications of recruitment progress. However, DPOs took different approaches, some not adding young people until participation was assured.

²⁷ The reasons for this were not systematically captured but are likely to reflect both deciding not to participate and not completing baseline data collection.

Figure 1: Participant flow diagram



Attrition

Table 11 displays the attrition of young people from the trial, calculated as the percentage of all those randomised who did not contribute to the data for the primary outcome analysis. A quarter (23.7%) of all young people randomised were lost to the analysis, with slightly higher rates of loss in the intervention (26.1%) than in the control arm (21.2%).

The sample losses were mainly a result of the young person not completing the follow-up survey (see Figure 1). In the intervention arm, 22.6% of those randomised ($n = 84/372$) did not complete the follow-up survey. In the control arm, 18.3% ($n = 68/372$) did not do so. For further discussion about non-response to the follow-up survey, see the section on missing data.

The remaining losses were caused by young people not completing, or not completing sufficiently fully for inclusion, the SDQ scale at either the baseline or follow-up. A further 3.5% ($n = 13/372$) of the young people randomised to the intervention arm and 3.0% ($n = 11/372$) of those in the control arm were lost for this reason.

Table 11: Attrition from the trial analysis (primary outcome)

		Intervention	Control	Total
Number of participants	Randomised	372	372	744
	Analysed	275	293	568
Participant attrition (from randomisation to analysis)	Number	97	79	176
	Percentage	26.1%	21.2%	23.7%

Participant characteristics

Characteristics of all young people randomised

The characteristics and baseline outcome measures of the 744 young people randomised into the trial are presented in Table 12, split into those randomised to the intervention or control arm. As would be expected, the characteristics and baseline outcome measures of the two groups are broadly similar, with no statistically significant differences between them.

Levels of missing data were very low. The young person's DPO was known in all cases, with other characteristics missing for 3.0% ($n = 11/372$) of those in the intervention arm and 3.2% ($n = 12/372$) in the control arm. Levels of missing data for the baseline outcome measures varied from 1.9% ($n = 7/372$) for the SDQ total difficulties score (the primary outcome measure) for both the intervention and control arms to 5.4% ($n = 20/372$) for the teamwork/social skills score (one of four secondary outcomes) among the control arm.

The original aim was for each DPO to recruit 50 young people, around half of whom would be randomised to the intervention arm.

- Six of the 17 DPOs reached 50 or 51 (see the top of Table 12);
- Seven recruited between 40 and 49 young people; and

- Four recruited between 29 and 37 young people.

The maximum number of young people in one DPO in the intervention arm was 26 (DPO 12), while the minimum was 14 (DPO 17). The maximum number of young people in one DPO in the control arm was 26 (DPO 9), while the minimum was 15 (DPO 17).

Around half of the young people were female (52.1% in the intervention arm and 45.8% in the control arm). While the trial included young people across the 10–17 age range, around half were aged 13 (25.5% in the intervention arm; 23.6% in the control arm) or 14 (24.9% in the intervention arm; 21.4% in the control arm). The trial protocol stipulated that young people in the trial should predominantly be aged 10–14, with no more than 30% being aged 15–17. This was met, with the percentage aged 10–14 being 82.3% in the intervention arm and 79.4% in the control arm. Over six in 10 (61.5% in the intervention arm; 63.9% in the control arm) were White, with the second most prevalent ethnicity being Black (16.6% in the intervention arm; 13.9% in the control arm).

Around one in five young people were recorded as SEND (19.4% in the intervention arm; 16.4% in the control arm), and nearly four in 10 (38.0% in the intervention arm; 37.2% in the control arm) were eligible for FSM.

The most common referral route to the trial was via the young person’s school (57.1% in the intervention arm; 58.6% in the control arm). Other routes included the young person being an existing service user at the DPO (15.5% in the intervention arm; 15.6% in the control arm), a young person referring themselves or having been referred by family or friends (16.6% in the intervention arm; 15.6% in the control arm), or being referred by another service, including CAMHS, social services, other health services or YOT (10.8% in the intervention arm; 10.3% in the control arm).

The mean (standard deviation) baseline SDQ total difficulties score was very similar in the intervention and control arms – intervention arm 18.36 (6.99); control arm 18.65 (6.41); effect size –0.04 (again, see Table 12 for the full breakdown). A lower mean indicates a better outcome. Likewise, the mean (SD) baseline scores for the four secondary outcomes were very similar in the two trial arms, with effect sizes between 0.02 and 0.03. Unlike the primary outcome, a higher mean indicates a better outcome. The scores per secondary outcome were:

- For self-confidence, a mean of 0.01 (0.94) in the intervention arm; –0.02 (0.91) in the control arm; and an effect size of 0.03;
- For problem-solving and decision-making skills, a mean of 0.01 (0.86) in the intervention arm; –0.01 (0.90) in the control arm; and an effect size of 0.02;
- For teamwork/social skills: a mean of 0.02 (0.80) in the intervention arm; 0.00 (0.84) in the control arm; and an effect size of 0.03; and
- For resilience/emotional regulation, a mean if 0.01 (0.87) in the intervention arm; –0.01 (0.87) in the control arm; and an effect size of 0.02.

These baseline mean SDQ scores for young people in the trial – intervention arm 18.36 (6.99); control arm 18.65 (6.41); effect size –0.04 – highlight that those coming into the trial had more difficulties than for average young people. They compare to a British norm of 10.3 among 11- to 15-year-olds.²⁸

Histograms showing the distributions at baseline for the primary and secondary outcomes are included in Appendix M.

Table 12: Baseline characteristics of all those randomised

	Intervention group		Control group		
Participant-level (categorical)	n/N (missing)	Count (%) ²⁹	n/N (missing)	Count (%)	
DPO	372/372(0)		372/372(0)		
DPO 1	16/372	16(4.3%)	16/372	16(4.3%)	
DPO 2	19/372	19(5.1%)	21/372	21(5.6%)	
DPO 3	26/372	26(7.0%)	24/372	24(6.5%)	
DPO 4	16/372	16(4.3%)	17/372	17(4.6%)	
DPO 5	25/372	25(6.7%)	25/372	25(6.7%)	
DPO 6	22/372	22(5.9%)	21/372	21(5.6%)	
DPO 7	24/372	24(6.5%)	25/372	25(6.7%)	
DPO 8	24/372	24(6.5%)	26/372	26(7.0%)	
DPO 9	19/372	19(5.1%)	18/372	18(4.8%)	
DPO 10	25/372	25(6.7%)	23/372	23(6.2%)	
DPO 11	25/372	25(6.7%)	26/372	26(7.0%)	
DPO 12	22/372	22(5.9%)	22/372	22(5.9%)	
DPO 13	25/372	25(6.7%)	25/372	25(6.7%)	
DPO 14	21/372	21(5.6%)	20/372	20(5.4%)	

²⁸ SDQ index of norms: <https://www.sdqinfo.org/norms/UKNorm3.pdf>

²⁹ Percentages based on all those providing data (i.e. excluding missings).

	Intervention group		Control group		
Participant-level (categorical)	n/N (missing)	Count (%) ²⁹	n/N (missing)	Count (%)	
DPO 15	23/372	23(6.2%)	23/372	23(6.2%)	
DPO 16	14/372	14(3.8%)	15/372	15(4.0%)	
DPO 17	26/372	26(7.0%)	25/372	25(6.7%)	
Gender	361/372(11)		360/372(12)		
Female	188/372	188(52.1%)	165/372	165(45.8%)	
Male ³⁰	173/372	173(47.9%)	195/372	195(54.2%)	
Age	361/372(11)		360/372(12)		
10	28/372	28(7.8%)	30/372	30(8.3%)	
11	28/372	28(7.8%)	30/372	30(8.3%)	
12	59/372	59(16.3%)	64/372	64(17.8%)	
13	92/372	92(25.5%)	85/372	85(23.6%)	
14	90/372	90(24.9%)	77/372	77(21.4%)	
15	53/372	53(14.7%)	64/372	64(17.8%)	
16 or 17 ³¹	11/372	11(3.0%)	10/372	10(2.7%)	
Ethnic group	361/372(11)		360/372(12)		

³⁰ This category includes a small number of young people who responded 'prefer not to say' or 'prefer to self-describe'. These two categories have been included within 'male' to adhere to ONS guidelines of having a minimum cell size of 10.

³¹ Combined to ensure minimum cell sizes of 10.

	Intervention group		Control group		
Participant-level (categorical)	n/N (missing)	Count (%) ²⁹	n/N (missing)	Count (%)	
White	222/372	222(61.5%)	230/372	230(63.9%)	
Black, Black British, Caribbean or African	60/372	60(16.6%)	50/372	50(13.9%)	
Mixed or multiple ethnic groups	38/372	38(10.5%)	41/372	41(11.4%)	
Asian or Asian British	28/372	28(7.8%)	22/372	22(6.1%)	
Other ethnic group	13/372	13(3.6%)	17/372	17(4.7%)	
SEND	361/372(11)		360/372(12)		
Yes	70/372	70(19.4%)	59/372	59(16.4%)	
No	291/372	291(80.6%)	301/372	301(83.6%)	
Eligible for FSM	361/372(11)		360/372(12)		
Yes	137/372	137(38.0%)	134/372	134(37.2%)	
No	146/372	146(40.4%)	137/372	137(38.1%)	
Don't know or prefer not to say	78/372	78(21.6%)	89/372	89(24.7%)	
Referral route	361/372(11)		360/372(12)		
School	206/372	206(57.1%)	211/372	211(58.6%)	
Existing service user	56/372	56(15.5%)	56/372	56(15.6%)	

	Intervention group		Control group		
Participant-level (categorical)	n/N (missing)	Count (%) ²⁹	n/N (missing)	Count (%)	
Family/friends/self-referral	60/372	60(16.6%)	56/372	56(15.6%)	
Social care, CAMHS, other health, YOT or other	39/372	39(10.8%)	37/372	37(10.3%)	
Participant-level (continuous)	n/N (missing)	Mean (SD)	n/N (missing)	Mean (SD)	Effect size
SDQ total difficulties score	365/372(7)	18.36 (6.99)	365/372(7)	18.65 (6.41)	-0.04
NCS self-confidence score	356/372(16)	0.01 (0.94)	354/372(18)	-0.02 (0.91)	0.03
NCS problem-solving and decision-making skills score	361/372(11)	0.01 (0.86)	362/372(10)	-0.01 (0.90)	0.02
NCS teamwork/social skills score	360/372(12)	0.02 (0.80)	352/372(20)	-0.00 (0.84)	0.03
NCS resilience/emotional regulation score	360/372(12)	0.01 (0.87)	356/372(16)	-0.01 (0.87)	0.02

Characteristics of all young people included in the primary analysis

Table 13 presents the same characteristics and baseline outcomes as Table 12 but restricts the sample to the 568 young people for whom we could calculate a primary outcome measure (the SDQ total difficulties score) at both baseline and follow-up. Again, it provides a comparison of the profile of young people in the intervention and control arms.

As with the full trial population, the characteristics and baseline outcomes of the young people in the intervention and control arms were very similar. The only statistically significant difference between the two arms relates to gender, where the intervention arm includes significantly more females than the control arm (55.6% compared to 46.4%, p-value 0.03). However, the size of the difference is in line with that seen in Table 12 (where the difference was not significant).

Levels of missing data were even lower than for the full trial sample, with information on characteristics missing for 1.8% ($n = 5/275$) of those in the intervention arm and 0.7% ($n = 2/293$) in the control arm. Levels

of missing data for the baseline secondary outcome measures³² varied from 1.8% ($n = 5/275$) for both the problem-solving and decision-making skills score and teamwork/social skills score in the intervention arm to 3.8% ($n = 11/293$) for the teamwork/social skills score among the control arm.

While there were differential levels of drop-off between DPOs (from randomisation to having data on the primary outcome at both waves), the balance between the two arms remains largely similar within each DPO. Two DPOs (DPO 6 and DPO 8) had at least 45 young people in the primary analysis, 11 had between 30 and 39 young people, three had between 25 and 28, and one had 13 young people.³³

As with the full trial population, around half of the young people in the primary analysis were aged 13 (23.7% in the intervention arm; 22.7% in the control arm) or 14 (24.8% in the intervention arm; 21.3% in the control arm). Nearly two-thirds (63.7% in the intervention arm; 63.9% in the control arm) were White, with the second most prevalent ethnicity being Black (15.9% in the intervention arm; 13.4% in the control arm).

Again, as with the full trial population, around one in five young people in the primary analysis were recorded as having SEND (20.7% in the intervention arm; 17.9% in the control arm), and four in 10 (40.0% in the intervention arm; 39.2% in the control arm) were eligible for FSM.

The referral routes of those included in the primary analysis mirrored that of the full trial population, with the most common referral route to the mentoring being via the young person's school (54.1% in the intervention arm; 60.8% in the control arm).

The mean (SD) baseline SDQ total difficulties score was very similar in the intervention and control arms (intervention arm 18.33 (7.02); control arm 18.45 (6.31); effect size 0.02). A lower mean indicates a better outcome. Likewise, the mean (SD) baseline scores for the four secondary NCS outcomes were very similar in the two trial arms, with effect sizes between 0.00 and -0.02. Unlike the primary outcome, a higher mean indicates a better outcome. The mean scores per secondary outcome³⁴ were:

- For self-confidence, -0.04 (0.96) in the intervention arm; -0.04 (0.90) in the control arm; effect size -0.01;
- For problem-solving and decision-making skills, 0.00 (0.87) in the intervention arm; -0.01 (0.88) in the control arm; effect size -0.02;
- For teamwork/social skills: 0.03 (0.79) in the intervention arm; 0.02 (0.83) in the control arm; effect size -0.02; and
- For resilience/emotional regulation, -0.02 (0.84) in the intervention arm; -0.02 (0.90) in the control arm; effect size 0.00.

³² With the sample restricted to those with a primary outcome score at baseline and follow-up, there is no missing data on this outcome.

³³ Because some of the cell sizes were smaller than 10 (for two DPOs), the numbers for these DPOs have been combined with another in the Table.

³⁴ See the description of outcome measures in the impact methods section for more detail on the measures.

Table 13: Baseline characteristics of those with an SDQ total difficulties score at both baseline and follow-up

	Intervention group		Control group		
Participant-level (categorical)	n/N (missing)	Count (%) ³⁵	n/N (missing)	Count (%)	
DPO	275/275(0)		293/293(0)		
DPO 1 or 3 ³⁶	17/275	17(6.2%)	22/293	22(7.5%)	
DPO 2	19/275	19(6.9%)	18/293	18(6.1%)	
DPO 4	15/275	15(5.5%)	15/293	15(5.1%)	
DPO 5	24/275	24(8.7%)	24/293	24(8.2%)	
DPO 6	16/275	16(5.8%)	16/293	16(5.5%)	
DPO 7	22/275	22(8.0%)	23/293	23(7.8%)	
DPO 8	19/275	19(6.9%)	20/293	20(6.8%)	
DPO 9	16/275	16(5.8%)	18/293	18(6.1%)	
DPO 10	13/275	13(4.7%)	12/293	12(4.1%)	
DPO 11	14/275	14(5.1%)	23/293	23(7.8%)	
DPO 12	17/275	17(6.2%)	13/293	13(4.4%)	
DPO 13	16/275	16(5.8%)	23/293	23(7.8%)	
DPO 14	18/275	18(6.5%)	14/293	14(4.8%)	
DPO 15	16/275	16(5.8%)	20/293	20(6.8%)	
DPO 16	14/275	14(5.1%)	14/293	14(4.8%)	
DPO 17	19/275	19(6.9%)	18/293	18(6.1%)	

³⁵ Percentages based on all those providing data (i.e. excluding missings).

³⁶ The numbers for these two DPOs have been combined because some of the cell sizes for those completing both the baseline and follow-up primary outcome measure are fewer than 10.

	Intervention group		Control group		
Participant-level (categorical)	n/N (missing)	Count (%) ³⁵	n/N (missing)	Count (%)	
Gender	270/275(5)		291/293(2)		
Female	150/275	150(55.6%)	135/293	135(46.4%)	
Male ³⁷	120/275	120(44.4%)	156/293	156(53.6%)	
Age	270/275(5)		291/293(2)		
10	22/275	22(8.1%)	25/293	25(8.6%)	
11	27/275	27(10.0%)	24/293	24(8.2%)	
12	39/275	39(14.4%)	54/293	54(18.6%)	
13	64/275	64(23.7%)	66/293	66(22.7%)	
14	67/275	67(24.8%)	62/293	62(21.3%)	
15, 16 or 17 ³⁸	51/275	51(18.5%)	60/293	60(20.5%)	
Ethnic group	270/275(5)		291/293(2)		
White	172/275	172(63.7%)	186/293	186(63.9%)	
Black, Black British, Caribbean or African	43/275	43(15.9%)	39/293	39(13.4%)	
Mixed or multiple ethnic groups	24/275	24(8.9%)	35/293	35(12.0%)	

³⁷ This category includes a small number of young people who responded 'prefer not to say' or 'prefer to self-describe'. These two categories have been included within 'male' to adhere to ONS guidelines of having a minimum cell size of 10.

³⁸ Combined to ensure minimum cell sizes of 10.

	Intervention group		Control group		
Participant-level (categorical)	n/N (missing)	Count (%) ³⁵	n/N (missing)	Count (%)	
Asian or Asian British	21/275	21(7.8%)	18/293	18(6.2%)	
Other ethnic group	10/275	10(3.7%)	13/293	13(4.5%)	
SEND	270/275(5)		291/293(2)		
Yes	56/275	56(20.7%)	52/293	52(17.9%)	
No	214/275	214(79.3%)	239/293	239(82.1%)	
Eligible for FSM	270/275(5)		291/293(2)		
Yes	108/275	108(40.0%)	114/293	114(39.2%)	
No	112/275	112(41.5%)	110/293	110(37.8%)	
Don't know or prefer not to say	50/275	50(18.5%)	67/293	67(23.0%)	
Referral route	270/275(5)		291/293(2)		
School	146/275	146(54.1%)	177/293	177(60.8%)	
Existing service user	42/275	42(15.6%)	47/293	47(16.2%)	
Family/friends/self-referral	52/275	52(19.3%)	40/293	40(13.7%)	
Social care, CAMHS, other health, YOT or other	30/275	30(11.1%)	27/293	27(9.3%)	
Participant-level	n/N	Mean (SD)	n/N	Mean (SD)	Effect size

	Intervention group		Control group		
Participant-level (categorical)	n/N (missing)	Count (%) ³⁵	n/N (missing)	Count (%)	
(continuous)	(missing)		(missing)		
SDQ total difficulties score	275/275(0)	18.33 (7.02)	293/293(0)	18.45 (6.31)	0.02
NCS self-confidence score	267/275(8)	-0.04 (0.96)	283/293(10)	-0.04 (0.90)	-0.01
NCS problem-solving and decision-making skills score	270/275(5)	0.00 (0.87)	286/293(7)	-0.01 (0.88)	-0.02
NCS teamwork/social skills score	270/275(5)	0.03 (0.79)	282/293(11)	0.02 (0.83)	-0.02
NCS resilience/emotional regulation score	269/275(6)	-0.02 (0.84)	285/293(8)	-0.02 (0.90)	0.00

Outcomes and analysis

In this section, we present:

- The impact estimates:
 - *Primary analysis*: impact estimates on the primary outcome, the SDQ total difficulties score;
 - *Secondary analysis*: impact estimates on the four belief-based socio-emotional skills development secondary outcomes;
 - *Exploratory analysis*: impact estimates on three further SDQ outcomes; and
 - *Subgroup analysis*: reporting on differential impacts by gender.
- Missing data analysis: assessing the roles of unit and item non-response.
- Robustness checks:
 - Analysis controlling for the time interval between randomisation and follow-up;
 - Analysis restricting the data to DPOs with the greatest levels of compliance to the protocol to examine potential dilution effects due to non-compliance on other aspects of the protocol; and

- Analysis excluding those responding with a ‘don’t know’ on any of the items within each of the four secondary outcome domains.

Appendix G has the details of the effect size calculation. Appendix M, Table 1 has the pre–post correlations for the primary and secondary outcomes, and Table 2 shows the average pre–post change scores for the intervention and control groups. These show the extent to which change since baseline occurred per group.

Impact estimates

Primary analysis: impacts on the SDQ total difficulties score

Table 14 shows the trial results for the headline ITT analysis of the primary outcome, the SDQ total difficulties score. The measure is scored 0 to 40, with lower scores representing fewer behavioural, emotional and relationship problems. The effect size on this outcome is very low, at 0.01, with the 95% confidence interval (CI) around it being –0.12 to 0.14 (p-value 0.915). (Note that for the SDQ total score, a negative effect size represents a positive impact.) The conclusion we draw is that the 12 weeks of mentoring does not lead to short-term impacts on this measure.

Table 14: Primary analysis

Outcome	Unadjusted means				Effect size		
	Intervention group		Control group		Total n (intervention; control)	Hedges' g (95% CI)	p-value
n (missing)	Mean (95% CI)	n (missing)	Mean (95% CI)				
SDQ total difficulties score	275 (96)	17.4 (16.6, 17.9)	293 (79)	17.3 (16.6, 18.1)	568 (275; 293)	0.01 (–0.12, 0.14)	0.915

Secondary analysis: impacts on belief-based socio-emotional skills development outcomes

Table 15 shows the trial results for the four NCS secondary outcomes, each of which covers a different domain of socio-emotional skills development (see outcome measures for further information):

- Self-confidence: leadership and communication;
- Problem-solving and decision-making skills;
- Teamwork and social skills building; and
- Resilience and emotional regulation.

For all of these, higher scores (and positive effect sizes) represent improvements. The measure is scored from –1 to 1, with a higher score denoting a better level of the socio-emotional skills development attribute.

There is a positive statistically significant impact on two of the four domains: self-confidence: leadership and communication (p-value 0.004) and problem-solving and decision-making skills (p-value 0.002). We

therefore conclude that 12 weeks of mentoring has a positive impact on these two domains. The effect size for the self-confidence score is 0.20, with the 95% confidence interval around it being 0.06 to 0.33. Similarly, the effect size for the problem-solving score is 0.22, with the 95% confidence interval being between 0.08 and 0.35.

There is no strong evidence of impact in relation to the other two socio-emotional skills development domains: teamwork and social skills building and resilience and emotional regulation. The effect size for the teamwork score is 0.14, with the 95% confidence interval around it being 0.00 to 0.29 (p-value 0.054). Similarly, the effect size for the resilience score is 0.12, with the 95% confidence interval being between -0.02 and 0.26 (p-value 0.102).

Table 15: Secondary analysis

Outcome	Unadjusted means				Effect size		
	Intervention group		Control group		Total n (intervention; control)	Hedges' g (95% CI)	p-value
	n (missing)	Mean (95% CI)	n (missing)	Mean (95% CI)			
Self-confidence score	268 (103)	0.14 (0.03, 0.26)	284 (88)	-0.03 (-0.15, 0.08)	552 (268; 284)	0.20 (0.06, 0.33)	0.004
Problem-solving and decision-making skills score	276 (95)	0.14 (0.03, 0.24)	289 (83)	-0.03 (-0.12, 0.07)	565 (276, 289)	0.22 (0.08, 0.35)	0.002
Teamwork/social skills score	276 (95)	0.12 (0.01, 0.22)	282 (90)	-0.002 (-0.10, 0.10)	558 (276, 282)	0.14 (0.00, 0.29)	0.054
Resilience/emotional regulation score	269 (102)	0.21 (0.10, 0.32)	281 (91)	0.11 (0.00, 0.22)	550 (269, 281)	0.12 (-0.02, 0.26)	0.102

Exploratory analysis: further SDQ outcomes

The primary outcome measure – the SDQ total difficulties score – is a composite of four of the five SDQ subscales. Two of these four subscales (the emotional and peer problems subscales) can be used to measure ‘internalising problems’, while the other two subscales (the conduct and hyperactivity subscales) can be used to measure ‘externalising problems’. Each of these scales has a score of 0 to 20, with a lower score denoting fewer problems.

While the trial has found no evidence of impact on the SDQ total difficulties score, further analysis was run to explore whether 12 weeks of mentoring had an impact on either of these two subscales. Estimates of impact for these two measures were included in the protocol on the basis that it was perfectly plausible that mentoring could have had an impact on either just internalising or just externalising behaviour, even if there

was no statistically significant evidence of impact on the SDQ total difficulties score.³⁹ In addition, the further analysis looked at whether the mentoring had an impact on the fifth subscale – the prosocial subscale. Unlike the other four subscales, a *higher* score, on a scale from 0 to 10, on the prosocial subscale denotes fewer problems.

Table 16 shows that there is no evidence that 12 weeks of mentoring has an impact on a young person’s internalising or externalising problem score. As with the SDQ total difficulties score, the effect size on the two outcomes is very low. The effect size for the internalising problems scale is -0.02 , with the 95% confidence interval around it of -0.16 to 0.12 (p-value 0.792). The effect size for the externalising problems scale is 0.04 , with the 95% confidence interval around it of -0.09 to 0.16 (p-value 0.549).

In contrast, there is evidence that the 12 weeks of mentoring has a statistically significant and positive impact on young people’s prosocial score, with an effect size of 0.16 , with the 95% confidence interval around this being 0.02 to 0.30 (p-value 0.023).

Table 16: Exploratory analysis of additional outcomes

Outcome	Unadjusted means				Effect size		
	Intervention group		Control group		Total n (intervention; control)	Hedges’ g (95% CI)	p-value
	n (missing)	Mean (95% CI)	n (missing)	Mean (95% CI)			
SDQ prosocial subscale	283 (88)	7.09 (6.83, 7.34)	301 (71)	6.56 (6.31, 6.82)	584 (283, 301)	0.16 (0.02, 0.30)	0.023
SDQ internalising problems	279 (92)	7.59 (7.12, 8.05)	296 (76)	7.44 (6.97, 7.91)	575 (279, 296)	-0.02 (-0.16 , 0.12)	0.792
SDQ externalising problems	278 (93)	9.83 (9.32, 10.34)	297 (75)	9.87 (9.39, 10.35)	575 (278, 297)	0.04 (-0.09 , 0.16)	0.549

Subgroup analysis: impacts by gender and across DPOs

As an exploratory analysis to test whether there was any evidence of differential impacts of mentoring by gender, the regression models for the primary and four secondary outcomes were re-run with gender added as a covariate together with a ‘randomisation by gender’ interaction term. This analysis generated no evidence of differential effects across the two subgroups, with the p-values for the interaction terms being above 0.05. Table 17 below shows the estimated effect size for the primary SDQ total difficulties outcome split by gender, these effect sizes being generated via gender-specific regressions. The effect size for both girls and boys is very small (-0.03 for girls and 0.03 for boys.) Effect sizes by ethnic group were not run

³⁹ Albeit that, given the mean scores on the total difficulties score were so similar in the intervention and control arms that a significant difference would only have been found on one of the two scales if there had been a negative effect on the other scale.

because many of the sample sizes by ethnic group are very small, and the estimated effect sizes would consequently be of very low precision.

A similar analysis was undertaken to establish where there is evidence of differences between DPOs in the impact on the primary and secondary outcomes. No significant or meaningful differences across DPOs were identified, the p-values for the interaction terms being consistently above 0.05.

Table 17: Primary SDQ total difficulties score outcome by gender

Outcome/ group	Unadjusted means				Effect size		
	Intervention group		Control group		Total n (intervention; control)	Hedges' g (95% CI)	p-value
n (missing)	Mean (95% CI)	n (missing)	Mean (95% CI)				
Female	150 (38)	18.0 (16.8, 19.1)	135 (30)	18.3 (17.1, 19.4)	285 (68)	-0.03 (-0.2, 0.15)	0.742
Male	118 (51)	16.7 (15.6, 17.8)	155 (39)	16.5 (15.5, 17.4)	273 (90)	0.03 (-0.18, 0.23)	0.797

Missing data analysis

This section assesses the role of missing data in the primary and secondary analysis. The trial data has two types of missing data: unit missings, where young people fail to complete a follow-up questionnaire, and item missings, where young people did not answer all of the questions put to them. The item missings may occur at both baseline and follow-up.

Overall, 744 young people entered the trial, with 372 being allocated per arm. Of these 744, all completed their baseline questionnaire (although not all answered all questions), but one young person in the intervention arm subsequently asked for their data to be removed. Of the original trial members, 592 young people completed a follow-up questionnaire, 80% of the total – 288 (77%) in the intervention arm and 304 (82%) in the waitlist control arm. That is, there are 152 cases of missing data in the analysis attributable to unit non-response.

For the primary outcome analysis, there are additional missing cases because of item non-responses, where a valid SDQ score could not be constructed.⁴⁰ Overall, a further 24 young people were excluded because of item non-response (13 in the intervention group and 11 in the control group). Table 18 summarises the losses for each of the primary and secondary outcomes.⁴¹

Table 18: Number of missing cases per outcome

⁴⁰ Valid score refers to young person answering at least three out of five items in each of the four domains of the SDQ, excluding the prosocial domain.

⁴¹ For the secondary outcomes any question not being answered within a domain leads to the outcome for that domain being set to item missing.

Outcome	Intervention group			Control group		
	Unit missing n (%)	Item missing n (%)	Total missing n (%)	Unit missing n (%)	Item missing n (%)	Total missing n (%)
SDQ total difficulties score	84 (23%)	13 (3%)	97 (26%)	68 (18%)	11 (3%)	79 (21%)
Self-confidence score	84 (23%)	20 (5%)	104 (28%)	68 (18%)	20 (5%)	88 (24%)
Problem-solving and decision-making skills score	84 (23%)	12 (3%)	96 (26%)	68 (18%)	15 (4%)	83 (22%)
Teamwork/social skills score	84 (23%)	12 (3%)	96 (26%)	68 (18%)	22 (6%)	90 (24%)
Resilience/ emotional regulation score	84 (23%)	19 (5%)	103 (28%)	68 (18%)	23 (6%)	91 (24%)

The estimates of effect size for the trial outcomes could be biased if those who are included in the analysis are a biased subset of all the young people in the trial. Such bias would arise if the outcomes for those for whom we have data are systematically different to the outcomes for those who are missing from the analysis. In order to establish whether the baseline characteristics and baseline outcomes of those in the trial are predictive of whether or not data is missing at follow-up, a logistic regression was run, where the outcome is set equal to 1 if a young person was in the primary analysis and set to 0 otherwise. The predictors in the model are the characteristics recorded at baseline and the baseline outcomes. All available predictors were entered into the model.⁴² The results are shown in Table 19, with the model coefficients being shown as odds ratios.

The model identified just two baseline variables as significantly predictive of obtaining follow-up data: FSM status, with the odds of follow-up being lowest for those young people whose FSM status was not known or otherwise not recorded by the DPO, and baseline SDQ total difficulties score (the lower the score, the lower the odds of a follow-up being achieved). The same pair of significant predictors were found when running models for follow-up for the four secondary outcomes.

Table 19: Logistic regression model for non-response on the primary SDQ outcome

Participant-level (categorical)	Odds ratio	p-value
Gender		0.222
Female	1	
Male/prefer to self-describe/prefer not to say	0.763	

⁴² These models were restricted to those with complete baseline data on all of the covariates in the model.

Participant-level (categorical)	Odds ratio	p-value
Age group		0.283
10–11	1	
12–13	0.517	
14	0.547	
15 and over	0.630	
Ethnic group		0.453
White	1	
Mixed	0.776	
Asian	0.913	
Black	0.575	
Other	1.180	
SEND		0.093
Yes	1.651	
No	1	
Eligible for FSM		0.016
Yes	1	
No	0.870	
Don't know or prefer not to say	0.476	
Referral route		0.391
School	1	
Existing service user	1.734	
Family/friends/self-referral	1.153	
Social care, CAMHS, other health, YOT or other	0.929	

Participant-level (categorical)	Odds ratio	p-value
Outcomes		
SDQ total difficulties score	0.963	0.047
NCS self-confidence score	0.854	0.298
NCS problem-solving and decision-making skills score	0.850	0.281
NCS teamwork/social skills score	1.209	0.245
NCS resilience/emotional regulation score	0.842	0.272
SDQ prosocial score	0.992	0.890
Constant	25.79	<0.001

Given these findings, the effect sizes for the primary and secondary outcomes were re-estimated, adding these two variables to each of the regression models. Gender was also included in each of the models on the grounds that, at follow-up, there was a significant difference in the gender profile of the two arms of the trial (as seen in the Participant Profile section). The re-estimated effect sizes are shown in Table 20 alongside the original effect sizes. As can be seen, the effect sizes change very little once the factors predictive of non-response or group status are added to the models.

Table 20: Effect sizes for the primary and secondary outcome before and after controlling for factors related to non-response

Outcome	Hedges' g (95% CI): main ITT analysis	Hedges' g (95% CI): analysis adjusting for gender, FSM status and baseline total SDQ score
SDQ total difficulties score	0.01 (-0.12, 0.14)	0.00 (-0.13, 0.13)
NCS self-confidence score	0.20 (0.06, 0.33)	0.22 (0.08, 0.35)
NCS problem-solving and decision-making skills score	0.22 (0.08, 0.35)	0.20 (0.08, 0.32)
NCS teamwork/social skills score	0.14 (0.00, 0.29)	0.12 (-0.03, 0.27)
NCS resilience/emotional regulation score	0.12 (-0.02, 0.26)	0.12 (-0.02, 0.27)

Although there are only a small number of demographic variables that are predictive of missing data at follow-up, within both trial arms, there were young people who actively chose not to participate in the trial at some point during the trial after randomisation. Those who chose not to participate were inevitably far less likely to complete the follow-up survey. Table 21 shows the statistics on this. A slightly higher percentage

of young people in the intervention group actively withdrew from the trial (84% versus 81% for the control group), probably reflecting the fact that the intervention group had ongoing engagement via mentoring, so there were more opportunities to withdraw. Of those who did not withdraw from the trial, 89% completed the follow-up survey in each arm. Of those who did withdraw, fewer than half completed the follow-up (26% in the intervention group and 43% in the control group). The reasons for the higher follow-up rate for those in the control group are unclear, but it may reflect the fact that mentoring was subsequently offered to this group even after they had withdrawn.

The implications of this relationship between participation and follow-up mean that the trial effect sizes largely reflect the effect of mentoring for those who entered and stayed with the trial. There are, however, no large observable differences in the profile of those in the follow-up data between the two arms of the trial – the participation rate is very similar per arm, and as we demonstrated earlier, controlling for demographic characteristics does not change the estimates – so we conclude that our ITT estimates of effect are close to unbiased *for active participants*.

Table 21: Continued participation in the trial after randomisation

Continued participation in the trial	Intervention group n/N (%)	Control group n/N (%)
Participated throughout	302/372 (81%)	312/372 (84%)
<ul style="list-style-type: none"> And completed follow-up 	270/302 (89%)	278/312 (89%)
<ul style="list-style-type: none"> Did not complete follow-up 	32/302 (11%)	34/312 (11%)
Withdrew	70/372 (19%)	60/372 (16%)
<ul style="list-style-type: none"> And completed follow-up 	18/69 (26%)	26/60 (43%)
<ul style="list-style-type: none"> Did not complete follow-up 	52/69 (75%)	34/60 (57%)

Robustness checks

A range of post hoc analyses have been undertaken to test the sensitivity of the effect sizes for the primary and secondary outcomes to a number of unanticipated trial issues, in particular, the longer-than-planned average interval between randomisation and follow-up and the fact that around 30% of the control group started mentoring at least three weeks before completing the follow-up questionnaire. These analyses were:

1. Analysis controlling for the time interval between randomisation and follow-up:
 - a. Analysis restricting the data to those young people completing their follow-up within the period stated in the trial protocol (between 12 and 16 weeks after randomisation);
 - b. Analysis controlling for the time interval between randomisation and follow-up; and

- c. Analysis restricting the data to those DPOs for which at least 85% of their young people completed their follow-up within the period stated in the trial protocol (between 12 and 16 weeks after randomisation), these being the DPOs adhering most closely to the protocol.
2. Analysis exploring whether the effect sizes would have been larger, and by how much, if there had been greater levels of compliance to other aspects of the protocol:
 - a. Analysis restricting the data to those DPOs where no more than 15% of the control group started mentoring within three weeks of completing the follow-up questionnaire;
 - b. Analysis restricting the data to those DPOs where at least 75% of the young people in the intervention arm completed at least 10 sessions of mentoring;
 - c. A simple CACE analysis that aims to generate an upper bound for the effect sizes that might have been achieved had the intervention group all completed at least eight sessions of mentoring and all of the control group had at most seven sessions.
 3. Analysis excluding those responding with a 'don't know' on any of the items within each of the four secondary outcome domains.

These analyses are described in turn below. Across all of the ITT analyses, the effect sizes stay stable, suggesting that the main ITT estimates of effect are robust. There is, however, some evidence that had the protocol been more strictly adhered to, the effect sizes for the secondary outcomes would have been larger.

Robustness checks 1: controlling for the interval between randomisation and follow-up

An unanticipated issue arising in the trial was that the interval between randomisation and follow-up was considerably longer for many young people in the trial than was planned for, with the planned period being 12 to 16 weeks (or 84 to 112 days). In practice, although the minimum was adhered to, the shortest interval being 83 days, the maximum was not, with the longest interval recorded being 262 days. Table 22 shows the distribution of the intervals by randomisation group. Overall, there is no significant difference between the mean number of days for the intervention and control groups ($p = 0.08$).

Table 22: Number of days between randomisation and follow-up

	Intervention group n (%)	Control group n (%)
Between 83 and 112 days (12 to 16 weeks)	174 (60.4%)	154 (50.7%)
Between 113 and 140 days (17 to 20 weeks)	50 (17.4%)	79 (26.0%)
Between 141 and 175 days (21 to 25 weeks)	26 (9.0%)	20 (6.6%)
Between 176 and 210 days (26 to 30 weeks)	29 (10.1%)	38 (12.5%)
Over 210 days (31 weeks or more)	9 (3.1%)	13 (4.3%)

	Intervention group n (%)	Control group n (%)
Mean (sd)	120 (39)	125 (41)

It is not easy to predict what impact this late follow-up will have on the effect size, and because it was unexpected, a strategy to test for the extent of bias was not included in the Statistical Analysis Plan. Three analyses have been undertaken that look at the implications of these late follow-ups, as shown in Table 23. The first of these is an analysis where the data is restricted to those young people who completed their follow-up within the 12-to-16-week period ($n = 164$ intervention group and 149 control group for the primary analysis). The second analysis retains all young people in the analysis, but the regression model includes the interval as a covariate.⁴³ The third analysis exploits the fact that the average interval varied across DPOs. For this third analysis, the data is restricted to the four DPOs where at least 85% of the young people who completed a follow-up did so within the 12-to-16-week period ($n = 55$ intervention group and 78 control group for the primary analysis), this being the subset of DPOs who were closest to protocol in this respect.⁴⁴ The advantage of this last analysis is that it exploits the fact that each DPO was running its own RCT, so analysis of a subset of DPOs allows for an ITT analysis using the standard regression model.

Across all of these analyses, the effect sizes remain fairly stable, suggesting that the main trial ITT findings are not markedly affected by the longer-than-planned interval.

Table 23: Effect sizes under different time intervals

Outcome	Main ITT analysis: Hedges' g (95% CI)	Restricted to those with 12–16-week follow-ups: Hedges' g (95% CI)	Controlling for interval: Hedges' g (95% CI)	Restricted to DPOs with 85% of DP within target interval: Hedges' g (95% CI)
SDQ total difficulties score	0.01 (-0.12, 0.14)	0.00 (-0.16, 0.17)	0.01 (-0.12, 0.15)	-0.07 (-0.35, 0.21)
NCS self-confidence score	0.20 (0.06, 0.33)	0.23 (0.05, 0.41)	0.18 (0.05, 0.32)	0.34 (0.06, 0.62)
NCS problem-solving and decision-making skills score	0.22 (0.08, 0.35)	0.22 (0.03, 0.41)	0.19 (0.05, 0.32)	0.25 (-0.06, 0.57)
NCS teamwork/social skills score	0.14 (0.00, 0.29)	0.18 (-0.03, 0.38)	0.12 (-0.03, 0.27)	0.04 (-0.30, 0.39)
NCS resilience/emotional regulation score	0.12 (-0.02, 0.26)	0.08 (-0.12, 0.28)	0.09 (-0.05, 0.24)	0.12 (-0.19, 0.44)

Robustness checks 2: Analysis to examine potential dilution effects due to non-compliance on other aspects of the protocol

⁴³ Entered as a categorical variable because there is no strong expectation of a linear relationship between the interval and the outcomes, coded as: 83–112 days, 113–140 days, 141–175 days, 176–210 days and 211 or more days.

⁴⁴ The sample size is very small for this analysis, but setting a threshold lower than 85%, at, say, 75%, does not bring in more DPOs.

Control group members starting mentoring before their follow-up

Related to the fact that the follow-up survey was much later than intended, many of those in the waitlist control arm started their mentoring before completing their follow-up survey (Table 24). Overall, around 30%⁴⁵ of the control group started mentoring at least three weeks before completing their outcomes survey, although no record has been kept of the number of mentoring sessions attended over that period.

Table 24: Number of weeks between starting mentoring and completing the follow-up surveys for those in the control group

Number of sessions attended	n (%)
Follow-up completed before mentoring started	161 (53.0%)
Mentoring started on the day of follow-up	36 (11.8%)
Mentoring started up to two weeks before follow-up	17 (5.6%)
Mentoring started between three and five weeks before follow-up	18 (5.9%)
Mentoring started between six and 10 weeks before follow-up	28 (9.2%)
Mentoring started 11 or more weeks before follow-up	44 (14.5%)
<i>Base</i>	304

This contamination of the control group has the potential to bias the trial effect sizes towards zero. However, again, a strategy to test for the extent of bias was not included in the Statistical Analysis Plan because it was not foreseen. An analysis has been included to address this, where the ITT analysis is repeated just for those DPOs where the percentage of the control group starting mentoring three or more weeks before the follow-up is no more than 15%, this being the subset of DPOs where the dilution of the effect sizes should be least (8 DPOs, intervention group = 118, control = 146). Again, restricting the analysis in this way to the DPOs that followed the protocol most closely allows for an ITT analysis.

This analysis (Table 25) generates somewhat larger effect sizes for the two NCS secondary outcomes where a significant overall effect size has been found in the main ITT analysis, namely the self-confidence score and the problem-solving and decision-making score. The effect size for the eight DPOs that were least likely to start mentoring for the control group before follow-up was 0.27 for self-confidence (compared to an all-DPO ITT effect size of 0.20), and the effect size for problem-solving and decision-making score was 0.25 (compared to an all-DPO ITT effect size of 0.22). Although these findings do seem to support the hypothesis that starting mentoring too early in the control arm has dampened the main ITT effects, it is also entirely plausible that the reason for these larger effect sizes is that the eight DPOs included delivered more effective mentoring. As such, these findings cannot be considered conclusive.

⁴⁵ The data suggest that the start dates for mentoring have not all been completed accurately, so this 30% is an estimate.

Table 25: Effect sizes for DPOs with no more than 15% of the control group starting mentoring more than three weeks before follow-up

Outcome	Main ITT analysis: Hedges' g (95% CI)	Restricted to DPOs with no more than 15% of the control group starting mentoring more than three weeks before follow-up: Hedges' g (95% CI)
SDQ total difficulties score	0.01 (-0.12, 0.14)	0.03 (-0.15, 0.21)
NCS self-confidence score	0.20 (0.06, 0.33)	0.27 (0.08, 0.45)
NCS problem-solving and decision-making skills score	0.22 (0.08, 0.35)	0.25 (0.05, 0.45)
NCS teamwork/social skills score	0.14 (0.00, 0.29)	0.07 (-0.15, 0.29)
NCS resilience/emotional regulation score	0.12 (-0.02, 0.26)	0.04 (-0.16, 0.24)

DPOs delivering fewer than 12 sessions of mentoring

The trial did not adopt a formal definition of compliance with the intervention. The number of mentoring sessions attended by young people in the intervention arm was recorded by the DPOs for all but five young people, with this data suggesting that 96% of young people attended at least one session, and 74% attended eight or more of the intended 12 sessions. Forty-five percent attended the target number of 12 or more sessions (Table 26).

Table 26: Number of sessions attended by those in the intervention group

Number of sessions attended	n (%)
0	16 (4.4%)
1	10 (2.7%)
2-4	32 (8.7%)
5-7	39 (10.6%)
8-9	38 (10.4%)
10-11	66 (18.0%)
12	151 (41.1%)
13 or more	15 (4.1%)

Number of sessions attended	n (%)
Base	367

For some DPOs, the percentage of young people attending close to the target of 12 sessions is high, and we have included a robustness check, where the analysis is restricted just to those DPOs where the percentage of young people attending at least 10 sessions is at least 75% (seven DPOs, intervention group = 122, control = 136), shown in Table 27. This analysis gives a crude indication of the likely effect sizes that might have been observed across the trial if attendance had been uniformly higher and tests the sensitivity of the overall effect sizes to the number of attended sessions.

Restricting the analysis in this way to the seven DPOs where at least 75% of the young people in the intervention arm completed at least 10 sessions of mentoring, the effect size for self-confidence is somewhat larger, at 0.24, than the 0.20 for the all-DPO analysis, and the effect size for problem-solving and decision-making score is 0.25, again somewhat larger than the all-DPO effect size of 0.22. This analysis suggests, but does not prove, that had more mentoring sessions been completed across the DPOs, the ITT effect sizes would have been larger. Of course, it is possible that the seven DPOs in this analysis generate slightly larger effect sizes for other reasons than the number of sessions delivered, so, as with the analysis on early mentoring starts in the control group, this analysis is not conclusive.

Table 27: Effect sizes for DPOs where at least 75% of the intervention group received 10 or more sessions of mentoring

Outcome	Main ITT analysis: Hedges' g (95% CI)	Restricted to DPOs where at least 75% of the intervention group had 10+ sessions of mentoring: Hedges' g (95% CI)
SDQ total difficulties score	0.01 (-0.12, 0.14)	-0.07 (-0.26, 0.13)
NCS self-confidence score	0.20 (0.06, 0.33)	0.24 (0.04, 0.44)
NCS problem-solving and decision-making skills score	0.22 (0.08, 0.35)	0.25 (0.05, 0.45)
NCS teamwork/social skills score	0.14 (0.00, 0.29)	0.19 (-0.03, 0.41)
NCS resilience/emotional regulation score	0.12 (-0.02, 0.26)	0.09 (-0.12, 0.30)

Simple complier average causal effect analysis

Finally, as an alternative approach and to generate estimates of how large the effect sizes might have been if neither of these two aspects of non-compliance (fewer than 12 mentoring sessions and mentoring being delivered to the control group) had occurred, a CACE analysis was conducted, using a two-stage instrumental variable approach. For this analysis, for those in the intervention group, compliance has been defined as

eight mentoring sessions or more; for those in the control group, compliance has been defined as having started mentoring no more than seven weeks before follow-up.⁴⁶

Under these definitions, 74% of the intervention group and 84% of the control group are compliant. The probability of being compliant was generated via a logistic regression with randomisation group and DPO as the independent variables.⁴⁷ This probability then replaces the group variable in the regression models. Table 28 gives the estimated effect sizes from this analysis.

As might be expected, the effect sizes generated from this analysis, where both aspects of non-compliance are adjusted for simultaneously, are larger. The effect size for self-confidence for compliers is estimated at 0.3, and the effect size for the problem-solving and decision-making score is 0.31. However, this analysis makes an assumption of zero impact on the intervention group non-compliers, and assumes that the full impact of mentoring will have been observed for those in the control group who started mentoring at least eight weeks before their follow-up. These assumptions will, in combination, have likely led to the complier effect sizes from the CACE analysis being over-estimated, so the estimates from Table 28 are most appropriately interpreted as upper bounds. Nevertheless, the conclusions reached from across the robustness checks are that non-compliance with the trial protocol has led to a fairly marked dilution of effect sizes for the two secondary NCS outcomes, self-confidence and problem-solving and decision-making.

Table 28: Effect sizes from complier average causal effect analysis

Outcome	Main ITT analysis: Hedges' g (95% CI)	CACE analysis estimates of the effects on compliers
SDQ total difficulties score	0.01 (-0.12, 0.14)	0.01 (-0.20, 0.20)
NCS self-confidence score	0.20 (0.06, 0.33)	0.30 (0.10, 0.50)
NCS problem-solving and decision-making skills score	0.22 (0.08, 0.35)	0.31 (0.11, 0.52)
NCS teamwork/social skills score	0.14 (0.00, 0.29)	0.19 (-0.03, 0.41)
NCS resilience/emotional regulation score	0.12 (-0.02, 0.26)	0.15 (-0.06, 0.37)

Robustness checks 3: analysis excluding those responding with a 'don't know' on any of the items within each of the four secondary outcome domains

In the calculation of the four secondary outcomes (via factor analysis of 20 NCS belief-based questions), those responding with 'don't know' on any of the questions were recoded to the central value of each scale. That is, 'don't knows' were recoded to be equivalent to 'neither confident nor not confident' or 'neither agree nor disagree'. The advantage of doing this is that it maximises the sample size and reduces the risk of non-response bias. Nevertheless, recoding 'don't knows' in this way involves making a judgement about those responses which may be incorrect.

⁴⁶ This is on the assumption that those starting mentoring at least eight weeks before follow-up could have had at least eight sessions of mentoring. The actual number was not recorded.

⁴⁷ Of all the available baseline covariates available, DPO is the only significant predictor of compliance.

Analysis has been carried out, setting all of the ‘don’t knows’ to missing, to test whether this affects the effect size calculations. This reduces the sample size per outcome by around 150 to between 386 and 400 per outcome.

Table 29 shows the effect sizes from the main ITT analysis alongside this new test where the ‘don’t knows’ are excluded. Although the effect sizes are somewhat different, the same conclusions are reached, namely that the mentoring had a positive and significant effect on self-confidence and problem-solving and decision-making skills.

Table 29: Effect sizes after excluding ‘don’t know’ responses on the secondary outcomes

Outcome	Main ITT analysis: Hedges’ g (95% CI)	Analysis excluding DKs: Hedges’ g (95% CI)
NCS self-confidence score	0.20 (0.06, 0.33)	0.29 (0.13, 0.45)
NCS problem-solving and decision-making skills score	0.22 (0.08, 0.35)	0.21 (0.04, 0.36)
NCS teamwork/social skills score	0.14 (0.00, 0.29)	0.20 (-0.03, 0.31)
NCS resilience/emotional regulation score	0.12 (-0.02, 0.26)	0.14 (-0.03, 0.31)

Implementation and Process Evaluation Findings

Introduction

The following section provides an overview of the IPE findings, drawing (as discussed in the Methods section) on a range of data sources, including qualitative interviews, mentor and mentee surveys, and administrative data. We address the research questions (see the Objectives section) in turn. The first part of the section uses data from mentor and mentee interviews to build on the trial measurement of impacts and to understand the impacts of mentoring from mentee and mentor perspectives and in their own words. The second part of the section then turns to research questions concerning the feasibility and delivery of the shared practice model and the trial procedures.

We used the different data sources in the following ways:

- Data from qualitative interviews are used to highlight key themes and illustrate practitioner and young people's perspectives, including verbatim quotations, in relation to the impacts of mentoring and implementation of the trial arrangements and the shared practice model.
- We integrate quantitative data from three sources: the mentee feedback survey responses (providing insight into key quality dimensions of mentoring), the mentor survey (providing data on the acceptability and feasibility of the shared practice model and trial arrangements) and fidelity data.

RQ1. What is the perceived impact of short-term mentoring on a) behavioural, emotional and relationship problems and b) socio-emotional skills of young people at risk of youth violence, compared with services as usual?

In addition to the quantitative outcome measures, the evaluation also explored the impacts of mentoring as described by mentees and mentors. Our aim was to add richness to the quantitative data by exploring changes experienced, the elements of mentoring that brought them about and why mentoring might achieve more for some young people than others. We also wanted to assess the conceptualisation of outcomes in the theory of change (see Appendix B). The outcome areas identified in the theory of change (developed through consultation work with practitioners earlier in the study and revised for the impact trial) were:

- Socio-emotional skills – decision-making and emotional regulation;
- Improved relationships and social skills;
- Socio-emotional skills – self-confidence;
- Improved wellbeing;
- Crime reduction; and
- Improved school attainment and engagement.

The ways in which mentors and mentees discussed outcomes were closely aligned with these.

Summary of theory of change outcome areas

Our analysis mainly reviewed outcomes with reference to the theory of change. Overall, the outcome domains in the theory of change were seen as highly relevant to the needs and aspirations of mentees among all DPO managers and mentors and were well aligned with DPOs' perspectives on what mentoring could achieve. However, interviewees stressed the importance of how individualised they are in practice – different outcome areas are more or less relevant to individual mentees based on their needs and the context of delivery. Practitioners across the trial typically championed person-centred mentoring approaches with high levels of adaptability.

'Improved mental health and well-being, yes, definitely. Again, this is all young person dependent, isn't it, and it's really difficult to measure that.' (DPO manager)

'It just depends on the young person and what they need support with.' (Mentor)

Impacts relating to improved wellbeing, socio-emotional skills, relationships and self-efficacy were more often described by DPOs as having been achieved by mentoring compared to other outcome areas. Reducing young people's involvement in crime and improving school attainment were perceived to be more challenging. This reflected two views: that issues not easily influenced by mentoring, such as the accessibility of secondary school environments, played a significant role in young people's progress in these areas and that a longer period of mentoring would be needed to address them.

Turning to the mentor survey, all 26 mentors who responded to the survey said that they agreed or strongly agreed with the statement 'I believe that young people have benefited from the mentoring delivered as part of this study'. We also asked mentors in which areas they felt young people had achieved positive change, summarised in Table 30. The most commonly reported area of improvement was self-esteem/confidence, and the least was violent or aggressive behaviour.

Table 30: Areas of benefit identified by mentors

Area of benefit	Number of reports
Self-esteem/confidence	25
Emotion regulation/resilience	22
School attendance	19
Anti-social behaviour	19
Relationships with peers	18
Relationships with family	18
Problem-solving and decision-making	16
Empathy	13
Violent or aggressive behaviour	9
Other	2

Source: Mentor survey. Base = 26

It was clear in the accounts of mentees and mentors during interviews that young people's outcomes were highly interrelated. Young people rarely experienced change in isolated domains and often described progressing in ways relevant to several outcome areas. For example, improvements in emotional regulation were described as having led to changes in behaviour and engagement at school. One mentee, for example, reflected on how mentoring had enabled them to be more emotionally available to friends in school, leading to improved confidence as well as stronger relationships.

'I would come into school, and I wouldn't really open up that much. Then, after my sessions, I'll just talk to them all the time about things in my personal life, and they'd just go, oh, okay. It was really helpful, and I think it boosted my confidence just a little bit more.' (Mentee)

'I think that building their confidence themselves to do other things, or to be able to focus better in class, or the confidence to put their hand up and ask questions or ask for help, I see that a lot.' (Mentor)

Impacts on socio-emotional skills – decision-making and emotional regulation

Practitioners identified socio-emotional skills development as one of the key areas of change emerging from mentoring. This outcome was seen to be achievable over the course of short-term mentoring provision. Mentors and mentees described mentoring as having improved young people's ability to make decisions in line with positive values and behaviours. They reflected on how mentoring had raised consciousness about the consequences of decision-making and helped young people to think more critically about their decisions.

'When I have an argument with one of these girls in my school, when I get home, I always think about the outcomes, and then I write it down on a piece of paper, and then I go to school the next day, and I think [about] the best outcome.' (Mentee)

Improved decision-making also helped to improve young people's relationships. Mentees felt that the mentoring empowered them to be more conscious of how they interacted within more problematic relationships. This helped them to control their immediate emotional responses during conflict and to make better decisions about the nature of their involvement with peers. We discuss the impacts of mentoring on mentees' relationships in more detail below.

The improved emotional regulation in social settings was characteristic of wider positive shifts as a result of mentoring support. Specifically, mentees were able to identify and acknowledge their trigger points and work towards controlling their responses. This supported mentees in responding in calmer ways to challenging circumstances.

'I was hoping for a better way to control my anger and my sadness, and all my different emotions that I was feeling, and that stuff, really. According to [name of mentor], I had good coping methods that she's taught me.' (Mentee).

'I think one of [my goals] was not thinking about something too much, not overthinking things. Understanding things you can't change.' (Mentee)

Mentors also viewed supporting young people in understanding and managing their emotional responses as a key aspect of mentoring.

'It's really important to get to the underlying causes of their behaviour. Making them feel understood. It's okay that you're sometimes deregulated, and you get angry, but there's a trigger, and we just have to figure out what these triggers are, what the causes are of this behaviour. I think once they've understood themselves, the more empowered that they've been, and the more regulated they are.' (Mentor)

Impacts on relationships and social skills

One of the most notable outcome areas described by both practitioners and young people was improved relationships. There were many ways in which mentees' relationships were improved. For example, through improved emotional regulation and enabling young people to be more assertive with their boundaries, they became better at resolving conflict with their peers. This led to more positive relationships across community, family and school contexts.

'My relationships are stronger due to [mentor] helping me control my emotions and knowing how to treat those emotions, knowing how to help other people with their emotions as well. It's strengthened a lot of my friendships.' (Mentee)

DPO staff described the mentoring relationship itself as playing a critical role by demonstrating to mentees what healthy relationships look like.

'The relationships that they're building with the mentor are modelled and reciprocal of healthy relationships. So, you're demonstrating how to have relationships, how to manage conflict resolution, how to talk about difficult things, how to advocate for yourself for support.' (Manager)

Mentees also experienced positive changes in their relationships with family members. The guidance of mentors encouraged young people to take more responsibility for their roles in relational dynamics and empowered them to be emotionally available to those around them at home. In addition, young people were better able to regulate themselves during conflict within family settings.

'I never really told my mum anything about what I go through at school, and then after talking to [mentor], I felt more comfortable talking to my mum about it and telling her everything that I'm going through.' (Mentee)

'Now me and my brother have a better relationship. We get on way better.' (Mentee)

Through the mentoring support, young people also had a better understanding that they were not alone in facing personal issues. Gaining an understanding that many others also struggled with mental health and emotional wellbeing helped to reduce the intensification or internalisation of feelings and made them realise they were not different to their peers in this respect.

'I think the 12 sessions have allowed young people to recognise that they're most likely not alone in their struggles. To normalise feeling anxious and feeling depressed at times. Then, finding out what's unique to them.' (Mentor)

This helped to reduce feelings of isolation and difference. It was achieved through developing a relationship with the mentor, building greater connections with peers and providing onward referrals to additional provisions in the local area. The relationships that mentees formed with mentors were central here. For

many mentees who might be experiencing feelings of isolation, having a close relationship with a trusted adult increased feelings of connection and relational confidence.

Impacts on socio-emotional skills – self-confidence

Improvements in self-efficacy, confidence and locus of control⁴⁸ were seen to be both highly relevant and likely to be achieved by mentees and practitioners. Improved confidence was specifically highlighted by mentees as a prominent way in which mentoring supported them to achieve change over time. They described mentoring as having built their confidence in who they were as individuals and also improved confidence to participate socially and to learn in educational environments.

'I felt much more confident after five sessions, I felt much more confident about myself.'
(Mentee)

'They realise that they've got their own tools, skills and capabilities of managing this phase of their life better than they thought they had. So just giving them the language to be able to navigate in a way that I guess instructs their emotions, more than their emotions instructing them.' (Mentor)

As highlighted above, one of the impacts noted by interviewees was an increased awareness of how decision-making could lead to specific outcomes. Understanding how their decision-making could inform outcomes created cycles of reinforced self-efficacy.

'I always think [of] these different outcomes, and then I put them all together and think which is the best outcome.' (Mentee)

Being empowered to take a leading role in key aspects of their sessions, such as deciding on time, goals and activities, also helped to build mentees' confidence and self-efficacy. This youth-led approach was typically experienced as diverging from the approaches in many settings that young people were familiar with, such as school, and resulted in a greater sense of belief in independent decision-making.

'Empowering the young person. Empowering every single young person. Letting them take control of their session as well. I can sit there and plan a mental wellbeing session, a session based on supporting a young person on staying away from youth crime, and knife crime, and so on, but at the same time, it's like, let them decide what their session looks like.'
(Mentor)

Impacts on wellbeing

There was strong evidence throughout the mentee and practitioner interviews of mentoring helping to improve mentees' wellbeing. For many mentees, having a trusted adult outside their immediate family environment who would actively listen and provide space for emotional release was key here. Sharing their feelings and experiences in a non-judgemental space meant young people felt heard and were able to move towards a sense of lightness about the issues they faced. Mentors described how mentoring improved young people's wellbeing by arming them with more productive coping mechanisms.

'It felt like someone that I could talk to, to get, to tell her about all my feelings and get the stress off my shoulders.' (Mentee)

⁴⁸ The extent to which people believe that they, as opposed to external factors, have control over the outcome of their lives.

'it seems like over the 12 weeks the trend is that they have improved wellbeing. They just have different mechanisms that are more productive, rather than depletive.' (Mentor)

Interviewees also highlighted how physical wellbeing was improved through mentoring. Practitioners described how the sessions themselves, as well as referrals to sports clubs, encouraged young people to engage in physical activities. This positive impact was seen as reaffirming young people's growing sense of confidence. It built young people's confidence to join new sports provisions, and they gained confidence through engagement with the activities themselves and increased social networks. One mentee described goals they set related to both confidence and sports engagement:

'Getting into some sort of martial arts and increasing my confidence. I do kung fu now [...] My confidence from going to kung fu has increased a lot.' (Mentee)

Mentees also described how other aspects of physical and emotional wellbeing had been improved by mentoring. One mentee shared her story of how she had been empowered to take steps away from self-harming:

'I used to self-harm but not a lot, and then [mentor] always says self-harming is not the answer because you're just hurting yourself more. So I decided that maybe I should try to stop and follow her ways. Then after following her ways, I haven't self-harmed once.' (Mentee)

Impacts on criminal activity

There were more mixed views about the relevance of violence reduction as an outcome and how likely it was to be achieved. A key factor informing this view was that, although they met YEF's unmet needs criteria, most of the mentees interviewed did not see themselves and were not seen by mentors as having specific needs in this area. In addition, there were limitations to what a 12-week mentoring programme with this population was seen as able to achieve *directly* in relation to violence reduction.

'Stopping them from committing crime. I'm not out there when they're going to get into trouble, so obviously, that's going to be hard.' (Mentor)

'I think the harder one would be young people getting involved in youth crime. A lot of young people turn around into drug dealing and so on because they're seeing parents struggle [...] it's a big struggle.' (Mentor)

Nevertheless, there were examples of young people whose involvement in youth violence had been impacted.

'I used to steal stuff off shops when I was quite young, but when I met [mentor], I haven't even tried to – I can barely swear now.' (Mentee)

In addition, there was a sense that mentoring could *indirectly* help to reduce involvement in youth violence, for example, by connecting young people with additional youth services, helping their emotional regulation and helping them to make more informed decisions.

Even if not relevant to them, mentees also felt that mentoring could reduce other young people's involvement in violence or crime. For example, they – and mentors – felt that diversionary activities (which

formed part of the mentoring provision for many mentees) could support young people to take steps away from youth violence.

'You're stopping yourself from doing the bad things which causes you to do the better things in life instead of doing crime. So I think it would definitely help.' (Mentee)

'Often positive diversionary activities can prevent [crime]. So I guess that would be an example of how mentoring might have stopped some people committing crime.' (Mentor)

It was also thought that mentoring could help to reduce involvement in crime by providing a safe space to express emotions and having someone to talk to.

'I think some people who live in the poor parts of London, they obviously get trapped in things like drugs and that. I think if they had someone to talk to, they could definitely let it all out. Then they can probably make a better future for themselves.' (Mentee)

Demonstrating the interrelated nature of the outcome domains, practitioners felt that the way in which mentoring helped young people to think critically about their relationships and make informed decisions about who they spent time with might also help to reduce involvement in crime.

Impacts on school attainment and engagement

There were more diverse views about the extent to which school engagement and attainment were or could be improved through mentoring. It was seen to be more challenging to achieve than other outcomes. Practitioners felt the scope for change was limited by the amount of time they spent with young people and by wider factors that they could not easily influence.

Despite this, there were some examples of positive impacts:

'For science, I did really bad at the beginning of the year, and now, with the whole talking and the whole [DPO name] thing, I've improved my score so much, and I'm really proud about it.' (Mentee)

Mentoring also helped young people to improve their organisation and preparation for coursework and exams:

'Setting myself a time to get it done by. Like, say I had a science test coming up, I'd study for it because of the mentoring. Before, I wouldn't do that.' (Mentee)

It also helped to improve behaviour at school through better emotional management, being more able to maintain focus, not reacting to negative experiences and being less stressed:

'After mentoring, since mine was in the morning, I felt much more relaxed and less stressed about the school day. So, I was able to do my work much more.' (Mentee)

Mechanisms of change

As well as reviewing whether the impacts outlined in the theory of change aligned with the experiences of mentors and mentees, we also reviewed whether the mechanisms of change in the theory of change were supported by their accounts. The theory of change proposed a set of mechanisms of change, conceptualised

as the underpinning processes, methods or steps that empowered young people to make progress across relevant outcomes:

- High-quality relationship between mentor and mentee;
- Building trust;
- Consistency of support;
- Goal setting; and
- Meeting in a safe space.

We used the interviews with practitioners and mentees to consider whether and how the proposed mechanisms of change influence outcomes across domains.

Throughout the interviews, it was clear that the mechanisms of change are interrelated. Typically, they were seen as mutually reinforcing and interdependent. For example, meaningful goals could not be set and worked towards unless mentors had high-quality relationships with mentees. Similarly, trusting relationships were nurtured through consistency in support. When young interviewees reflected on positive mentoring journeys, they typically described several of the mechanisms as present in their support.

High-quality relationship between mentor and mentee

Mentors developing and maintaining high-quality relationships with mentees was an essential mechanism of change across DPO contexts. There were many ways in which the high-quality nature of the relationship was conceptualised and reflected upon. For some young people, a sense of equity seemed to hold significant importance, where mentors were not perceived to occupy a position of authority but could offer guiding advice in a balanced power dynamic. For others, communication styles and a sense of being understood played a key role in establishing high-quality connections.

'I think it's the way we talk to each other. He really understands me, I understand him. Since the first session, we really got on. Yes, it was so easy just to get on.' (Mentee)

Practitioners highlighted the importance of high-quality relationships in effecting change, viewing the relationship as the foundation of mentoring provisions. Having high-quality relationships with mentees was essential to working alongside mentees in a way that was nurturing and youth-led. Having established meaningful connections grounded in equity meant mentors were also well positioned to challenge, to be at times directive and to encourage young people to work towards goals that may have been met with resistance in other relational dynamics.

Practitioners reflected on how, for many young people, mentoring might be one of the few spaces where they could talk openly with a trusted adult who was able to actively listen and respond in non-judgemental ways. This aligned closely with mentees' positive reflections on the relationships they held with mentors.

'I felt really safe with [mentor]. I knew that she would be really kind. She wouldn't make any judgements or personal comments. I knew that she would be really respectful to anything that I would say.' (Mentee)

A shared lived experience was identified as a further factor that could facilitate high-quality relationships between mentors and mentees. While this was not perceived to be an essential requirement for a high-quality relationship, shared experiences enabled mentors to connect with authentic empathy and a deeper level of understanding.

'Having trust and having other, like, with a mentor that's sympathetic, who sometimes knows what you're going through, could also help. She got bullied when she was my age, and she was able to relate that to how I got beat up.' (Mentee)

Building trust

Interviewees held the perspective that high-quality relationships were underpinned by the establishment and maintenance of trust. Building trust was identified as a key mechanism of change across outcome areas and was typically viewed as synonymous with high-quality relationships.

There was variation in how trust was established and built. For many mentees, it was established over time as the relationship naturally became stronger during sessions; for others, it was built quickly early on. Mentees not only reflected on the importance of trust to inform high-quality relationships but also connected trust to key outcome areas. Trusting relationships played an important role in creating space for young people to be emotionally open, discussing their issues and consequently improving their emotional wellbeing.

'It's easier to communicate when you know a person more, and then if I get to know [mentor] more, I will open up even more with her about what troubles I'm going through all the time, instead of just certain ones that happen at school, at home, stuff like that. I talk a lot about personal ones. We were talking about how stressed I'm able to get from all the homework I get at school. Because I'm in Year 10 now, there's so much stress with all the homework.' (Mentee)

Turning up on time. So yes, trust, building trust, not being judgmental, putting myself in their shoes, listening, all of those skills. There's probably more, but yes, and then I guess it's not coming across as a teacher, more of an ally.' (DPO mentor)

Having a trusted relationship with someone outside of family and school settings was viewed as another key driver towards outcomes. One of the ways this materialised in practice was mentors acting as advocates for mentees. This included mentors talking to school staff and parents/carers directly to address conflicts mentees may have held in school or at home. Mentors' work to advocate on behalf of young mentees was seen to reinforce positive and trusting relationships and increase the likelihood of outcomes in other areas.

A more practical element of mentoring that enabled young people to be more emotionally open and discuss the challenges they faced was confidentiality:

'It's all confidential to an extent, and you aren't ever going to see them again unless you want to. It's that sort of thing for me. You can say anything. You can tell them whatever, whatever you want, and that's it.' (Mentee)

Consistency of support

As previously mentioned, for many young people, trust was established over a prolonged period of time. This affirmed the importance of consistent support. Consistency manifested in practice in multiple ways. For

many, consistency meant having the same mentor throughout the support period; for others, consistency in boundaries, messaging, goals and communication were also important mechanisms of change. One young person reflected on how having the same mentor throughout their support period enabled her to overcome her feelings of shyness.

'I think it's quite important because since some people like me are shy, it would be a bit strange to sometimes have a different mentor. If I got to know [mentor] really well, and then I got a different mentor, it'd be a bit confusing.' (Mentee)

'One-to-one mentoring for a fixed period where both the mentor and the mentee are aware of how long it's going to be, what it looks like, and it's a really consistent session, same time, same day, same place every week. I think that provides a really consistent safe space with a really trusted adult for the young person.' (DPO manager)

Goal setting

Goal setting was seen as a key driver of positive change for mentees. Goal setting was not only a useful way of framing or focusing mentoring, but the actual process of setting and reviewing goals was itself a driver of change for some mentees. Practitioners and mentees reflected on how goals, which were often youth-led and cut across outcome areas, provided a sense of intentionality and structure to mentoring. For example, one mentee described having goals that related to several outcome domains.

'We set about five things that I want to improve on myself, maybe not being late to school, maybe not always being frustrated or angry, always he was trying to make me better myself, improve five things that I didn't like about myself.' (Mentee)

Another mentee reflected on their positive experience of goal setting, which enabled them to address areas for growth.

'It was based on my weaknesses, so I think I've achieved many of those goals, to be honest, so I think that was really good, to make goals for myself.' (Mentee)

Goal setting provided a clearer idea of what progress might look like during the mentoring period. Having clear aims throughout support was seen to be a key driver of young people progressing in line with outcomes that were meaningful to them.

'I think a lot of the focus was definitely on the goal setting and smart goals and step-by-step focuses within the sessions, which I think helps the mentors to have more of a focus and to make it super youth-led for the young people to decide what they wanted their sessions to look like, what they wanted to focus on.' (DPO manager)

Meeting in a safe space

Safe spaces, both emotionally and physically, were also identified as key to achieving positive outcomes. Specifically, ensuring that young people were able to feel safe and secure on a very basic level ensured that they were able to focus on the aims and objectives of their mentoring sessions. Feeling emotionally safe enabled mentees to openly reflect on challenges and worries.

'We have a cabin that you can go into and just be more peaceful if you need to calm down; we call it the calm cabin. So, that's where we did our mentoring. She was really nice. She always gave us snacks. If we ever had any worries, we would be able to tell her.' (Mentee)

This helped mentees to talk about issues that they found challenging and meant mentors were able to work alongside mentees.

'It creates an air of they feel safe to speak without it being judged or reported back. Also, the safe space in terms of [being] non-judgemental, I think if there's suicide ideation or self-harm, that in other areas they don't feel safe to talk because it's taboo, or they get a shocking reaction.' (Mentor)

Overall, the accounts of mentees and mentors about the changes they saw arising from mentoring and the underlying mechanisms of change are very consistent with the theory of change. We discuss this further in the Conclusions section.

Factors influencing young people's ability to achieve changes from mentoring

The final theme we consider in relation to the IPE data about perceived impacts is the factors seen as influencing the extent of change for different mentees. Although the accounts of mentees and mentors were generally very positive about the impacts of mentoring, mentors acknowledged that not all young people achieve as much through mentoring. They identified wider factors that can influence the extent to which mentoring helps young people to achieve change. The most notable factors identified by interviewees were:

- Parent/carer engagement and buy-in;
- Mentees' level of engagement;
- Mentees' level of need; and
- School alignment with mentoring provisions.

Parent/carer engagement and buy-in

The extent to which parents/carers supported and bought into mentoring was seen by mentors as influencing how successful mentoring could be. Practitioners said that the vast majority of parents/carers supported the overall aims of DPOs and mentors.

Where parents/carers were engaged and supportive of the aims and objectives of mentoring, young people sometimes described their goals and aspirations being taken on by family members. One interviewee reflected on how, at the close of her mentoring, her mother offered to continue to support her towards positive outcomes.

'Then she also helped me, and then she did some – I told her what [mentor] tells me to do about all the outcomes, and then my mum's like, "Okay, so when you're finished with [mentor], if you're still dealing with it, I can try and remind you to think those outcomes."' (Mentee)

However, in some instances, parents/carers were hesitant about their child engaging with mentoring. This was typically a problem when parents/carers perceived DPOs to be engaging with issues that may have been treated with hesitancy in the home environment. Specifically, many mentors supported mentees to explore

topics relating to mental health and youth identity, which were not always perceived to be openly discussed within all family environments. Having limited family engagement was seen as a challenge to achieving outcomes, and consistent messaging at home could help to reinforce the aims of mentoring.

'If the parent or guardian isn't on board, then there's minimal hope of the young person actually investing in it themselves.' (DPO manager)

'if the parent is part of the problem, then they're standing in the way of what you can achieve because, obviously, the parents' ideology is so much stronger than mine.' (Mentor)

Mentors also felt some family members – and the wider community – might misunderstand mentoring, seeing it as being about mental illness, being deficit-driven or exposing wider family problems.

'I do wonder if there's just this notion of mentoring being understood as almost entwined with counselling, therapeutic spaces, which may be that older generation of parents that we have are super scared of still, of it being a space where a young person might be exposing things that are going on in the home.' (DPO manager)

In addition, practitioners also highlighted how families' previous experiences of welfare provisions could shape resistance to their children engaging with mentoring, particularly if families had more fractured relationships with statutory services, such as children's social care. Practitioners felt those families did not always distinguish between DPO provision and statutory services and therefore held concerns about potential family intervention. These reflections were not viewed as significant barriers to engagement with mentees overall but were highlighted when practitioners reflected on the challenges they faced and why some people may have benefited less from mentoring than others.

Importantly, this was typically framed as the exception, as opposed to the rule, and the vast majority of families were perceived as supportive of their children receiving mentoring and aligned with the aims and objectives of DPO provisions.

Mentees' level of engagement

Another key factor shaping the ability for mentoring to be effective was the level of engagement of mentees themselves. Practitioners described instances where young people had been referred by professionals but did not want to engage meaningfully in mentoring. Attempting to work alongside young people who had limited buy-in meant that mentors struggled to work towards outcomes.

'You can't create change unless they want to.' (Mentor)

Practitioners highlighted how some young people have had negative experiences with other services, both statutory and third sector, which could result in more hesitant engagement with mentoring. Some interviewees suggested that some young people may have more negative perceptions of mentoring itself, for example, seeing engagement with youth services as 'uncool' or an indication of being weak.

Extent of need

Practitioners also said it was sometimes the case that complex needs and the ongoing interventions of statutory services meant young people were facing too many challenges to be able to focus on the aims and processes of mentoring.

'For some young people, [they] can be so chaotic and so dysfunctional, that, however much they try, sometimes, they just can't get there.' (Mentor)

School alignment

School schedules were seen as affecting young people's ability to engage with mentoring meaningfully. It was harder to reach young people during school holidays, particularly for DPOs who focussed on school-based delivery. This affected the momentum of the sessions and the ability to work towards outcomes.

In addition, some young people experiencing behavioural challenges at school ended up being excluded, suspended or moved to different education settings. Again, this was a particular issue for those DPOs who deliver in schools. Although attempts were made by practitioners to support young people during educational transitions, one DPO manager reflected on how permanent exclusion had resulted in the ending of mentoring for several young people.

'We must have lost six or seven where they've been permanently excluded [...] We tried with all of them last term to find them to say, 'Look, we'll follow them into the other school'. We failed with every one.' (DPO manager)

RQ2. Quality and fidelity of the shared practice model: has the mentoring practice model been delivered as intended and as per the specified core components? What adaptations are made and why?

We now turn from discussing the impacts of mentoring to its delivery. In this first section, we describe findings relating to fidelity – whether the shared practice model was delivered as intended – before turning to the feasibility and acceptability of the mentoring model and then to considerations concerning the trial arrangements.

As described in the Methods section, the shared practice model was developed with DPOs to ensure that the delivery of mentoring and experience of young people across the 17 participating organisations was comparable and that the evaluation focuses on a consistent and known intervention. The model consists of 22 elements (Appendix D), which cover the whole mentoring process, from training mentors and recruiting young people to closing the mentoring relationship.

Fidelity

In this section, we draw on quantitative assessments of fidelity. In order to assess fidelity to the shared practice model, we first identified 11 of the key elements thought to be crucial to high-quality mentoring practice to prioritise fidelity monitoring. These elements are categorised under five dimensions. The assessment criteria per element are summarised in Table 9 in the Methods section.

Each DPO was given a rating of high, medium or low fidelity against each of the five key dimensions:

- Adherence to target population (age and eligibility);
- Dosage (duration and number of sessions);
- Quality relating to mentor (consistency of mentor and mentor training);
- Quality relating to mentoring components (written plan and closure process); and

- Quality relating to interaction (trusting relationship, safe space, goal setting).

Overall, DPOs delivered the intervention with high fidelity across the five dimensions, though there was more divergence from the model in some dimensions than others. A total of 14 of the 17 DPOs (82%) delivered at least four of the five quality dimensions with medium or high fidelity. Seven of the organisations (41%) delivered all five dimensions with high fidelity.

Table 31 shows the percentage of DPOs that delivered each component with low, medium or high fidelity. For three dimensions, almost all DPOs achieved high or medium fidelity. These were quality – interaction, target population and quality – mentor. For the remaining two dimensions (dosage and quality – components), 11 out of 17 DPOs delivered with high or medium fidelity. In a later section, we discuss the possible reasons for some elements of the shared practice model being delivered with more fidelity than others based on interviews with DPO managers and mentors.

Table 31: Number of delivery partner organisations who delivered each dimension at each level of fidelity

Dimension	Low fidelity	Medium fidelity	High fidelity	High or medium fidelity
Target population	1	4	12	16
Dosage	6	3	8	11
Quality – mentor	1	0	16	16
Quality – components	6	7	4	11
Quality – interaction	0	4	13	17

Base = 17 DPOs; high fidelity (≥80%), medium fidelity (60–80%) or low fidelity (<60%)

Target population

The target population of this evaluation was achieved with high fidelity by 12 DPOs and medium fidelity by four. All of the young people recruited were within the age requirements of the study (that is, aged 10–17), with only 19.7% aged 15–17 years old (we set a target of no more than 30% of young people per DPO to be aged 15–17).

The YEF criteria for unmet needs were met in 74% of cases. No unmet needs were recorded for 26% of those randomised. It is likely that most of this is missing data – that is, there were unmet needs, but the data about them was not completed by the DPO. DPOs found completing the administrative information about mentoring cases particularly onerous, and since they did not know a young person's characteristics and circumstances more fully at the start of mentoring, they may have postponed completing the case information and then not come back to it. But we cannot rule out the possibility that some of the young people who entered the trial did not have unmet needs. The mean baseline SDQ total difficulties score for those without data on unmet needs is lower, at 17.3 (sd 6.9), than the mean for those with recorded unmet needs, at 18.9 (sd 6.6). This suggests that, on average, those without data had lower needs, which would be consistent with some young people in this group having no unmet needs. Nevertheless, the mean SDQ

scores for those without data are markedly higher than the British norm of 10.3 among 11- to 15-year-olds, so the problem of young people without unmet needs entering the trial does not appear to be acute.⁴⁹

Dosage

Dosage was assessed based on the duration of mentoring (at least 12 weeks) and number of sessions (at least 10 sessions of at least 45 minutes) delivered per young person. Eleven DPOs delivered with high or medium fidelity. The main cause of low dosage was young people terminating mentoring early – of the mentees who attended fewer than eight sessions, 87% finished their mentoring before 12 weeks. This topic is explored further in the feasibility and acceptability sections below.

Quality – mentor

Mentor quality was assessed based on mentors' training and each mentee having one mentor throughout their mentoring (consistency). This dimension was delivered with high fidelity by 16 of the 17 mentors.

Quality – components

This dimension was delivered with high fidelity by four DPOs and medium fidelity by seven. It was assessed based on the delivery of two elements – creating a written plan for each young person and having a closure process. Although these elements were agreed with DPOs in the formulation of the shared practice model and are recommended in Garringer et al. (2015) – see the Methods section – the data indicates they were not consistently present. The interviews with managers and mentors suggest that this may be, in part, because, in practice, planning and closure are carried out more informally. For further discussion of the feasibility of delivering these elements consistently, see below.

Quality – interaction

The quality of interactions between mentees and their mentors was assessed using the mentee survey, in which they were asked about their experiences of trust, safe spaces and goal setting. These elements were achieved with high fidelity by 13 DPOs and medium fidelity by four.

RQ3. Feasibility of the shared practice model: how feasible is the practice model? What barriers and enablers were encountered in working to the practice model; how were these addressed?

Feasibility of the model overall

The previous section assessed the fidelity of delivery of the shared practice model. In the IPE, we also considered its feasibility and acceptability because DPOs might have implemented it faithfully but not found it easy to do so or considered it an acceptable or satisfactory approach.

Feasibility concerns the ease with which a practice or intervention can be successfully implemented in a given setting. In this section, we explore the feasibility of delivering specific elements of the shared practice model and the barriers and facilitators faced by DPOs working in different contexts. To understand the feasibility of delivering the shared practice model, we have drawn on several sources of data: the interviews

⁴⁹ There is no evidence of differential impact between those with recorded unmet needs and those without.

with young people, mentors and managers; administrative data; the mentee feedback survey and the mentor feedback survey.

As set out in the previous section, fidelity was generally good, although some elements of the shared practice model were delivered more consistently than others.

This is reflected in further data on feasibility collected in the mentor survey. In the survey, we used a validated measure of feasibility (Weiner et al., 2017), the Feasibility of Implementation Measure (FIM). The results are shown in Table 32 and indicate that mentors found the overall shared practice model feasible to deliver. We also draw on qualitative data to discuss why some elements were more feasible to deliver than others and their relationship with the quality of mentoring delivery.

Table 32: Feasibility of Implementation Measure

FIM item	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
The shared practice model seems implementable	0	0	3	18	5
The shared practice model seems possible	0	0	3	18	5
The shared practice model seems doable	0	0	3	18	5
The shared practice model seems easy to use	0	0	7	16	5

Source: Mentor survey; Base = 26

Familiarity with the shared practice model

The evidence from interviews with managers, mentors and mentees also indicates high levels of feasibility overall. This data suggests that this is due to the alignment of the shared practice model with existing practice rather than necessarily familiarity with the shared practice model itself. In the survey, 20 of the 26 mentors agreed or strongly agreed that ‘the form of mentoring required for the study is the same as my usual mentoring practice’. From one perspective, this shows that the collaborative process of developing a shared practice model which reflects common mentoring practice was highly successful. However, the data indicate that not all mentors were aware of the shared practice model and consciously and purposefully aligning their practice with it.

Familiarity with the shared practice model as a specific and documented approach varied between DPO staff and across organisations. A summary of the shared practice model was presented at one of the trial preparation workshops (see the Methods section), and DPO delivery leads were asked to familiarise themselves with the shared practice model. We also asked DPOs to incorporate it into their induction of mentors. The shared practice model was re-shared in the weekly email, and individual elements were emphasised during the fortnightly one-to-one DPO support meetings at relevant points in the trial timeline. Most organisations’ delivery teams familiarised themselves with the shared practice model at the start of the trial delivery, but the extent to which they remained close to it throughout varied between individuals.

'It was definitely something that we looked at in the beginning, and obviously making sure that we stick with, I guess, the initial objectives and aims of the project and what it actually set out to do.' (DPO manager)

The interviews and support sessions with DPO staff indicated that while managers were familiar with the shared practice model, some of their mentoring staff were not. Some nevertheless delivered broadly in line with it, but others appear to have deviated from it.

'I haven't seen it before, but it does correlate with what I understand about what we do and what we did. I do remember [DPO manager] saying we fit really well into the idea of it anyway because it's what we already were doing.' (Mentor)

'So, if I'm honest, it wasn't something that was embedded into all sessions with young people. We felt like, oh, brilliant [the evaluation team] have given us what they expect, but now we can go off with our own interventions, and our own styles of practice, and do what we feel is appropriate.' (Mentor)

This may explain why some of the elements that required more structure and an organisational process were not delivered as consistently as elements which are a typical part of mentors' work. The feasibility of these individual elements is discussed in the next section.

Feasibility of delivering shared practice model elements

In assessing feasibility, we look first at the delivery of specific elements of the shared practice model and then at the quality dimensions.

We draw first on quantitative data, and then use qualitative data to explore further. Table 33 summarises the relevant data from the administrative data and mentor and mentee surveys relating to elements of the shared practice model. The data do not cover all elements of the shared practice model, but they are indicative of how feasible it was to deliver the model, and the elements are discussed in more detail using insights from the interviews and support sessions.

Table 33: Delivery of shared practice model elements

Shared practice model element	Source	Unit	% of respondents
T.1. Mentors should have received a minimum of two hours of training prior to starting relationships	Mentor survey – at your current organisation, have you received at least two hours of training on - The organisation's safeguarding policies and procedures - The organisation's risk management processes - The organisation's mentoring approach	Mentor – respondents to survey (N = 26)	Almost all mentors surveyed received training
MS.1. Mentors will be supported throughout the	Mentor survey – have you received support from a line	Mentor – respondents to survey (N = 26)	100% of mentors surveyed received support

Shared practice model element	Source	Unit	% of respondents
mentoring programme by a line manager.	manager or supervisor during the trial?		
M.1. DPOs will reflect on mentor–mentee matchings and consider the qualities of the match.	Administrative data – was the organisation's usual process for matching followed in the case of this young person?	Cases (N = 742)	The matching approach was followed for 90.2% of young people
YS.1. DPOs will have a written programme plan to guide the 12-week mentoring relationship	Administrative data – was a written mentoring plan created for this young person to guide the 12-week mentoring relationship?	Cases (N = 742)	This requirement was met for 70.3% of mentees
C.1. DPOs will have a closure process	Mentee survey – I know when my mentoring will come to an end	Mentee respondents to survey (N = 299)	61.7% of mentees were aware of their mentoring closure

Sources and bases: As described in the Unit column

Moving to the analysis of the feasibility of specific elements of the shared practice model, mentors and managers considered the mentor training requirement highly feasible. DPOs were required to provide at least two hours of training prior to starting mentoring for the trial, with a focus on the organisation's mentoring approach, safeguarding policies and procedures, and risk management processes. This training, as well as ongoing professional development, was considered a standard part of their service required for effective mentoring delivery.

'What I did was each mentor was given an induction on the role aligned with the multisite trials. [DPO] also has their own training fortnightly and meetings and stuff that the mentors also were able to be a part of.' (DPO manager)

One DPO who had been part of the feasibility trial extended the training they gave mentors for the efficacy trial in response to issues that had come up in the feasibility trial:

'So, aside from standard mental health, this time around we made sure that they also had mental health first aid in terms of preparing for this project because we had some things that came up. Just in general, they all do safeguarding, which is standard, and then they're all DBS checked and also familiarisation with the actual programme itself in terms of what model that they'd be using.' (DPO manager)

As with mentor training, DPO managers considered it very feasible to provide support for mentors throughout the trial, and this was considered a standard part of a DPO's provision. Mentors received a wide variety of support, including clinical supervision, regular check-ins with a manager or senior mentor, responsive safeguarding support and risk resolution, peer support and appraisals.

'It is just the normal after the induction, ongoing training, supervisions, and appraisals.' (DPO manager)

Recruiting young people in line with the shared practice model's criteria for taking referrals and assessing eligibility was generally feasible, though the scale of the project presented a challenge, which is discussed further below in relation to the trial arrangements' feasibility.

It was also considered feasible to identify young people who fulfilled the eligibility criteria.

'So within our community provisions, we have different streams, but within that, there's always the more vulnerable with increased unmet needs and more high risk based on past exclusions from school, current school exclusions, managed moves and home lives, challenges, maybe they've been referred to us through early help social care, youth justice team, things like that.' (DPO manager)

The matching requirement of the shared practice model was considered feasible in most cases and aligned with the organisation's existing processes. While the shared practice model did not prescribe set parameters for organisations to match on, it did require organisations to reflect on the strengths and risks of each match, even where matching options were limited or not available. The shared practice model also did not prescribe the approach to be used, and varied approaches were taken, depending on organisation size, delivery location, and mentor and mentee characteristics. For example, some organisations delivering in schools only had one mentor assigned per school, which meant there was no option when matching, while other DPOs were able to consider characteristics such as gender, lived experience, staff availability and personality when matching young people to a mentor. DPO staff described their ideal approach to matching and their actual process within the resources available.

'We like to match where possible, so when we're internally recruiting, it's looking at staff who already have an established relationship with the individuals, and looking at the personalities and whether they would think they'd be a good match for that individual.' (DPO manager)

'In a luxury world, we would have a bank of 50 mentors. The reality is there's two of us, so it came down to me taking 25 boys and [name of mentor] taking 25 girls, and it worked fine.' (DPO manager)

DPOs were asked to hold a meeting with each young person that includes relationship building and boundaries, which could take place at any stage within the onboarding process or first mentoring sessions. While mentees did not consistently meet their mentor prior to starting mentoring, mentors appear to have covered the intended issues, which include introducing the mentor, setting young people's expectations of mentoring and explaining the boundaries of the mentoring relationship, within the first mentoring session. It is possible that the lack of familiarity with this requirement of the shared practice model is the reason for a formal pre-meeting not being delivered consistently, rather than it not being feasible. However, a formal pre-meeting would also have required an additional session, with implications for staff capacity and timing of the 12 sessions.

'[The first session involved] speaking a bit about my role, how things are going to look, the 12 weeks, and not being able to go over that. Session times, confidentiality, and looking at what they may want to get from it, what the focus is, what's going on for them. Yes. Trying not to overwhelm them, really. Just find out a bit about them.' (Mentor)

As described in Garringer et al. (2015), a written plan is key to monitoring and supporting mentoring relationships to a high standard. This element was delivered fairly consistently across organisations, though

there was variety in how. Some DPOs use a standard plan or programme for every relationship, others create a new one with each young person and a minority prefer to be entirely youth-led week-to-week.

'It always helps to have some form of plan [...] it's got to be fluid, and it goes where it goes, but the last thing you want is those awkward silences where you don't know what to say [...] If you've got a structure or something that you're trying to achieve within the lessons, then there's always that natural flow.' (DPO manager)

'So yes, it's just nice to, like I said, build that relationship and then be able to set goals from that young person and say, "Right, well, what do you think we could do? What do you think we could do next week then?" and because you've got that 12 weeks, you can plan up for that.' (Mentor)

Young people tended to work with one mentor throughout their time on the trial unless the mentor left the delivery organisation. In general, this was easy to do – both practically and in terms of personal relationship building – unless staff left the DPO. In one case where the mentor left 'close to the beginning' of the trial, the mentee said it was the only thing that wasn't good about mentoring.

Having mentors who have been long-term employees and an established presence in schools or delivery settings beyond the mentoring relationship was also considered valuable, as it means deliverers, referrers and young people have a shared expectation of the provision.

'That's one of the reasons why I think what we do is easier, because we're all on the same page about it, and it's all very consistent with what we do with the group and then with the one-to-ones as well.' (Mentor)

The feasibility of delivering at least 12 sessions of at least 45 minutes each within 12 weeks varied by DPO. The key determinants of this were the delivery setting and the timing of delivery. School holidays made it challenging to deliver the sessions within the 12-week period for mentors working in schools, as they only worked with young people at school and during term time. Some organisations delivering in schools invited mentees to sessions at their community venues during school holidays but had low take-up of this offer. Some DPOs offered two sessions a week for one or two weeks, but this approach was not welcomed by some DPOs who felt it didn't leave young people enough time to process one session before their next. If a mentee missed a session, it was similarly not always possible to reschedule it within the 12-week period because mentors were at capacity, could not fit sessions around school timetables or it would have meant two sessions in a week. While this element was expressed as a minimum number of sessions and weeks, in practice, it is likely that most mentoring relationships had to end at the 12-week mark to ensure that mentors had the capacity to start working with the waiting list group.

'Young people are not going to turn up every week. One week, they'll have something else on that takes priority. People get ill. My mentors need to take annual leave. All of those need to be factored in. We can't guarantee that there's going to be both sides, the mentor and the mentee, available every single week for 12 weeks' (DPO manager)

The duration of sessions was considered feasible across settings, although some felt that allowing more flexibility based on young people's needs would have been better. For school-based delivery, 45 minutes was not felt to be disruptive, as it fitted into a single school lesson, and in other delivery settings, it could be extended as required.

'The forty-five minutes, hour, fits really nicely with a lesson length in the school, so that's great.' (Mentor)

The closure process requirement of the shared practice model was considered feasible by interviewees, although it was not always a formalised process. Mentors interviewed discussed managing the end of mentoring relationships as a typical part of their practice. In the interviews, young people reported that they were conscious of and happy with when their mentoring would end (both if it had already ended and if it was still ongoing at the point of the research interview). However, only 64.9% of young people completing the feedback survey (at around eight weeks of mentoring) agreed that they knew when their mentoring would come to an end. This may suggest that the attempts of mentors to provide a healthy ending to the mentoring relationship were not always consciously received by young people.

'I knew when my last session was. Because she's eased me into it, it just didn't feel like a whole shock.' (Mentee)

'Acknowledging where we started, how we finished, how they feel about it, what I've noticed in them. Yes, the ending is something I talk about often, just to support the young person. So, it doesn't come at the end. They don't feel really let down or surprised.' (Mentor)

Information from our various data sources on the quality dimensions of the shared practice model and their feasibility, again suggests that these were feasible for the DPOs. Beginning with our quantitative data, in the mentee and mentor feedback surveys, we asked young people whether they had experienced key elements of the shared practice model which indicate the quality of the mentoring relationship, summarised in Table 34. These results suggest that all the quality elements were delivered with high levels of consistency by all DPOs.

Table 34: Summary of delivery of the support quality dimensions

Shared practice model element	Source	% of respondents
YS.2. Key quality dimensions are intentionally attended to through the mentoring relationship:		
Young people feel able to trust their mentor	Mentee survey – I feel like I can trust my mentor	90.3% agree or strongly agree
Relationships between mentors and mentees are high-quality	Mentee survey – I feel like I have a good relationship with my mentor	89.6% agree or strongly agree
	Mentee survey – I feel that my mentor understands me and the challenges that I face	86.2% agree or strongly agree
	Mentee survey – I feel like my mentor hears and respects my ideas and views	92.0% agree or strongly agree
Spaces where mentoring takes place are emotionally and physically safe	Mentee survey – Did your mentor make you feel safe so you could share your thoughts, feelings, or work?	91.0% in some or all sessions
	Mentor survey –	100% in some or all sessions

Shared practice model element	Source	% of respondents
	How often did you create a safe space for young people to share thoughts, feelings, or work?	
With the support of their mentor, young people set and review goals	Mentee survey – Did you make goals or plans with your mentor?	82.9% in some or all sessions
	Mentor survey – How often did you provide opportunities for young people to set and monitor goals?	100% in some or all sessions

Source: Mentee survey (Base = 299) and mentor survey (Base = 26)

Information from the qualitative data, including the mentor interviews, showed that the key dimension of relationship quality was considered very feasible to deliver. One manager described their mentors as follows:

‘They just have got great relationship-building skills. They’re quite quickly able to establish trust, a rapport, all that thing about being non-judgemental.’ (DPO manager)

Ensuring that mentoring took place in physically safe spaces was made more or less feasible by the context and location of delivery, but all the mentors interviewed felt it was important and that they had achieved it. For example, in some cases, the schools facilitated mentors to create a safe physical space by providing a dedicated room in which the mentors could make comfortable with soft furnishings and fidget toys. On the other hand, organisations working in community centres or public spaces used their relationship-building skills to ensure that young people felt safe even in busy public spaces.

‘That is important because they have to feel comfortable in the environment. So we’re pretty open about where we can do a session. It ranges from just doing it in the family home because that’s sometimes where they feel comfortable. It could be doing it in school. It could be going to the park. Also, we’ve got a few allocated rooms at the [youth centre] which are always available.’ (Mentor)

‘We’ve got our own rooms [in schools] now. Yes, we can leave our resources there; we’ve got things up, fairy lights, posters, colouring, and things. The schools have been really responsive in that way, which is great.’ (DPO manager)

Others felt that the physical space was less important than building emotional safety. Mentors created a safe emotional space by setting clear boundaries, assuring mentees of the confidentiality of their sessions and ensuring young people did not feel judged.

‘It’s all about boundaries – what I share, how I react to things, being appropriate. Going back to empathy. If young people feel that you understand them, or you’re willing to try and understand them, and there’s no judgement, and you’re being person-centred. I think that really creates a space for them to feel like, oh, okay, maybe this is someone that will listen to me.’ (Mentor)

Goal setting was also considered feasible throughout the mentoring, though how this element was delivered varied by organisation and mentor. While some organisations had a structured approach and used tools

such as the Outcomes Star or SMART targets, others took an informal approach through organic conversations.

'I always ask them if there's anything that they want to talk about or if they have anything that they want to improve on. That's how I get them to set their own goals. We also do goal setting in one of the activities. I always check in every session with the ones that I've set their goals to see if they're on track with their goals.' (Mentor)

However, one mentor noted that she did not set goals with mentees until she was reminded by the items in the mentee feedback survey, supporting the idea that mentors were not always familiar with the shared practice model in their everyday practice.

RQ4. Acceptability of the shared practice model: is the model viewed as acceptable and an improvement on services as usual by the delivery partners, and is it acceptable to young people?

The previous section explored the *feasibility* of the shared practice model – whether it was possible and easy to deliver it. In this section, we turn to the *acceptability* of the shared practice. Here, rather than whether it *could* be implemented, we look at whether it was a model of mentoring that mentors thought was appealing and that they liked and welcomed. To understand this, we have again drawn on several sources of data: the interviews with mentees, mentors and managers; administrative data; the mentee feedback survey and the mentor feedback survey.

Acceptability of the model overall

Beginning with the mentor survey, we used a validated measure of acceptability (Weiner et al., 2017), the Acceptability of Implementation Measure (AIM), presented in Table 35, as an overall measure of acceptability used in the mentor survey. This shows that overall, mentors found the shared practice model acceptable. A substantial number chose 'neither agree nor disagree' as a response option, but as discussed in the previous section, this may indicate mentors' lack of familiarity with the shared practice model.

Table 35: Acceptability of the shared practice model

AIM item	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
The shared practice model meets my approval	0	<3	7	15	3
The shared practice model is appealing to me	0	<3	6	15	3
I like the shared practice model	0	0	8	14	4
I welcome the shared practice model	0	0	7	15	4

Source: Mentor survey; Base = 26

Interviews also confirmed that the model was generally well-liked by interviewees, and in some cases, DPO managers felt it had helped them to refine, define and improve their mentoring provision as an organisation.

'It honed in the skills that our mentors have, and it's given them a structure, and especially, as I said, we've got new mentors coming in who've never mentored before, to have a model to follow, it's really good actually, yes. Really enjoyed it.' (Manager)

Acceptability of the shared practice model elements

As before, in our analysis, we look first at specific elements of the shared practice model and then at quality considerations.

The training and support requirements of the model were generally seen as a positive aspect of the model. For some DPOs, they reflected the training they already provided; for others, they were an opportunity to refresh some skills without excessive demands on their time. The requirements were also aligned with DPOs' usual training practices and reinforced their quality assurance processes.

There were more mixed views about the eligibility criteria, and this varied by organisation, depending on their normal referral routes. The criteria were viewed positively by teams who already work directly with Youth Justice teams and other statutory referrers, while organisations working in schools sometimes felt the criteria excluded young people who would have benefited from mentoring, particularly younger children aged 10–11 not yet showing any of the unmet needs.

'In general, it was fine. I think the only barrier we hit was the fact that usually, we don't stipulate certain criteria for our students. If the school thinks there's somebody that would benefit, they just send them our way. Whereas, obviously, there was some specific criteria for these trials, which meant that there was a few times when a teacher would say, "Oh, this student would be great", but we'd look down the list, and they wouldn't tick anything, and so we've had to hold them off until outside of the trials.' (DPO manager)

The requirement to reflect on the matches between mentors and mentees was viewed positively. DPO staff considered it an important part of their provision and crucial to ensuring mentoring relationships were effective.

'[W]e've had a little issue recently in one of the schools where one of the mentors didn't fit with the young people – so we've swapped that one around. Because we have the regular meetings with all the mentors, we'll check make sure that that relationship is as best as it can be and they don't need to change to anybody else.' (Mentor)

Initiating the relationship through a meeting in which they set boundaries was also an acceptable and normal part of the mentoring provision.

'The first meeting really is just creating that space for them to tell me a little bit about them really, and just chatting. With young people that might find that difficult, I'll have other resources there. They might like to do some drawing. I have fidget toys and spinners and things that young people can have to fiddle with' (Mentor)

Views about the written plan component of the model varied depending on whether this was a usual part of the DPO's practice. While a written plan was seen as useful by most, some organisations preferred a more flexible approach with a focus on sessions led by the young person.

'I actually put together the 12-week programme that we did because I was the first one that started, so each week I'd have a different theme.' (Mentor)

'[We make it] super youth-led for the young people to decide what they wanted their sessions to look like, what they wanted to focus on.' (DPO manager)

The practice model required mentees to work with one mentor consistently throughout the duration of the trial. This was liked by mentors and considered essential to developing a strong and trusting relationship by mentors within the 12 weeks. Mentees also highly valued the consistency and ability to build a relationship with one trusted adult.

'I think sticking with one mentor is easier. If I had two different, it would be like, oh, I'd rather just have one because it's easier than two.' (Mentee)

There were more mixed views about whether the 12-week period was a positive feature of the model or not. Some practitioners felt that real change could be achieved during this time, and it was also recognised that mentor capacity was limited. Others questioned whether it was enough time to achieve long and sustained improvements or favoured a more flexible approach depending on the needs of the young people. Mentors also appeared to have commonly interpreted the 12-week minimum requirement as a maximum duration, which may have negatively influenced their perception of it.

'Ideally, in the world of mentoring and supporting these types of young people, we would probably generally do a longer term if we could choose how long we mentored an individual. [...] At the same time, we have proved it to be useful because of the types of young people that we're recruiting and supporting and the relationships that we've had. So it fits really well within the organisation, and it fits with our values and aims as an organisation and what we want to do.' (DPO manager)

'We have to be firm sometimes that we can't continue, we only get funding for this amount of weeks. So it does have to stop, unfortunately. If we do think they require more support, then we will look at referring them to either another [internal] service or an external service.' (Mentor)

'If I'm honest, I don't really like time-limiting (support). I think it needs to be more individual' (DPO Manager)

The shared practice model specified that mentoring sessions should last at least 45 minutes, which was considered acceptable in most cases, though some mentors felt they needed more flexibility with session length depending on young people's needs and the delivery setting. One mentor discussed how shorter sessions would be more appropriate, especially while the relationship was still developing.

'I think for others, what I've heard is that maybe it wasn't quite the right time for them, and I think that has been the key. It's been a struggle to get them to open up, like 45 minutes has been a struggle. Maybe all they needed was 15 minutes, and maybe it needed to be over a longer period of time.' (DPO manager)

DPOs were required to have a closure process in which they informed young people of when their mentoring would end and which services would be available to them after the 12 weeks. This element was considered a good feature to include by DPO staff.

Turning to the acceptability of quality dimensions of the shared practice model, mentors placed a lot of value on building trusting relationships with mentees and approached developing them using a variety of techniques. Some mentors talked about using games and structured approaches, while others took an approach based on more organic relationship building.

'In the first session, we play a game called Getting to Know You Jenga. We pull out a piece of Jenga, and it's got questions, so like, "What's your favourite food?" I answer the questions too, and they answer. I feel like that helps build the relationship because they're getting to know myself [...] I get an idea about them, they get an idea about me, and for them, it builds up the trust and builds up the relationship.' (Mentor)

'If you can really show that you're there for that young person [...], you're solely there, and they're your priority. It creates a space where someone can really feel validated and build that trust..' (Mentor)

Likewise, mentors liked the reference to creating physically and emotionally safe spaces for young people. They considered this a central aspect of their work, which had to be developed over time and in every session.

Mentors' opinions of the goal-setting element varied between DPOs depending on how structured their provision was. For many, goal setting was a core part of their mentoring approach, but some felt it limited the flexibility to respond to the needs of young people.

Acceptability to young people

We also explored the acceptability of the mentoring model to young people. While they did not explicitly reflect on the defined elements of the shared practice model, young people's positive perceptions of their mentoring were clear from their overwhelmingly positive comments when asked what they would tell other young people about it.

'Oh, do it, definitely do it. You'll feel much better about yourself, and you'll feel just so much more relieved. It's well worth it. It's just nice to speak to someone, it's better than keeping it all in. It's better to talk to someone.' (Mentee)

These positive reflections were also found when asked if anything could be improved about the mentoring:

'No, I don't think so. I think everything was very good.' (Mentee)

RQ5. Differentiation: how does it differ from the mentoring approach(es) previously used by DPOs and from other services as usual?

Differentiation

Since a key objective of the study was to establish whether it was possible to evaluate a common and non-programmatic service delivered by youth agencies as part of their usual practice, the shared practice model was, by definition, intended to be very similar to their usual activities. As detailed in the previous sections, this similarity was a key driver of the feasibility and acceptability of the model. There were two key areas in

which the shared practice model varied from delivery organisations' usual practice: the duration of the mentoring and the eligibility criteria.

The extent to which the 12-week duration of mentoring differed from usual practice varied. In a few cases, this trial offered the opportunity to extend their usual mentoring provision, which was as little as six weeks. For others, this element of the trial required them to significantly reduce a long-term or open-ended mentoring provision.

The eligibility criteria also varied from the usual approaches used by DPOs. Compared to usual practice, the criteria sometimes required DPOs to widen the range of referrers they worked with or establish new referral routes, such as working with schools to reach the numbers of young people required for the trial who had relevant unmet needs.

Take-up of other services and support in the two arms of the trial

A potential source of contamination that could, in theory, arise in the trial was that the control group could have received services and support during the waitlist period that were not available to the intervention arm. If this had occurred, the trial would not measure the 'added effect' of mentoring; rather, it would measure the effect of mentoring versus other services and support. In practice, there is no evidence that any such contamination occurred.

Table 36 shows the services and support that young people received during the course of the trial from the DPO, as well as the numbers receiving support from external services. There is no strong evidence to suggest that the control arm received services or support beyond those that the intervention group received. There were no notable differences in the percentage of young people receiving DPO or external services or support during the trial or in the kinds of support or services they received.

The majority of young people in both arms (75.8% of the intervention arm and 69.3% of the control arm) received no alternative services or support from the DPO during the trial. Those who did had a mix of casual catch-ups with DPO staff (9.2% of the intervention arm and 15.2% of the control arm) and group sessions, including wellbeing sessions (4.3% of the intervention arm and 6.9% of the control arm) and activity-based sessions (e.g. art or sport; 4.1% of the intervention arm and 8.6% of the control arm).

Table 36: Services and support received during the trial

	Intervention	Control
From the DPO		
Casual catch-up	34(9.2%)	55(15.2%)
Group wellbeing sessions	16(4.3%)	25(6.9%)
Activity-based sessions (e.g. art, sport)	26(4.1%)	31(8.6%)
Other group activities	36(9.8%)	37(10.2%)
Other support/services (e.g. signposting)	25(6.8%)	20 (5.5%)
None	279(75.8%)	251(69.3%)
Received support from external organisations	38(10.3%)	31(8.6%)

*Base: young people with
information on services and
support*

368

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RQ6. Feasibility of the trial arrangements: how feasible are the requirements for recruitment, consent, randomisation and data collection? What barriers and enablers were encountered; how were these addressed?

Having focused on the shared practice model and experiences of using it, we now turn to the trial arrangements themselves. Again, we first discuss their feasibility and then their acceptability.

As we noted in the summary of the intervention, the trial arrangements were largely completed satisfactorily. However, achieving this involved intensive and creative efforts on the part of DPOs and extensive support from the evaluation team. Recruitment, gaining consent and completing baseline and follow-up data were all challenging for DPOs to undertake, requiring significant work. Despite this, all 17 DPOs remained engaged in the trial, completed the activity required and remained committed to undertaking the RCT. While the trial arrangements brought some specific challenges relating to data collection and consent, the administrative activities and the pressures that they created were not unfamiliar to the DPOs. One practitioner reflected on how the challenges resulted in frustration but were in keeping with business as usual.

'It's quite annoying. Yes, it is quite annoying, but it's all right. That's the nature of the job, really.' (Mentor)

The delivery setting shaped the way DPOs were able to implement the trial, as did the size, structure and organisational processes of each DPO. The following sections discuss the feasibility of key trial arrangements:

- Recruitment and consent;
- Outcome measures and data collection; and
- Waitlist design and randomisation.

Recruitment

As described in the Methods section, recruitment involved initial screening of young people referred to assess eligibility, explaining the trial and going through the information sheet and consent form, seeking parental/carers consent and collecting baseline data and managing randomisation.

These arrangements were much more onerous for DPOs than their usual processes in a number of ways. Quite apart from the trial context and the need to manage a waiting list, it represented a significant increase in referral numbers; written consent from children and young people and parents/carers was not part of usual business for some DPOs, and regular data collection at recruitment and/or end of mentoring was not usual practice for all DPOs, and where it was, it was much more light-touch. The scale of recruitment required extensive staff input, which put pressure on DPO resources.

'Scaling up the referrals was a big push. It took quite a bit of resource from the operation manager. Quite a lot of hours to do.' (Mentor)

This was particularly noted by organisations that took part in the feasibility study, as they had to adapt their referral processes further for the efficacy trial:

'Well, I suppose it was suddenly a lot bigger, so we had to gear up for a lot, lot bigger. We had to start thinking about. When we did the first stage, because it was just a smaller cohort of young people, all our referrals were from internal. We looked within the staff team and the existing staff at youth activities. We just asked for internal referrals. This time, it was much bigger, so we had to start thinking about where we would go to get those other referrals.' (DPO manager)

The DPOs utilised three core referral pathways to support the recruitment of young people into the trial: school-based, statutory service-based and community-based referrals. Due to the high number (50) of young people that each DPO was required to recruit relative to their usual practice, DPOs that ordinarily relied on statutory or community-based referrals initially struggled to meet this target. Those DPOs working in schools experienced fewer issues with reaching the numbers required.

'I guess what made it easier is that we already had relationships with quite a few different schools, so in terms of us getting numbers for the trials, that wasn't a difficult thing.' (Mentor)

The study team had encouraged DPOs to start building referral pathways and specifically explore the option of building relationships with local schools to increase referral rates. The study team was also able to share examples of successful approaches used by DPOs in the feasibility trial, such as hosting assemblies, attending parent/carer evenings and organising social events at youth facilities to promote the offer of mentoring and the trial.

Overall, as noted earlier, we fell somewhat short of the intended number of young people recruited to the trial, with 744 recruited compared with a target of 850, the numbers per DPO ranging from 29 to 51 compared with a target of 50 per DPO. This was a significant increase on the 10 required to be recruited during the feasibility trial. It was clear that the DPOs' pre-existing processes and positioning within their local context were key to informing feasibility.

'Scaling up the referrals was a big push. It took quite a bit of resource from the operation manager. Quite a lot of hours to do alongside [mentor], to create, I suppose, administrative procedures, to manage that process. To try and keep track of what was going on there.' (DPO manager)

We initially allowed a period of 20 weeks for recruitment, but this needed to be extended to 24 weeks. The reason for this was twofold. Firstly, DPOs found that the work required much more effort and elapsed time than envisaged. Secondly, the delay in the trial start date from September 2022 to March 2023 pushed the delivery timeline over the school summer holidays. DPOs were concerned this would result in young people randomised after May 2023 disengaging from mentoring over the school summer holidays and would make delivering 12 sessions in 12 weeks a significant challenge. As reflected in Table 37, this meant that some DPOs had to amend their recruitment strategies, pausing during June, July and August 2023. The extended timeline enabled DPOs recruiting through schools to finish recruitment in the first two weeks of the Autumn 2023 term. This time was used to upload the details onto the portal of young people to be approached and gather consent, ready to send baseline surveys and randomise in the first week of the school autumn term.

Table 37: Numbers of young people randomised during the recruitment phase per month

Month of randomisation	Count of randomisation per month
March 2023	79
April 2023	195
May 2023	120
June 2023	71
July 2023	49
August 2023	82
September 2023	148

Practitioners who were interviewed often felt that the timelines for recruitment placed too much pressure on delivery staff and were not feasible to meet. There were a number of challenges.

An added issue was that DPO staff felt that they had not had sufficient notice of the launch of the trial and that the communication from the evaluation team had not been sufficient. There was a period of nine weeks (including the Christmas break) from notifying them of YEF's confirmation that the trial would proceed to launching the trial recruitment phase. In this period, we supported their set-up through workshops, emails and individual calls. However, DPOs experienced the move from decision to launch as too short and rushed.

'There was a bit of a quiet period, and then, all of a sudden, it went off again and, all of a sudden, went quite quickly. I suppose that's because you guys were waiting for confirmation from the funder, etc. So I can completely understand, but just from a provider point of view, that could have maybe been better communicated, better coordinated.' (DPO manager)

'It was all a little bit manic, from what I remember. I remember it started a lot later in the day than it was expected. The biggest challenge for us was that, in order for us to deliver the 12 weeks, we had to get on to it within a set time.' (DPO manager)

Obtaining consent

Half of the mentors completing the mentor survey (13 of 26) agreed or strongly agreed that the procedures (recruitment, consent, baseline survey, randomisation) were clear and easy to follow, demonstrating the challenges that were faced in practice.

'I think, really, I can't imagine the process being any simpler. It's a consent form. It's a baseline survey that the young people do, and then they're able to start the process. You just select randomisation. So, I don't believe the process could be any simpler.' (Mentor)

However, obtaining consent remained a challenging and time-consuming task. DPOs reported several challenges:

- **Challenges in reaching and engaging parents/carers** – practitioners found it hard to get responses and consent forms from parents/carers. Additionally, the data-sharing requirement for participation raised concerns among some parents/carers, with some declining consent on these grounds. Mentors reported informally that this was particularly the case in more deprived areas, where families faced multiple and complex disadvantages. It was also said to reflect some families' poor experiences of children's social care services and more distrust of authorities post the pandemic.

- **Digital exclusion of marginalised communities** – many families did not have email accounts or did not regularly use/check them. DPOs reported that this was often driven by the lack of digital access/literacy among marginalised communities.
- **Language barriers** – while the Welsh versions of all key recruitment and consent documents were provided to organisations based in Wales, other DPOs only received English versions of the forms. We expected that DPOs would be able to use their usual practices to reach parents/carers who could not use English, but this proved challenging, perhaps because of the complexity of the trial materials and the resources required.
- **Lack of control of consent process in school settings** – school-based DPOs were often not in control of administering consent forms, relying on schools to support this. This was driven by challenges relating to data-sharing arrangements between schools and DPOs.

Overcoming these barriers required tenacity and creativity on the part of DPOs and support from the evaluation team.

The evaluation team shared tips from the feasibility trial. The approaches adopted by DPOs to support referrals and, subsequently, consents were:

- **Shortlisting young people prior to the start date:** some DPOs found it helpful to create a shortlist of suitable young people with contact details prior to the start of recruitment.
- **Diversifying consent options:** we provided three options for completing consents: emails and electronic forms through the portal, a data portal enhancement that allowed mentors to open consent forms and surveys on their own devices and support young people to complete these in person on the mentor's device, and paper copies.
- **Collective recruitment sessions:** several of the DPOs held a collective recruitment session for parents/carers and young people. This created an open space for parents/carers and young people to hear about the opportunity, discuss any concerns and gather consent from multiple families simultaneously.

'We sent them all out emails on the first one, and then even if you remind them a million times, they just never check their emails. So we were getting them to come to us at the end, and they'd sit in the room with a laptop, and we'd have them queueing up outside' (DPO manager).

- **Home visits:** some DPOs made home visits to discuss the trial with young people and parents/carers and manage consent in person.

'I think at one point I went out with the staff, and we just drove around and knocked on people's doors and was getting consent forms signed off by parents. I think we travelled around the city in a couple of hours, going all different places.' (DPO manager)

Additionally, DPOs were provided with a range of personalised documents relating to recruitment and consent, including information sheets and consent forms for young people and parents/carers. This was seen as very helpful.

'The fact that it kind of came with a pack, you gave us that starting pack, information for carers, all of that was really useful.' (Manager)

'They were great, and it was really helpful that they were edited to reflect our organisation [...] someone very helpfully put in Buddy Up and specifics about us, which made the letter look like it had come from us. We sent that to all the parents, and they were really grateful.' (Manager)

However, practitioners said that parents/carers did not always meaningfully engage with the documents provided, and some were unsure that all parents/carers had been fully aware of the nature of the trial when providing consent, particularly if translated documents were not available.

'The only thing I would have said, and I think I talked about this the last time, is about potentially looking into having consent forms that are in different languages [...] I think that would make things easier for us in regards to the recruitment process.' (Mentor)

Outcome measures and data collection

As well as the baseline questionnaires completed pre-randomisation, the trial involved other substantial demands on DPOs for data collection:

- In the mentoring group, a mentee feedback survey at week eight;
- The outcomes questionnaire after 12 weeks (for both the control and intervention groups);
- Administrative data collected at the end of the trial period;
- The mentor survey, administered after the end of the trial; and
- Qualitative research interviews after mentors and mentees had finished mentoring.

As we noted in the Methods section, these were largely completed with good response rates, although this involved considerable effort on the part of DPOs, and without their industriousness and commitment, it would not have been feasible.

Just over half of the 26 mentors completing the mentor survey agreed or strongly agreed that the data collection procedures for young people were clear and easy to follow. This split response rate is in keeping with the qualitative data.

DPOs reported difficulties with sharing baseline and follow-up surveys via email due to many young people not regularly accessing their email. To address this challenge, mentors sent reminders to young people via text message or WhatsApp. As with consent forms, in some cases, DPOs facilitated survey completion by opening unique links on their laptops and providing young people with the opportunity to complete surveys confidentially before or after their mentoring session.

Some DPOs held group events to support with data collection, inviting young people to join activities such as coding workshops and film and pizza nights. Laptops and tablets were made available at these events for young people to complete baseline and follow-up surveys.

Securing follow-up data from young people in both the intervention group and control group was particularly challenging. As we noted in the section on impact evaluation results, the time period required

for follow-up surveys was much longer than expected, and 30% of young people in the control group completed the follow-up questionnaire after starting mentoring. Once young people had finished mentoring, it was challenging to contact them. For those DPOs working in schools, school holidays often resulted in breaks in communication with young people. For those who completed their mentoring just before a school holiday, DPOs reported increased difficulty in obtaining a completed follow-up survey within the required timeframe. Additionally, there were instances of young people being placed on managed moves or being permanently excluded from school, which impacted the DPOs' ability to maintain relationships with young people and impacted their ability to collect follow-up survey data.

Many mentors who were interviewed noted how engagement with young people was often sporadic and inconsistent. In addition, mentors highlighted how the needs of mentees often took priority over the trial arrangements.

'Our thoughts and time are spent on either meeting the young person or figuring out what's the best thing to do with the young person, finding new ways of working, adapting to the sessions. Often, the questionnaires get put to the back of our minds.' (Mentor)

As noted in the Methods section, it was also challenging to identify mentees willing to take part in qualitative interviews, and we undertook fewer than intended, with little or no scope for purposive sampling.

Overall, DPOs felt that in comparison to their usual practice, the trial required a high level of data collection. This meant that there were ongoing challenges to ensure that they were able to meet the demands. DPOs felt that more could have been done by the evaluation team to ensure they were aware of the different components of the trial and had the appropriate time to complete the differing elements. The administrative data survey, in particular, came as a surprise to some of the DPOs. Some practitioners felt that the administrative survey was too long, resulting in a reluctance to complete it.

Waitlist design and randomisation

A key challenge for DPOs in delivering the waitlist design was ensuring that young people randomised to the control group remained engaged and eventually started mentoring. The relatively low attrition rate of 21.2% in the control group (compared with 26.1% in the intervention group) suggests that it was feasible for DPOs to maintain engagement with those randomised into the control group.

Some took a relatively light touch approach and had an initial touch point explaining the length of wait, and they re-engaged when support was about to start. Others maintained more frequent contact with families and mentees during this period, including emails, calls, messages and in-person check-ins. For mentors delivering in schools or DPOs offering group sessions to young people on the waitlist, it was easier to maintain informal contact during the 12-week period, which mitigated disengagement.

'Having the flexibility to just check in, and it's almost like that warming-up period, isn't it? Just to keep contact. I guess if we hadn't have done that, the young person might've forgotten that they'd been referred. They might've forgotten who we are, so just being able to, again, liaise with teachers frequently and say, "Just like updating you on where we're at. We're on week four of the waiting period, so our first session will be at this time."' (DPO manager)

'We made sure that they had our details so if anything changed, they could contact us. Again, because of the size of our organisation, we haven't really got that support if they needed it. If they had contacted us, then yes, we could have done, but we hadn't really got the manpower to keep in touch with the groups and stuff. We'd have liked to.' (Mentor)

Study team support

To meet the trial requirements, the DPOs needed significant support from the study team throughout the trial, particularly during the recruitment phase. This support included fortnightly one-to-one meetings via Teams with a named member of the study team, as well as email and phone call support between scheduled meetings. Meetings were used to address and resolve any problems the DPOs encountered, from technical issues to challenges engaging parents/carers or young people in data collection. These ongoing meetings and the responsive nature of the study team support were seen by DPOs as important to the feasibility of the trial arrangements.

'The support has been really good, and I think that's been really key in this programme [...] what's been really good about you guys is that you have listened to us as delivery partners right from the beginning, right from the efficacy trial to the feasibility trial, etc. You have listened to feedback and you allowed us to input and help shape some of those processes.' (DPO manager)

'I think you guys have been very supportive. I think the main thing for us is, do we have people that we can approach and ask for help, as and when? You guys have been very helpful in that.' (Mentor)

The positive nature of the relationships held between DPO practitioners and the study team was also very important.

'I honestly haven't worked with such a consistently nice bunch of contract managers. Do you know what I mean? Admittedly, it has been a pain... but there's been no sense of people being annoyed or frustrated or cross at all ever. [Data portal manager] had been amazing. [Study team contact] has been amazing. You've been really nice.' (DPO manager)

The data portal itself was a critical component of the trial's successful delivery. Specifically, it was the key enabler of data monitoring across all DPOs and ensured that there was little room for ambiguity relating to recruitment, consent and data collection requirements. Having a clear summary of DPOs' progress, which was visible to both practitioners and study team members, meant that there was ongoing accountability throughout the trial. This transparency ensured that one-to-ones held with DPOs were grounded in live overviews of progress and supported members of the study team in identifying areas that needed to be focussed on and highlighting upcoming data collection priorities.

We refined the data portal following the feasibility trial to mitigate some of the usability and technical issues experienced. For example, to support DPOs in using the portal as efficiently as possible, visual cues were developed, with a blue icon appearing on the user view when action was required by them. The simplicity of the data portal was highlighted as the key strength.

'I found it all really simple to get around and use, yes. I don't have any thoughts on that; it was just inputting everything in and uploading. It was easy to do.' (Mentor)

'When we did the trial itself, we didn't really have many teething problems, and everything was kind of straightforward. You can just access it, you can put your stuff on, everything was clear. I think it was good.' (DPO manager)

The support provided by the portal developer was also key.

'I am not a technical man at all, and I had a number – particularly early on – of trying to work out why is this button not working, why can I not add this, and [data portal manager] responded every time with exactly what I needed: screenshots, whatever. I left him alone after a few months, but initially, he was really helpful. So, yes, absolutely, the support has been great.' (DPO manager)

Nonetheless, DPOs did encounter a small number of issues relating to the data portal. A common issue was emails sent via the portal being relegated to junk email folders, leading to delays in users registering and young people completing their baseline and follow-up surveys. There were cases where the young people did not click the submit button at the end of their baseline or follow-up survey, meaning the surveys did not register on the portal. In these instances, DPOs had to ask young people to complete surveys again.

'I think that they had some glitches in IT where the follow-ups didn't come up in time. They didn't flag up until towards the end. Then we weren't able to get them done because they didn't come up when they should have come up. So, there were a few IT glitches.' (DPO manager)

There was one occasion when young people were completing their follow-up surveys in school, and the DPO had to rely on a school staff member to share the unique survey link for each young person. There were 25 instances where the portal user did not copy and paste the entire link, meaning surveys were returned without being able to identify who had completed them, and, therefore, the possibility of data linking with the baseline survey was lost.

A further element of study team support that played a notable role in the delivery of the trial was the shared resource folder. The folder provided DPOs with personalised consent and information sheets as well as key guidance documents relating to the portal and the requirements of the trial more broadly. Twenty-two of the 26 mentors who completed the mentor survey were satisfied or very satisfied with the briefing documents and other support resources provided by the study team. Interviewees reflected on how this was an invaluable resource throughout the delivery period.

'I've looked at the resource folder. It's organised. I go onto [the DPOs' shared folder], we've got the consent forms and everything there. All the materials that we need are available to us. I think that's the most important thing that I think has been great.' (Mentor)

Additionally, two workshops were held at the launch of the efficacy trial for all participating DPO practitioners to attend. These workshops provided key information on the delivery of the efficacy trial, equipped practitioners with successful delivery tips taken from the feasibility trial and encouraged a sense of shared practice across participating DPOs. Interviewees reflected on how these workshops informed a greater understanding of the trial requirements.

'I think there was maybe one or two workshop meetings that I went through before we started, and they were definitely really helpful. I think it was a good chance to understand,

especially for me, having taken part in the feasibility, there was quite a few key differences, which was nice because I think my feedback last time, it felt like it had been heard.’ (DPO manager)

In the feasibility trial, we had used an instant messaging system in the hope that it might become a peer learning resource for DPOs. Because it was not well-used (nor well-liked), we set up ‘buddy pods’ where DPOs were grouped into threes or fours and encouraged to share learnings relating to delivery throughout. While the study team facilitated initial introductions and encouraged ongoing contact throughout the trial, the ownership was placed on DPOs to initiate contact and share learnings. This element of the trial arrangements failed to develop into what was initially envisaged. Practitioners reflected on how this would have provided an invaluable resource for delivery should it have been taken on and implemented with greater success.

‘I know we tried things initially with the first stage where there was a Slack platform. That didn't come out of it in, and I hoped it would. I hoped we'd be buddied up. We did kind of get put into buddy pods, but I never really got a response from people that I was in buddy pods with.’ (DPO manager)

RQ7. Acceptability of the trial arrangements: are the efficacy trial arrangements viewed as acceptable by DPO staff and by young people?

As with the shared practice model, we considered not only the feasibility of the trial arrangements but also their acceptability – irrespective of where they *could* implement them – and whether the trial arrangements themselves were viewed by mentors and mentees as acceptable to practice settings. Again, we looked at the acceptability of:

- Recruitment and consent;
- Outcome measures and data collection; and
- Waitlist design and randomisation.

For DPOs, throughout both the efficacy and feasibility trials, there was an ongoing tension between the trial requirements and their typical delivery approach. The degree to which they became accommodated to this varied. Some practitioners perceived the trial arrangements to be rigid and bureaucratic, which contrasted with their usual practice, which was typically flexible, dynamic and responsive to the needs of young people.

‘The rigidity of certain things having to be done in certain orders [...] it causes a lot of frustration. It seemed very much led by the process, and our entire bread and butter is to be led by the needs of children. So, it's really difficult to shift that around.’ (DPO manager)

This more critical perspective was counterbalanced with views that the trial arrangements were an acceptable compromise, given the need to establish a wider evidence base relating to youth mentoring and the need for certain approaches to ensure high-quality evidence. In addition, practitioners recognised that the trial had brought additional resources to fund mentoring provisions that otherwise might not have been available.

Among mentees interviewed, there was a range of perspectives on their overall involvement as participants in an RCT. These perspectives typically reflected how aware they were that they were taking part in a trial.

Although all had been through the consent processes, they did not necessarily remain conscious of the trial. For those who were fully aware of the trial, there was a sense of pride in participating in a process that held the potential to improve support offers for other young people, and none expressed negative views about taking part in the trial.

'It's because it helps the younger generation, and the younger generation is literally going to rule the world someday. That's why I feel like it's a good thing if I help out with the younger generation, the next generation would even get better.' (Mentee)

Some young people were not particularly aware of the trial or had given it little thought. For many young people, the primary focus of their engagement in the trial was the mentoring support itself as opposed to the research.

'I think [mentor] mentioned it once or twice. I can't really remember, but he mentioned it.' (Mentee)

'I don't really know about the research part.' (Mentee)

Recruitment and consent

A key issue raised here was that some practitioners felt that the requirements of the onboarding process meant the trial did not always reach the most marginalised young people and families (such as those most suspicious of services or with limited literacy or access to emails) or delayed the start of mentoring.

'It's quite clinical, isn't it? That's what I kept saying when we were sitting in meetings, going, oh, this doesn't seem right. I think because it is a piece of research, it feels it is very clinical. It's on the portal, and this is when it starts, this is when it finishes, it's randomised, and there's no human bit around it. I think in the real world, we don't work like that. We want to be fair, and we want to respond to need.' (DPO manager)

The consent forms themselves were generally positively viewed by mentees who participated in interviews. No issues were raised in relation to accessibility, and young people typically felt it was clear in terms of completion, although they were not necessarily remembered in detail.

'There wasn't any problems. It was pretty clear to me.' (Mentee)

'You just had to tick some stuff saying if we approve or disapprove of certain things that were happening in the mentoring session.' (Mentee)

Outcome measures and data collection

The use of the outcome measures (SDQ and NCS) was broadly seen as acceptable to practitioners, recognising that it needed to be as robust as possible. The qualitative interviews with mentees were seen as a particularly important addition to sit alongside the quantitative elements of the design to highlight the experience of young people and add nuance to the data. Some doubted that surveys would capture real change. Mentors also suggested that some mentees gave the surveys limited attention, and at times, it became a 'box-ticking exercise'. The length of the outcomes survey was seen as a barrier to completion, particularly for young people with ADHD and/or other educational needs.

'I think the interview more will, with the questions. I think what I've noticed is also, that young people are so beholden to their circumstances. So, for example, if you were to interview someone in October, you're going to get very different responses than you're going to get in January when they've got their exams coming up.' (Mentor)

'When I've seen the young people fill in the baseline surveys and stuff for this project, there's a lot of questions and you see them just clicking through, probably not putting as much thought into it as we would like. I think sometimes young people just really struggle to think about a question; it depends also how their day has gone. It might be more reflective of what's just happened.' (DPO manager)

However, the mentees interviewed offered more positive reflections on survey completion. Specifically, mentees noted how outcome measures could facilitate self-reflection in positive ways.

'I actually like doing surveys like that because it makes me open up more, and it releases stress.' (Mentee)

'I understood all the questions. They were nice and simple, so it was easy to get through.' (Mentee)

'I thought the questions were good. They were understanding, so they didn't need a straightforward answer from you. You could be open and stuff with it.' (Mentee)

Waitlist design and randomisation

There was a range of views on the waitlist design among practitioners: some felt that it was in tension with being responsive to immediate needs. This was mitigated by providing help straight away to young people who needed immediate support, but not putting them forward for the trial, but others felt that it is not always possible to determine the level of need at the point of referral; however, they recognised that young people could be withdrawn from the trial if it transpired they needed urgent or more intensive support.

'A young person has a need and not being able to immediately support it. I think that was the biggest challenge.' (DPO manager)

Practitioners said that young people and parents/carers did not always distinguish between a service waiting list due to insufficient capacity to meet demand and the trial waitlist. The waitlist design was, to some degree, normalised.

'They haven't really worried or said anything negative because referrals to a lot of services, 12 weeks actually is not bad, so they just think that it's another service where there's a waiting list as opposed to, even though we talk about randomisation. They haven't looked at it as, they're going into a RCT group, so they've got to wait for 12 weeks. It's like, okay, we've referred them to a service, and the maximum wait is 12 weeks.' (Mentor)

'In general, it's gone okay, and I was quite nervous about this at the start, particularly going back to parents and saying "It's randomised trials. They may not get provided mentoring first. It could be after half term; it could be after summer holidays." I thought we'd have an issue, but most of the parents seemed pretty happy that their kids were just going to be offered some free mentoring, so that went down fine.' (DPO manager)

Among young people, views about the waitlist were mixed. It is important to note here that we only interviewed mentees, not young people in the control group. For some mentees, waiting was normalised. They reflected that it would be unrealistic to provide the level of provision to a significant number of people at the same time and that other young people needed provision, too.

'They can't get that much people into school, and they can't take that much people out at one time, out of class. Really, it's pretty fair if you have to wait for your turn.' (Mentee).

'I thought that was okay. Other children need to have the sessions as well. So, if I had to wait 12 weeks, I wouldn't mind.' (Mentee)

However, some were more critical of the waitlist and thought they might have disengaged if they had had to wait.

'It was just long. I couldn't be bothered waiting.' (Mentee)

'I think I'd be nervous a bit, and then you don't know if you want to do it.' (Mentee)

Conclusion

Table 38: Key conclusions

Key conclusions
Short-term mentoring showed no impact on reducing children’s self-reported behavioural and emotional problems. After the mentoring, children in the intervention group had the same level of behavioural or emotional difficulty as their counterparts in the control group who had not yet received mentoring. This result has a moderate security rating .
Short-term mentoring showed a positive impact on a range of secondary outcomes, including self-confidence, problem-solving and decision-making, teamwork and social skills, and resilience and emotional regulation. These are the secondary outcomes, which are less robust than the primary outcome and should be interpreted with more caution.
DPOs broadly delivered the shared practice model as was originally intended. They worked with the children the programme was designed to support and provided trained and consistent mentors who built trust, set goals for mentees and provided a physically and emotionally safe space.
The shared practice model was feasible and acceptable to mentors. Children interviewed in the study had overwhelmingly positive perceptions of the mentoring model.
The project achieved its primary purpose in demonstrating the feasibility of using an MST approach to test the impact of interventions delivered by small organisations. The evaluators provided extensive and vital support to DPOs, and DPOs showed great willingness and flexibility to support trial delivery. This model provides a precedent for robustly testing other interventions delivered by small, community-led organisations.

Impact evaluation and implementation and process evaluation integration

Evidence to support the theory of change.

Overall, the evidence established through the study supports the theory of change. Mentoring was delivered in line with the activities set out in the theory of change and to young people in circumstances consistent with the 'unmet needs and risk factors'. A high level of fidelity was achieved, and feedback from mentees confirms that mentoring was in line with key quality dimensions, including trust and high-quality mentor-mentee relationships, emotional and physical safe spaces, and goal setting and reviewing. Moving to the outcomes set out in the theory of change, these are generally – although not entirely consistently – well supported by the evidence. In terms of behavioural, social and emotional problems and socio-emotional skills, although there was no detectable impact on the SDQ total difficulties score, we did observe improvements in four secondary outcomes (two of which were statistically significant), which covered different domains of socio-emotional skills – self-confidence, including leadership and communication, and problem-solving and decision-making skills – and (in exploratory analysis) in prosocial behaviour as measured on the SDQ subscale.⁵⁰

Evidence about mentor and mentee perceptions is also consistent with the outcomes set out in the theory of change. At least half of mentors said they had seen benefits for young people in the areas of self-esteem/confidence, emotional regulation/resilience, school attendance, relationships with peers, relationships with family, problem-solving and decision-making, and empathy. The qualitative interviews with mentors and mentees also clearly show the perceived impacts on socio-emotional skills (decision-making, emotion regulation, self-confidence), relationships and wellbeing. Views were more mixed about impacts on school attainment and engagement (with some examples but also a view that the scope for change is limited by the short duration of mentoring and by the issues it could not easily influence) and on

⁵⁰ Note that the SDQ total difficulties score does not include the prosocial subscale.

crime reduction⁵¹ (with occasional examples of direct impacts, some evidence of indirect impacts but also a widespread view that this was not a current issue for many of the young people participating).

The evidence also supports most of the mechanisms of change proposed in the theory of change. Here, high-quality relationships between mentors and mentees and building trust emerge as the fundamental mechanisms of change. Goal setting and consistency of support were both seen as important ways in which impacts had been enabled, and there were some suggestions in the data that they may also be mechanisms of change (i.e. aspects of the dynamic process of mentoring that themselves drive change). Meeting in a safe space and parental/carer engagement were important contextual enablers, but our data do not suggest they are, in themselves, mechanisms of change. The relevant aspect of a 'supportive infrastructure' apart from parental or carer support was alignment with schools (in the sense of both school schedules making time for mentoring and issues that led to a young person being excluded or moved to another school), but this again appears to be an enabler of impact rather than a mechanism of change.

Our theory of change also outlines outcomes and mechanisms of change pertinent to effective implementation. Here, too, our findings are generally supportive. Our evidence suggests that mentors were generally confident using the shared practice model of mentoring (although awareness of it varied) and that its proximity to their usual mentoring practice was an aid. There was some evidence that the shared practice model introduced – or made more consistent – some areas of practice improvement. There was also evidence indicative of improved support from stakeholders, particularly referring agencies and schools (where mentoring was schools-based), and certainly, the support of these stakeholders was essential. Finally, the evidence supports the proposed mechanisms of change for implementation, namely positive, stable relationships (with mentees) and high-quality practice.

Interpretation, limitations and lessons learned

Conclusions about running a multi-site trial

A key aim of this study was to test whether it is possible to undertake an RCT with multiple small youth agencies. This was an important question to test because the work of such organisations is an important part of youth provision and not well represented in the existing evidence base about effective youth provision because such organisations and their work are not usually well aligned with the requirements of RCTs.

Feasibility of undertaking a randomised controlled trial of a shared practice model with multiple delivery partner organisations

Our study concludes that it is indeed possible to undertake a successful RCT with such agencies, with as many as 17 in our trial. The trial was not unflawed. The number of young people recruited was 744, against a target of 850; the time period for participant recruitment had to be extended by one week; the period from randomisation to follow-up data was significantly longer than intended; and around 30% of the control group had started mentoring at least three weeks before completing the follow-up measures. However, this was still a large trial with a large enough sample to measure effect sizes of around 0.19 standard deviations; the recruitment and consenting (unfamiliar territory for the DPOs) were satisfactorily undertaken,

⁵¹ Although the theory of change refers specifically to violence reduction, mentors and mentees tended to talk about crime reduction more widely.

mentoring was delivered with good fidelity, the DPOs secured impressive rates of data collection at follow-up including from the control group, and all 17 youth agencies remained part of the trial. The trial design and requirements were viewed as feasible and acceptable by mentors. Overall, the trial can be counted as a success, and the study has demonstrated that it is possible to run an RCT with multiple youth agencies.

There was – as we anticipated – a degree of tension throughout the study between the requirements of the RCT and the established ways of working in community-based organisations that work with vulnerable young people, and this needed to be negotiated and managed carefully. It called for a high level of collaborative working from the start. We worked closely with DPOs from the beginning to develop and confirm the shared practice model and to discuss the trial requirements and how to operationalise them with minimal disturbance to usual practice. These early workshops were a crucial starting point. They gave us an important early understanding of each other's expectations and worlds and were a forum for discussing how to bring these worlds together. Throughout, DPOs drew on their experience of working with vulnerable young people, but greater involvement of young people directly in establishing the trial procedures might have helped in reconciling the need for rigorous impact evaluation with the needs of young people and organisations working with them.

Intensive support required

As a study team, we also needed to provide intensive support throughout the trial, and the study has generated useful lessons about what is key in this support. Our experience confirmed that strong mutually respectful relationships and frequent personal contact – including fortnightly support conversations – were essential components of this support, in line with wider evidence and guidance on running multi-site trials. The verbatim quotations from DPOs about their contact with evaluation team members are indicative of the personal nature of the relationships and that this went beyond simply providing information and clarification. We also observed spikes in data and documents being uploaded to the data portal after one-to-one support meetings had taken place.

These one-to-one sessions were opportunities to surface and resolve particular points of friction between the trial requirements and the everyday work of DPOs. For example, the issues raised included challenges with recruitment, gaining consent from parents/carers and young people, completing baseline and follow-up measures with all mentees, and working with the data portal. The evaluation team representative often brought these issues to the rest of the team for discussion and resolution, so having frequent evaluation team meetings – weekly throughout the trial – as well as open conversations among evaluation team members on a messaging app was also important. This does raise questions about whether and how such intensive personal support could be provided in a larger trial. We saw little scope for replacing personal contact with automated contact, although it may be worth exploring whether there could be a role for chatbots or other artificial intelligence resources.

We also sent a weekly email to DPOs, updating them on collective progress, celebrating milestones and achievements, emphasising the need for specific activity (e.g. when recruitment numbers were low), providing clarifications to all DPOs from issues raised in one-to-one conversations or reminding them of upcoming stages or activities. These were not consistently read, but they were clearly used by and useful to mentors, and, in fact, mentors often referred to items in the email in one-to-one sessions.

The portal itself was also an important part of the support system. It provided prompts and triggers to DPOs where action was needed on their part. It also provided shared real-time data for the evaluation team and DPOs on the current state of play, which was essential for monitoring. The fact that each DPO's progress

was clearly visible to them and the evaluation team meant there was little room for ambiguity about progress with recruitment, consent and data collection. This introduced ongoing accountability and transparency, ensuring that one-to-ones and other meetings were grounded in a shared overview of progress. It made it easy to see where, for example, actions were almost but not quite completed and quickly surfaced where there was a misunderstanding about the process or actions required. It supported members of the study team in identifying areas that needed to be focussed on and highlighting upcoming data collection priorities.

Providing a set of documentation tailored to each DPO with their branding, including information sheets and consent forms, and the fact that these were in a shared drive and so were not lost, was also viewed by DPOs as an important form of support.

Other support arrangements were less central and sometimes less successful. We had wanted a forum that brought DPOs together to share good practice, so we set up a DPO buddy system, linking feasibility trial DPOs with those new to the efficacy trial in pairs or triads. We organised initial introductory meetings but left DPOs to arrange future contact, and our understanding is that little or no such future contact took place. Our conclusion was that we should, instead, have organised regular sessions facilitated by the evaluation team to bring DPOs together to discuss and problem-solve on topics they had identified. We also concluded that we should have done more to ensure the shared practice model was embedded among all mentors and DPOs and that they used it attentively and deliberately – see further below.

Differences between delivery partners and evaluators in conceptualising the trial

Reflecting on the issues that went less well, we recognise that we needed to do more to understand the trial from the perspective of the DPOs and to recognise that their perspective was rooted in their total focus on meeting the needs of vulnerable young people. This meant that there were some nuanced differences between the evaluation team and DPOs in the significance of some aspects of the trial. A key example of this is the control group. To the evaluation team, the control group was primarily a comparison group that was *not* receiving mentoring (at least not until after follow-up data collection). For the DPOs, we think that the control group was primarily a group who had been assured they *would* receive mentoring, albeit not for 12 weeks. Mentors had to work hard to secure the confidence of young people in the control group that they would get mentoring and to keep them engaged.

This may partly explain why around 30% started mentoring some weeks before follow-up data had been collected. Mentors appeared to have timetabled mentoring to begin at 12 weeks, and they either did not notice that the follow-up survey had not been completed or (consciously or unconsciously) prioritised fulfilling their commitment to the young people over chasing survey completion. In addition, some mentors were brought in on fixed-term contracts, and this and other staff capacity issues might have meant tight scheduling to provide mentoring to the control group and little or no room for flexibility.

We also reflected that the evaluation team had perhaps not given the same focus to the follow-up data collection that we had given to recruitment and baseline data collection in our communication with DPOs, or perhaps having given that focus to baseline data collection we assumed that the priority of follow-up data would be understood. The fact that so many of the control group started mentoring before completing follow-up surveys and that follow-up data collection for the intervention group was slower than planned may also suggest that not all DPO managers and mentors fully understood the trial design and why the

follow-up data needed to be collected at a fixed interval after randomisation for both intervention and control group.

For DPOs, managing their mentoring capacity across the demands of the trial was also a key part of their reality. Because the recruitment processes required such intensive work with somewhat unpredictable results, it was difficult for mentors to manage the flow of young people into the intervention group and into starting mentoring. Smaller teams needed to postpone the start of mentoring – which meant postponing the point of randomisation – until a mentor was available. The hiatus between the feasibility trial and the efficacy trial also raised challenges for DPOs since staff needed to be retained, but their time over that period was not covered by YEF's funding contribution. The decision to go ahead with the efficacy trial then meant an immediate need for rapid work to start recruitment, and some DPOs experienced this time as chaotic and rushed.

Overall, the intensive work involved in multi-site trials needs to be properly funded for both evaluators and delivery sites.

Importance of delivery partner organisation engagement and commitment

It is clear that the trial could not have been completed as successfully as it was without the dedication, commitment, creativity and tenacity of the DPOs. Their efforts went above and beyond what we had expected would be needed, and their successes went above and beyond what we had hoped would be achieved. The fact that they are small, community-based organisations meant that an RCT was unfamiliar territory – but it is also important to note that these characteristics may also have been key to the success of the trial because they meant that DPOs responded to challenges creatively, agilely and in ways that demonstrated their closeness to local families, young people and stakeholder organisations. Approaches such as driving from house to house and bringing parents/carers and young people together in group sessions are perhaps emblematic of this.

DPOs that delivered mentoring in schools also appeared to build very strong relationships with schools, which enabled them to access rooms and space in school timetables to meet with young people. They also had schools' support and assistance in managing consent processes and data collection. There were some particular challenges that the school context raised – principally managing the 12-week mentoring period in shorter school terms, with little scope for continued mentoring delivery, especially during the long summer holiday. Overall, these school relationships provided a supportive structure for trial delivery.

Conclusions about using a shared practice model

A further aim of the study was to test the use of a shared practice model as the trial intervention in a rigorous evaluation. Overall, this was also a successful feature of the study. We developed the shared practice model from two starting points: the current mentoring practices of the DPOs and a review of evidence about the characteristics of effective and high-quality mentoring approaches. We ran two workshops with the DPOs where we collected information about their mentoring and worked through a proposed shared practice model, refining it with them and getting their sign-off on it (see further Hall et al., 2023). This was an important learning for the evaluation team about the DPOs and their ways of working, as well as a useful way to shape the trial intervention. Our reflection is that it helped to ease some of the friction between trial requirements and the worlds of DPOs, and the shared practice model was delivered with good fidelity.

Fidelity was not, however, complete. Perhaps ironically, our success in together developing an intervention model that was close to all the DPOs' usual practice may have contributed to the fact that there was not

always a sustained focus on the shared practice model as the trial intervention, and at least for some mentors and/or DPOs, there was some drift from the shared practice model and little or no consciousness of it as the trial intervention, distinct from 'usual' mentoring. We concluded that we should have done more to raise and sustain consciousness of the shared practice model, ensure it was embedded in each DPO and among all mentors, and check that practice was in line. We could also have used the intelligence we gathered in shaping it about which components were further from the usual practice of which DPOs to target oversight and support.

Overall, though, the approach was effective as a way of developing an intervention sufficiently consistent and bounded to be the subject of a trial but that also represented usual practice for community-based youth agencies.

Conclusions about the effectiveness of short-term mentoring

Finally, we conclude that short-term mentoring is an approach that has some promise for improving certain socio-emotional skills. There was no detectable impact on our primary outcome, the SDQ total difficulties score. However, we secured significant positive impacts for two of the four secondary outcomes – self-confidence (including leadership and communication) and problem-solving and decision-making skills – and for the prosocial SDQ scale, all of which are central to the theory of change. The accounts of mentors and mentees also point clearly to short-term mentoring helping young people in social-emotional learning domains aligned with the theory of change. Despite the absence of impact on the primary outcome, we therefore conclude that short-term mentoring has some promise for improving certain socio-emotional skills. It is possible that improving fidelity to the shared practice model and improving the support provided to DPOs at key points of the trial might secure better impacts.

In the context of previous reviews of mentoring, as reported in our rapid review (Appendix J), the effect sizes (Hedge's *g*) identified in this trial are fairly small but consistent with previous work. Effect sizes for the SDQ prosocial subscale and NCS self-confidence and problem-solving were consistent with those reported for motivational, social and emotional outcomes in DuBois et al., 2011, which includes positive effects for short-term (less than six months) mentoring provision. Other studies have identified moderate effect sizes across a variety of youth outcomes, including the internalising and externalising symptoms, cognition, social functioning, health and school, though the higher effect sizes may be due to the higher dosage/longer duration of mentoring than explored in this trial. For example, the average duration of mentoring in the 70 studies included in the Raposa et al. (2019) review was 11 months compared to the 12 weeks delivered as part of this trial.

Recommendations for practice

- Continue to develop and test short-term mentoring models – including using the shared practice model developed for this study – as the evidence for their effectiveness is promising and suggests that mentoring may not need to be of long duration to be effective. Build in flexibility for longer mentoring or signposting to other services where this is needed. Ensure the intended duration is clear to the young person, and plan and prepare them well for the end of mentoring.
- Attend to the following as aspects of high-quality mentoring provision:
 - Focus on building trust and high-quality relationships, as these are central to mentoring effectiveness, through demonstrating non-judgemental commitment, awareness of power

dynamics, safe sharing of personal information and interests, an emotionally and physically safe space for mentoring, confidentiality, and deep listening;

- Ensure continuity in the mentor working with a young person wherever possible; and
- Use goal setting in a young person-centred way with the flexibility to agree on goals, provide focus and help mentees see the progress they are making.
- Recognise the importance of family contexts, the value of parent/carer buy-in and support for mentoring, and the need to work hard to overcome suspicion and resistance, which may be based on previous poor experiences with services.
- Work with schools where possible to directly and indirectly address aspects of school experiences, cultures and practices that could otherwise impede the impacts of mentoring.
- Be confident that the unique perspectives and relationships that youth agencies hold are vital and need to be brought into rigorous impact evaluation to generate relevant, actionable and robust evidence about youth services.

Recommendations for evaluation

- When evaluating an aspect of mainstream youth practice, consider using a co-design approach to develop a shared practice model which incorporates evidence about effective and high-quality practice. Ensure that the shared practice model is kept in focus by delivery partners throughout the delivery and measure fidelity to it.
- Agree on the trial procedures through extensive collaborative work with delivery organisations and young people, aligning the requirements of evaluation rigour with the needs of young people and the usual practices and capacities of delivery organisations. Ensure that these remain in focus for delivery organisations, including arrangements to induct and support delivery staff who join during the course of the evaluation.
- Consider how best to induct delivery partners into trial procedures once agreed upon, including a launch event, videos providing guidance and written procedures. Keep all guidance documents in a single digital location that is accessible to all delivery staff.
- Consider using a data portal that is a single point for data collection, triggers reminders about required actions and provides shared sight of data showing progress with recruitment, consenting and data collection.
- Develop tailored versions of trial documentation (e.g. consent forms and information sheets with delivery partner branding since they hold the primary relationship with young people).
- Build in time and support for recruitment processes, recognising the need for creative and flexible approaches (e.g. group sessions and home visits), particularly when working with vulnerable or marginalised young people and families.
- Consider how procedures and timelines need to be adapted for school-based provision, where school terms and holidays determine key issues such as the duration or intensity of mentoring, timings for recruitment and referral, and when mentoring can begin.

- Ensure frequent contact with delivery organisations both individually and collectively, and use a range of communication approaches to develop mutually trusting relationships, problem-solve, ensure data quality and address areas of tension between evaluation requirements and delivery priorities. Do not assume that core elements of the trial process hold the same meaning to evaluators and practitioners. Use deep listening to understand different perspectives and the priorities and concerns that underpin them.
- Recognise that community-based organisations can bring unique insights about and relationships with vulnerable young people to collaborative work on rigorous evaluation and that open dialogue, negotiation and collaborative work are essential to building the evidence base about youth work. Prioritise building mutually trusting relationships and creating spaces and cultures that bring youth agencies and young people into the centre of evaluation practice.

Study limitations

There were, as we have noted, some limitations to the evaluation. For the RCT, the main ones were the problems around late completion of the follow-up surveys and the associated problem that mentoring often started before follow-up for the control group. However, the statistical robustness checks suggest that this did not lead to biased effect sizes. The follow-up data collection was inevitably most successful among those young people who entered and stayed with the trial, and consequently, our estimates mostly reflect the effects for *active* participants.

For the IPE, the chief limitation was the challenge of reaching young people. Our sample fell slightly short of the number we had hoped to interview, but more significantly, there was little scope for the purposive sampling we had intended; we did not reach any mentees who had disengaged early from mentoring, and it is likely that the sample of mentees interviewed is biased towards those with positive experiences of mentoring.

Future research and publications

Future research should continue to test how best to support multi-site RCTs with community-based youth agencies, including testing support strategies against each other to identify the optimal combination and intensity of support necessary. Further examples of shared practice models and approaches to developing them would be useful. Further tests of short-term mentoring would be useful to expand the evidence base. In particular, it would be useful to test short-term mentoring models of different durations. Although there were mixed views, the reflections of some young people and mentors suggest that a longer duration may be needed, at least for some young people, to secure the desired impacts. Finally, it would also be useful to continue to test outcome measures aligned with the intended impacts of mentoring.

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Appendices

Appendix A. YEF unmet needs criteria

Appendix B. Theory of Change

Appendix C. Shared practice model – checklist

Appendix D. Shared practice model – full version

Appendix E. DPO recruitment interview scoring criteria

Appendix F. Changes since the previous evaluation

Appendix G. Effect size estimation

Appendix H. Recruitment documents

Appendix I. Literature review of multisite trials

Appendix J. Literature review of mentoring

Appendix K. Data Privacy Notice for mentees

Appendix L. NCS domains and individual items

Appendix M. Further tables and graphs

Appendix A. YEF unmet needs criteria

- Young people who have had a criminal conviction
- Young people who are receiving services from a Youth Offending Team or similar
- Young people who are registered as a Child in Need
- Looked after children and young people
- Young people who have been excluded from school
- Young people who have been identified as at risk of exclusion from school
- Young people who are regularly absent from school
- Young people growing up in families where parents, carers or siblings have had a criminal conviction
- Young people who are unengaged at school/in formal education and have low levels of educational achievement
- Young people who have been diagnosed with mental health issues
- Young people who have suffered abuse / early childhood trauma
- Young people who have been a victim of crime
- Young people who have been involved in antisocial behaviour
- Young people who display high impulsivity/hyperactivity
- Young people who have a history of weapon possession (e.g., knife, gun)
- Young people who have a history of alcohol and/or substance use
- Other (please state)

Appendix B. Theory of Change

Aim: To build a safe, trusting and stable relationship between mentor and mentee that takes a positive approach to improving young people's wellbeing and addressing any unmet needs that may increase their risk to involvement in violence. Through delivering a shared model of mentoring practice, organisations are able to support young people to raise their aspirations and plan for the future, by both developing and sustaining key life-skills beyond the end of the mentoring time-frame.

Shared model of mentoring practice

Context and individualisation: needs, activities, goals and outcomes vary according to internal DPO practices

Unmet need and risk factors

- Young people age 10-14, with up to 17 years old by exception
- Actively involved or risk of involvement in violence, including exposure to/witnessing violence
- Associated areas of unmet need, as based on professional judgement, that may contribute to above risk

Activities

- Each DPO will use a core model structure:
- Recruitment
 - Screening
 - Training and initiation
 - Support
 - Closure
- This includes:
- 1:1 mentoring
 - Minimum 12-week duration
 - Voluntary on the part of the mentee

Mechanisms of Change

- Goal setting
- High quality relationship between mentor and mentee
- Building trust
- Consistency of support
- Meeting in a safe space
- Support from parent(s)/carer(s)
- Supportive infrastructure

Outcomes

- Socio-emotional learning improvement (self-confidence, problem solving/decision-making, teamwork/social skills and resilience/emotional regulation)*
 - Improved relationships (inc. prosocial)*
 - Reduction in emotional and behavioural difficulties*
 - Violence reduction
 - Improved school attainment and engagement
- *measured outcomes

Implementation

- Mentor training opportunities
- Support from DPO 'champion'
- Line management & supervision
- Incorporation of young people's feedback

- Positive, stable relationships
- Opportunity to develop high-quality practice

- Increased confidence in using shared model
- Improved mentoring and practice development
- Systems change, i.e. engagement and buy-in from stakeholders for collaborative approach

Shared Practice Model of Mentoring for Multi-site Trials – Checklist

Recruitment



- What recruitment materials do you have to recruit young people?
- Who is your organisation's champion to oversee recruitment?
- What is your process for accepting referrals and registrations of interest?
- Mentoring is voluntary on the part of the mentee (e.g. not court-ordered criminal justice interventions)

Closure



- What is your closure process?
- Early withdrawal or exit is recorded

Onboarding and Screening



- Have young people and their parents/carers provided consent? Are you monitoring demographic information?
- Have mentors received minimum 2-hour training?
- How are you matching mentors and mentees?
- Mentors are adults rather than peers
- Mentors are supported throughout the programme by a line manager

Eligibility Criteria:

- Young people aged 10-14 (with up to 17 years old by exception)
- Risk to involvement in violence (see VEF definition for more information)
- The offer is open to all young people, those with complex needs should not be disqualified

Mentoring



- An initial meeting that includes relationship building and boundaries
- Minimum of 12 weeks duration and minimum 12 sessions of at least 45 mins over the course of 12 weeks
- Mentoring is on a one-to-one basis
- The same mentor for all sessions
- Mentor sessions includes discussion relevant to the young person's goals.



Shared practice model of mentoring for the multi-site trials

December 2022

A shared model of mentoring practice

The shared model of mentoring practice will be used by all delivery partner organisations (DPOs) taking part in the multi-site trials of mentoring practice. The aim of the study is to assess mentoring as it is delivered by youth agencies, not to develop a new manualised approach to mentoring or new mentoring programme. However, for the purposes of this study, we do need DPOs to be working to a broadly consistent model of mentoring. The intention of this paper is to set out the proposed model of practice and to identify its core and flexible components.

Our aim is not to construct the ‘most effective’ mentoring offer to roll out across the DPOs, but rather to bring together the most common, evidence-informed elements that can be deployed across the DPOs so that we can be confident that the practice is similar enough to generate a meaningful shared dataset and is supported by existing evidence. There remains scope for variation within the model, and we will discuss this with DPOs in the implementation evaluation.

Defining mentoring

For this study, mentoring is defined as a formal, supportive developmental relationship between a young person and an adult, (definitions of adult vary, and tend to mean ‘more experienced’ than the mentee, and above 18 years of age) intended to support positive outcomes for the young person. Mentors can offer support, guidance, and concrete assistance to the mentee and should model positive socio-emotional behaviours for young people.

The basic programme structure for the mentoring model is:

- Minimum of 12 weeks duration and minimum 12 sessions of at least 45 mins over the course of 12 weeks
- Mentoring is voluntary on the part of the mentee: we will exclude mandated mentoring (e.g., a court-ordered criminal justice intervention) – this is particularly relevant when recruiting through referral partners e.g. YOS
- Mentors are adults rather than peers
- Mentoring is on a one-to-one basis

The model structure

The model aims to bring together research evidence and common elements across the DPOs existing practice, within the study parameters. It draws heavily on Elements of Effective Practice for Mentoring (4th Edition)⁵² and organises elements that feature in that model and those that are aligned to it under the same domain headings:

- Recruitment
- Screening
- Training
- Matching and initiation

⁵² <https://www.mentoring.org/resource/elements-of-effective-practice-for-mentoring/>

- Support
- Closure

Monitoring how the model is applied

Through the implementation study of the multi-site trials, the delivery of the shared practice model will be monitored for quality and fidelity. This will include:

- Feedback from young people about their experiences and relationships with their mentor;
- Feedback from mentors about their practice;
- Sessions features such as length and setting;
- Administrative data such as session attendance, demographic information, and additional relevant referral data about risk factors of involvement in youth violence.

Eligibility criteria for young people

Young people will have to meet a set of criteria to be eligible for mentoring within the multi-site trials. These criteria are in place so that there is some commonality between young people across the DPOs and to align with the YEF's charitable aims of working with young people primarily between the ages of 10-14 years old who experience 'unmet needs that leave them at risk to involvement in violence'.

Young people who meet these criteria should be targeted through recruitment and then their eligibility confirmed through screening and onboarding.

Age range

- Young people aged 10-14, with up to 17 years old by exception (no more than 30% aged 15- 17 per DPO)

Note that, for consistency and simplicity, we will refer to 'young people' throughout, rather than 'children' or 'children and young people' - the age range we are referring to will remain 10-14, and up to 17 by exception.

Risk to involvement in violence

The YEF defines 'risk' as young people having unmet needs which leave them at greater risk of involvement in violence. This information will be collected through admin and monitoring data.

The following characteristics set out how this is defined by the YEF. All young people should meet at least one of these criteria (and we recognise the strong likelihood that unmet needs are very likely to cluster, with young people experiencing more than one at any given time). Note, however, that there is an option for 'other' if a relevant characteristic or experience is not on the list.

- Young people who have had a criminal conviction
- Young people who are receiving services from a Youth Offending Team or similar
- Young people who are registered as a Child in Need
- Looked after children and young people
- Young people who have been excluded from school
- Young people who have been identified as at risk of exclusion from school
- Young people who are regularly absent from school
- Young people growing up in families where parents, carers or siblings have had a criminal conviction
- Young people who are unengaged at school/in formal education and have low levels of educational achievement

- Young people who have been diagnosed with mental health issues
- Young people who have suffered abuse / early childhood trauma
- Young people who have been a victim of crime
- Young people who have been involved in antisocial behaviour
- Young people who display high impulsivity/hyperactivity
- Young people who have a history of weapon possession (e.g., knife, gun)
- Young people who have a history of alcohol and/or substance use
- Other (please state)

Recruitment

For young people

Recruitment processes are used to reach and engage potential young people to take part in mentoring for the multi-site trials of practice.

Strong recruitment processes allow the mentoring provider (i.e. the DPO, for the purposes of this study) to clearly communicate their offer and onboard mentees to the programme with clear expectations. Information in recruitment materials should at a minimum include the key features of the mentoring offer and may also include bios of the mentor and other activities that the organisation offers to young people. Recruitment materials could include fliers aimed at both young people and relevant adults in their lives and processes may include reaching out to referral partners, holding 'meet and greets', or suggesting mentoring to a young person directly.

As the multi-site trials is a study, recruitment materials and processes will also have to include information about taking part in the trials so that young people, their primary carers, and referral partners understand what that will involve in addition to the mentoring sessions.

All DPOs will likely have their own unique processes for reaching potential young people to take part in mentoring for the trials that will be founded on their existing relationships and ways of working.

The shared core elements for recruitment in this practice model are to ensure the likelihood that young people who are reached are eligible to take part and that there is clarity around participation in the trials from the onset.

For mentors

There may be cases where a DPO recruits a new mentor to join the team. Onboarding new staff members will be unique processes within each DPO.

Elements

R.1. DPOs will recruit young people for mentoring through their existing work, relationships, and referral pathways that enable them to reach young people they believe to be eligible

- Young people aged 10-14, with up to 17 years old by exception (no more than 30% aged 15- 17 per DPO)
- Young people experience unmet needs that leave them at greater risk to youth violence – this is widely defined YEF and each DPO is to use their existing definitions and approaches for reaching this cohort

R.2. DPOs will have written recruitment materials to advertise the mentoring offer that include:

- The basic structure of the mentoring offer

- Minimum of 12 weeks duration and minimum 12 sessions of at least 45 mins over the course of 12 weeks
- Mentoring is voluntary on the part of the mentee: we will exclude mandated mentoring (e.g., a court-ordered criminal justice intervention) – *this is particularly relevant when recruiting through referral partners e.g. YOS*
- Mentors are adults rather than peers
- Mentoring is on a one-to-one basis
- Young people’s basic eligibility
- Messages about the trials (provided by the study team)
 - The mentoring offer includes taking part in a study
 - There is the potential of being randomly allocated to a waiting list for three months

R.3. Detailed written materials about the trials will be on-hand should people want this information at the recruitment stage

- The study team will provide a briefing sheet and FAQ document for young people, parents and referral partners that can be used at the recruitment stage if people require that level of information early on. This will include
 - Information about the trials – rationale, study team, funder
 - Randomisation process and rationale
 - Data collection measures for the control and intervention groups
 - Waiting list process and rationale

R.4. A ‘champion’ will be appointed within each DPO, ideally at a senior level within the organisation, to oversee and support recruitment

- At the recruitment stage, their role will primarily be to ensure that colleagues follow the necessary processes and to respond to any challenging questions that arise through recruitment processes. This may involve being ‘on the ground’ if recruitment events are live or being a named contact that people can reach out with questions. Questions could come from
 - Referral partners or carers considering whether to ‘nominate’ a young person for mentoring
 - Young people considering whether to put themselves forward to take part in mentoring for the study

R.5. DPOs will have a process for accepting referrals and registrations of interest to take part in mentoring

- These processes will be unique to the DPO and be the way in which a young person is initially engaged, after which they will be screened for eligibility and formally onboarded

Screening and onboarding

For young people

Following referrals and other initial engagements, young people’s eligibility for mentoring as part of the multi-site trial should be formally assessed through a screening process. Following successful screening, young people will be invited to take part in the trial and consent processes put in place, following which they will be officially onboarded onto the programme. There is likely to be a time gap between screening and onboarding - we do not expect that all elements in this section occur on the same day.

We expect that each DPO will have their own screening processes and we will not seek to standardise, though we will have to see that it has taken place.

Baseline data will be collected at the end of the screening procedure when young people's eligibility and their consent to take part is confirmed. After baseline data is collected from a young person, they will be randomly allocated to either the control group (waiting list) or intervention (mentoring).

For mentors

In the case where a new mentor is recruited into the DPO to deliver mentoring as part of the trials, their suitability for serving as a mentor should be assessed by the DPO both in terms of capability and DBS checks.

Each DPO will have their own procedures for this, and we will not standardise them across the DPOs beyond ensuring that screening and onboarding procedures are in hand.

Elements

S.1. Written criteria for assessing young people's eligibility for the mentoring offer is used when screening referrals and expressions of interest

- Young people's demographic information should be recorded for monitoring purposes - the study team will provide a standardised way of doing this
- Unmet needs experienced by young people that increase their risk to violence should be recorded for monitoring purposes

S.2. Young people are not to be disqualified on the basis of having complex needs

- The offer is open to all young people provided that additional support is provided alongside the core offer for young people with particularly complex needs and that young people on the waiting list are offered support that is different from mentoring

S.3. Onboarding to the programme will be formalised in writing following successful screening. This will include:

- Written agreement from both the mentee and their parent(s)/carer(s) they will participate in the mentoring offer
- Young people and parent(s)/carer(s) (due to the age of young people) will need to provide informed consent for participation in the trial and for data collection

Training for mentors

Evidence of effective mentoring practice shows a relationship between mentors having received training on mentoring, and the positive impact of mentoring. As the multi-site trials methodology does not insist that all sites deliver identical mentoring provision, the content of DPO-delivered training will vary according to the DPO's approach and policies.

We appreciate that as DPOs are working with experienced mentors, many of whom are existing members of staff, their training may have taken place in the past as part of onboarding procedures. DPOs are not expected to 'repeat' training, however, it should be confirmed that all mentors have had some training prior to mentoring with young people beginning.

Training will be provided to all the DPOs on the trial procedures by the study team. The DPO's multi-site trials champion should attend this training and pass on information as required to relevant members of the team.

Training on the trial procedures will include:

- Explaining the trials and establishing informed consent from participants and primary carers
- Data collection
- Data entry into an online portal
- The randomisation procedure for allocating young people to either the mentoring programme immediately or the waiting list

Elements

T.1. Mentors should have received a minimum of two hours of training prior to starting relationships that includes:

- The DPO's mentoring approach
- The DPO's safeguarding policies and procedures
- The DPO's risk management processes

Matching and initiation

The matching and initiation process involves the young person being paired with their mentor and meeting for the time. This may take place through the recruitment, screening, and onboarding processes or it may be a separate event. The significance of matching and initiation elements is to consider how the relationship between the mentor and mentee can be best supported and to establish the mentoring relationship's boundaries.

Parents/carers may or may not be involved in the initial meeting as appropriate. Other professionals may also be present at the initial per the DPO's business as usual - these people could include the referring professional, teachers, other team members at the DPO.

Many DPOs work with one or a small number of mentors and therefore young people are matched with the mentor by default rather than through pairing by selecting from a pool of mentors. Even so, it is valuable to assess the strengths and potential risks that are unique to that match to understand how best to manage and support the mentor-mentee relationship.

Elements

M.1. DPOs will reflect on mentor-mentee matchings and consider the qualities of the match. These could include:

- Perceived strengths and risks of the match
- Strategies to enhance the match based on perceived strengths and risks
- Aspects to particularly monitor or check-in on

M.2. A meeting that includes relationship building and boundaries

- This discussion (or components of it) may be included in the first mentoring session or may be part of the screening and onboarding process
- The initial meeting can take place on-site or another safe place that the mentee would prefer

Support

For young people

Through the mentoring process, young people will be supported to develop SEL skills and work towards personal development goals set by the young person. Elements in this domain are related to how the mentors will support young people through mentoring practice.

Within this domain, mentoring practice elements are outlined but they remain high-level, in recognition that DPOs are not all expected to deliver identical mentoring programmes. A purpose of the multi-site trials methodology is to lean into that variation; however, we will seek to see evidence that key quality principles are embodied in the mentoring relationships through the aforementioned implementation study.

DPOs are likely to have different tools and systems that they use for supporting young people to identify and monitor their goals. Additionally, the mentoring settings can vary as per business as usual for the DPOs. Mentoring can be either remote or in person.

Mentors and mentees can communicate in their strongest shared language, however data for the trials must be collected in English or Welsh.

Modes of contact with parent(s)/carer(s) can vary between DPOs depending on what's appropriate and their business as usual. This includes not maintaining contact with parent(s)/carer(s) if it is not appropriate or business as usual for mentors to do so.

Support for young people on the waiting list

DPOs can engage and support young people on the waiting list as long as it's not mentoring. This support could involve keeping in touch through informal check-ins, targeted intervention to support immediate needs, or group-work provision (as examples).

DPOs can support young people on the waiting list by working with them directly or referring them to another local youth organisation. While we cannot stop a young person on the waiting list from taking up mentoring outside of the DPO, DPOs should not directly refer or sign-post young people on the waiting list to another mentoring programme.

For mentors

Mentors will also be supported by colleagues within the DPO to enable consistent high-quality practice. This can be in the form of line management and supervision as well as ongoing training and practice development.

The frequency and content of training and supervision for mentors may vary between DPOs - this is to follow the DPOs standard procedures.

Elements for young people's support

YS.1. DPOs will have a written programme plan to guide the 12-week mentoring relationship

YS.2. Key quality dimensions are intentionally attended to through the mentoring relationship. These include:

- young people feel able to trust their mentor
- relationships between mentors and mentees are high-quality
- spaces where mentoring takes place are emotionally and physically safe
- with the support of their mentor, young people set and review goals

YS.3. Young people have the same mentor for the twelve-week period

YS.4. A ‘mentoring session’ is a minimum of 45 minutes long and includes discussion relevant to the mentoring programme and young person’s goals

- in between mentoring sessions, some DPOs may have shorter check-ins to keep in touch with the mentees or contact with them through other provision activities

YS.5. Over the twelve-week mentoring period, there should be a minimum of twelve sessions

YS.6. If the mentoring is extended beyond twelve weeks, reasons should be documented

Elements of support for mentors

MS. 1. Mentors will be supported throughout the mentoring programme by a line manager. This support can be space for:

- coaching and practice development
- resolution of risks and issues

Closure

It is widely considered good practice that young people are given clear expectations about the length of mentoring and are prepared for it to come to an end. If the closure of a programme or relationship is managed poorly, it can be potentially harmful and undermine the good work that has taken place.

The precise content of closure procedures, conversations, and post-closure contact policies and practice may vary between DPOs and will follow DPO business as usual. This extends to both how closure is communicated with young people and whether and how it is communicated with parents.

DPOs can extend their mentoring relationships beyond the 12-week minimum requirement. If they do extend beyond the 12 weeks, however, they will have to ensure that doing so would not undermine capacity to deliver mentoring to young people on the waiting list, whose mentoring should start 12 weeks after their randomisation.

For the trials, closure documentation will include information about how to contact the study team for any further queries or to gain access to their data in line with their rights under GDPR.

Elements

C.1. DPOs will have a closure process that includes:

- giving notice of closure to the young person and agreeing it in advance of the final session
- review any scope and boundaries for post-mentoring contact

C.2. Closing documentation is issued to the young person at the final session clearly communicating that mentoring has finished

- this can also include celebratory material acknowledging the young person's achievements through mentoring

C.3. Early withdrawal or exit is recorded along with any known reasons and relevant mentor reflections

Appendix E. DPO recruitment interview scoring criteria

Interview marking record for DPOs - Multisite trials of mentoring practice	
NAME OF INTERVIEWERS:	ORGANISATION:

The following requirements are essential for the person to be appointed.

Suggested scoring system:

0 - doesn't answer the question at all

1- answers some elements of the question/to some extent; doesn't meet expectations

2- answers most of the question; meets expectations

3 - answers the whole question; exceed expectations

INTRODUCTION:

- Thank you so much for applying to take part in the multi-site trials of mentoring practice!
- This is a really exciting and ambitious study and we're holding these interviews to make sure that your organisation is a good fit.
- We know that the trials won't be a good fit for every organisation that has expressed interest, so we won't be able to take all organisations through from the interview stage
- We intend this to be an open and honest conversation - we're going to use this time to learn more about your mentoring provision and also explore some of the elements of the study that we feel may be a bit of a stretch. We're not trying to catch you out at any stage!
- We want to make sure that if you're selected, you'll be entering the trial confidently and with open eyes as to what it entails.
- You'll have an opportunity to ask us questions as well. We'll cover next steps then too.

INTERVIEW QUESTIONS

Q	Question / requirement	Comments / Notes	Mark
1	Please tell us why you feel your organisation is particularly well placed to be part of this research study. What will you bring to the project?		
2	What was the original prompt for your organisation establishing its mentoring provision? [prompt - how long has your provision been running? How do you assess 'need' amongst young people? how do you		

Q	Question / requirement	Comments / Notes	Mark
	work with partners/referrers, including information sharing?]		
3	What have you learned about your mentoring provision since you started offering it? What have you done with that learning? [prompt – how have you learned about your provision, and what evaluation have you undertaken? how has your provision changed over time?]		
4	What do your trustees and wider staff team think about your organisation potentially being involved in an RCT? How do you think young people will react? [NB could re-frame this to ask how they would respond if staff/parents/young people complained or raised formal concerns about involvement in an RCT]		
5	As you know, young people recruited as part of the research study will be randomised into two groups. Young people in the ‘treatment’ group will start mentoring straightaway, whilst young people in the ‘control’ group will be placed on a waiting list for three months before starting mentoring. How would you support and keep in touch with young people on the waiting list?		
6	Participation in the research study will involve all delivery partner organisations collecting self-reported outcomes and crime data from young people in both the treatment and control groups. What challenges do you anticipate this might present, and how would you respond? [prompt - consent, managing drop outs, variable engagement, maintaining relationships, encouraging completion of surveys]		

Q	Question / requirement	Comments / Notes	Mark
7	How does your organisation listen to and act on the voices of young people and those with lived experience of serious youth violence? [prompt - how have the voices of young people influenced changes in your provision]		
8	How do you feel about working closely and transparently with other organisations involved in mentoring, and potentially sharing challenges and adapting your practice?		
9	If you were selected to participate in the research project, where do you think you will need the most support? [prompt - what would be the signs for you that participation in the research project wasn't working out? what would be the first steps that you'd take in response?]		
10	Do you have any questions for us?		

CLOSING REMARKS:

- Thank you again for your time. We're interviewing until next Tuesday and then will be making final decisions.
- Expect to hear from us the week commencing the 8th November
- Feel free to contact us with any questions during that time, and we may drop you a line if there's anything extra we need to ask.

Appendix F: Changes since the previous evaluation

	Feature	Pilot to efficacy stage	Efficacy to effectiveness stage
Intervention	Intervention content	Describe any changes to the content.	Describe any changes to the content.
	Delivery model	Describe any changes in the delivery mechanism (e.g., from developer-led to train-the-trainers; in-person vs online; etc.).	Describe any changes in the delivery mechanism (e.g. from developer-led to train-the-trainers; in-person vs online; etc.).
	Intervention duration	Describe any changes in the duration of delivery (e.g. shortened due to the inclusion of a pre-test)	Describe any changes in the duration of delivery (e.g. shortened due to the inclusion of a pre-test)
Evaluation	Eligibility criteria	Describe any changes in the eligibility criteria for participation in the evaluation (settings, participants etc.).	Describe any changes in the eligibility criteria for participation in the evaluation (settings, participants etc.).
	Level of randomisation	Not applicable to pilots.	Describe any changes to the design from efficacy to effectiveness stage to the level of randomisation
	Outcomes and baseline	Not applicable to pilots.	Describe any changes to the design from efficacy to effectiveness stage in: <ul style="list-style-type: none"> ○ Outcomes ○ Baselines
	Control condition	Not applicable to pilots.	Describe any changes to the design from efficacy to effectiveness stage to the control condition

Appendix G: Effect size estimation

Outcome	Unadjusted differences in means	Adjusted differences in means	Intervention group		Control group		Pooled variance
			n (missing)	Variance of outcome	n (missing)	Variance of outcome	
Primary outcome							
SDQ total score	0.036	0.047	275 (96)	46.3	293 (79)	43.0	44.6
Secondary outcomes							
Self-confidence score	0.17	0.19	268 (103)	0.93	284 (88)	0.93	0.93
Problem-solving score	0.16	0.19	276 (95)	0.75	289 (83)	0.71	0.73
Teamwork score	0.12	0.12	276 (95)	0.74	282 (90)	0.68	0.71
Resilience score	0.10	0.11	269 (102)	0.81	281 (91)	0.86	0.84
Exploratory outcomes							
SDQ prosocial subscale	0.52	0.36	283 (88)	4.73	301 (71)	5.24	4.99
SDQ internalising problems	0.15	-0.07	279 (92)	15.5	296 (76)	16.9	16.2
SDQ externalising problems	-0.04	0.16	278 (93)	18.7	297 (75)	17.9	18.3

A research study of youth mentoring – Information sheet for young people

[Add DPO name] is inviting you to take part in a research study about youth mentoring.

Please read this information carefully and ask us to talk you through it. It tells you why the research is being done and what you will be asked to do if you take part. There is a link at the end of this information sheet to a Consent Form for you to sign when you have read and understood all the information needed to take part.

If you are happy to be part of the research study, we will also contact your parent or carer to check they are ok with this.

If you would like to know more about the study at any time, please contact [add staff name and DPO name] or Dr Stephanie Smith from the

research team at trials@youthimpact.uk

What is the study about?



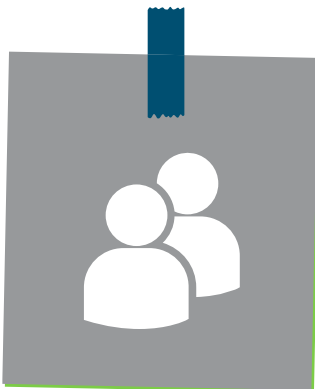
The researchers want to find out how youth organisations across England and Wales can work together to provide young people with a similar approach to mentoring. Over 1000 young people will be taking part. The research is being done by a team of researchers from the Centre for Youth Impact, the Centre for Evidence and Implementation, and Bryson Purdon Social Research. You can find out more about the study here: www.youthimpact.uk/yef-multi-site-trials.



What does taking part in the study involve?

If you take part in the study, you will:

1. Have mentoring sessions – either soon or in about three months' time
2. Be asked to fill in surveys and may also be asked take part in an interview about your experience of the mentoring you've been involved in and agree for the research team to have some basic information about you.



What is mentoring?

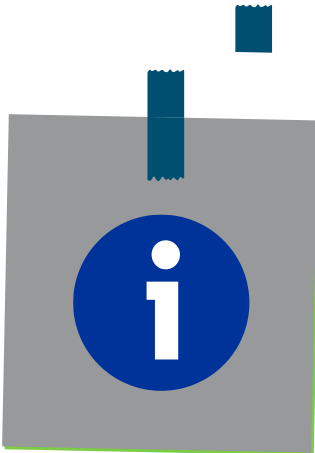
Mentoring is a 1:1 ongoing relationship between a trusted professional adult and a young person, that helps young people with their personal goals and development. The mentor and young person meet regularly. In this study, you will get at least 8 mentoring sessions, taking place over 3 months. The sessions will be at least 45 minutes. What happens in the mentoring sessions depends on what a young person needs, with the mentor giving advice and help, and acting as a role model.

At [insert DPO name] we [insert any additional details specific to DPO].



When will the mentoring start?

To test how well mentoring works for young people, young people who have mentoring sessions will be compared with young people who don't. This means that half of the young people in the study will be randomly selected to start mentoring straight away, and half will wait to start their mentoring in 3 months' time. Random selection means that it is just chance which group you're in – like rolling a dice. If you aren't in the group who starts mentoring straight away, you may be offered other support and activities (such as group work) until your mentoring begins.



What information will be collected?

1. Some **background information** at the start of the study (your age, gender, ethnicity, and particular life experiences).
2. All young people will be asked to fill in a **survey** about mental health and wellbeing. You will be asked to fill this in at the start of the research and again after 3 months. Your answers will **only** be seen by the research team and not by your Mentor, other staff, or anyone else.
3. If you start mentoring straight away, you will also be asked to fill in a very short **feedback survey** every few weeks about what you think about your mentoring meetings.
4. Mentors will provide information about your mentoring, such as the number of meetings, and any

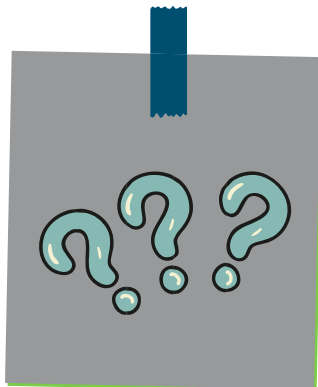
other services you receive from the mentoring organisation

5. We may also invite you to an **interview** with the research team. You can decide whether to take part in the interview when you are asked.



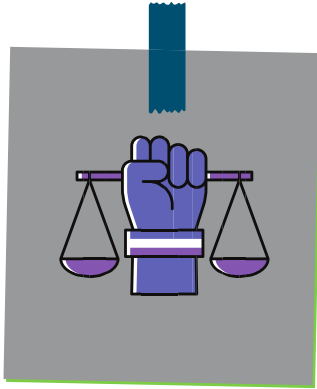
How will the information be collected?

The background information and the information about your mentoring will be entered onto an online database by your Mentor or someone from the mentoring organisation. You will be given an ID number unique to you and this will be used to protect your identity. You will then fill in the surveys either online or on paper, using your ID number to log in.



Do you have to take part?

Taking part in the research is completely voluntary. We may be able to give you mentoring even if you decide not to take part this depends on the number of mentors we have. You can change your mind and stop taking part in the study at any time, without giving a reason. You can also ask us to remove your data from the study, by talking to your mentor or contacting the research team on trials@youthimpact.uk. You can request this up to 3 months after you stop participating in the study.



What are your rights?

We have a [Data Privacy Notice](#) which sets out your rights as a participant in this research.



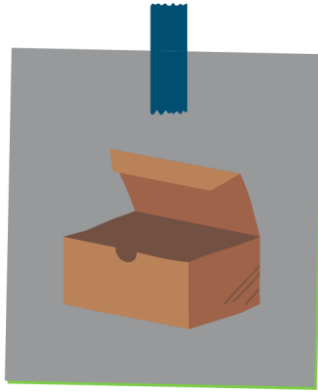
Who will have access to your information?

The research team will not have access to anything you talk to your mentor about in the mentoring sessions. Mentors will not have access to your survey responses, or any other data you provide in the feedback surveys or interviews. The research team will not have access to your name, contact details or anything that identifies you. The only time the research team will have any contact details is if you agree to take part in an interview.



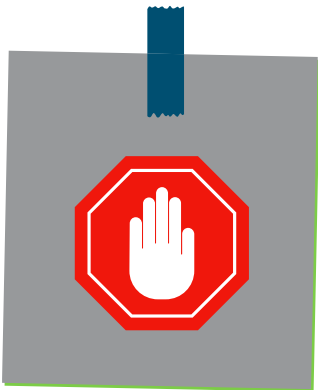
Is all the information about you private and confidential?

All the data collected as part of the research will be kept **completely** private and confidential. The only exception to this is if you say something to the research team that makes them concerned for your safety or the safety of others. If this happens, the researchers may need to tell someone else.



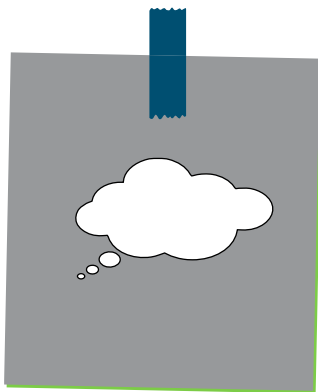
Where will the information be stored and for how long?

We will store your information in a secure password protected online database belonging to the Centre for Youth Impact. All data will be destroyed a maximum of two years after the end of the project.



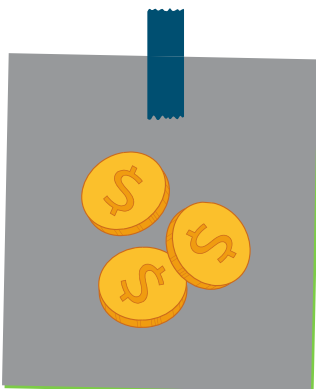
What if you don't want us to use your information?

You can ask us to change or delete the information at any time by telling [add staff name at the DPO] or contacting the research team on trials@youthimpact.uk



What if you change your mind?

Taking part in the study is voluntary and so you can decide to stop at any time by telling [add staff name at the DPO] or contacting the research team on trials@youthimpact.uk.



Who is funding this study?

The study is funded by the Youth Endowment Fund (YEF) and has been reviewed and approved by the Research Ethics Committee at the University of Cumbria (insert REC number).

All data collected as part of this evaluation will be managed in as secure a way as possible. This includes pseudonymising all data so that it is impossible for anybody accessing the data once it's been stored to identify the children on whom data is held.

The Department for Education will receive the data collected from the project when it ends and ensure anything that could directly identify a child (like names or dates-of-birth, addresses etc.) has been replaced with a unique reference. The Department for Education will then send the data to the Office of National Statistics, where it'll be held in a secure archive. The Youth Endowment Fund will become legally reasonable for what happens to the data and how it's protected once the project has finished. The Youth Endowment Fund will never allow the data in the archive to be re-identified and the Department for Education would never facilitate this.

If you would like to make a complaint about how your research data has been handled, you can contact Dr Colette Conroy, Chair of Research Ethics at the University of Cumbria: research.office@cumbria.ac.uk

If you have any complaints about the way the research data is treated, you can report them here: www.ico.org.uk/concerns

If you have any other questions, please speak to *[add in details for staff member at DPO name]* or contact Dr Stephanie Smith (project manager) on trials@youthimpact.uk

Please click here to complete the
Young Person's Consent Form

The Centre for Youth Impact is a company limited by guarantee (No.10640742) and a registered charity in England and Wales, number: 1178148.

CEI operates in the UK under the company name CEI Global UK Limited, a private limited company registered in England and Wales (Company Number 11471351). The Youth Endowment Fund Charitable Trust, registered charity number: 1185413 Bryson Purdon Social Research (Company Number OC346312)

Appendix H.B. Parent/carer information sheet

[Option for DPOs to add their logo here]

A research study of youth mentoring – Information Sheet for Parents and Carers

Dear Parent/Carer

[Add DPO name] would like to invite your child/the young person in your care to take part in a research study about youth mentoring. For your child to take part, we need your informed consent. This information sheet tells you all about the study and provides details about what information we would like to collect from young people, and how this data will be used and safely stored.

There is a **link** at the end of this information sheet to a **Consent Form** for you to sign when you have all the information needed and are happy for your child/the young person in your care to take part. We can also provide a **paper copy** if that is preferred.

If you would like any further details or to discuss anything about the study at any time, please contact [add staff name and DPO name] or Jamie Rowland from the research team at trials@youthimpact.uk

What is the study about?

Seventeen youth organisations across England and Wales have come together with a team of researchers from the [Centre for Youth Impact](#), the [Centre for Evidence and Implementation](#), and [Bryson Purdon Social Research](#). The study is being funded by the [Youth Endowment Fund](#).

The study is looking at how small youth organisations that are usually excluded from research can be supported to participate in a randomised controlled trial using a shared approach to youth mentoring, and the impact of this approach. You can find out more here <https://www.youthimpact.uk/yef-multi-site-trials>.

Mentoring is a 1:1 ongoing relationship involving scheduled appointments between a trusted professional adult and a young person, with the aim of supporting young people's personal goals and aspirations and socio-emotional development.

At [insert DPO name] specifically we [insert any additional details specific to DPO].

When will the mentoring start?

Thank you for giving your consent for your child to participate in the study and receive mentoring as part of the trial. To test how well mentoring works for young people, young people who initially receive mentoring will be compared with young people who don't. To make this comparison, half of the young people in the study will be randomly selected to start mentoring straight away, and half will wait to start their mentoring in 12 weeks' time.

If young people aren't in the group that starts mentoring straight away, they may be offered other support and engagement activities (such as group work) until their mentoring begins.

What information will be collected?

If you and the young person have agreed to take part, the following information will be collected:

1. **Background demographic information** at the start of the study (their age, gender, ethnicity, and particular life experiences) and we will monitor young people's attendance at mentoring meetings throughout.
2. All young people (whether they start mentoring immediately or after 12 weeks) will be asked to complete **two questionnaires** at the start of the research, and again after 12 weeks. The questionnaires are about their mental health and wellbeing. Their responses will only be seen by the research team and not by their Mentors or any other staff.
3. Young people who start mentoring straight away will be asked to complete a very **short feedback survey** every few weeks about their experiences of mentoring support.
4. We may also invite young people in the mentoring group to an interview or focus group discussion with the research team. Young people can decide whether to take part in the interview or focus group when they are approached.

How will the information be collected?

The initial background information and the information about the mentoring sessions they receive will be entered onto an online portal by the Mentor or someone from the mentoring organisation. The young person will be given an ID number, and this will be used to protect their identity. They will then complete the questionnaires on the online portal, using their ID number.

The data for this research will be collected in accordance with the law in England and Wales, under the UK General Data Protection Regulation (GDPR). We can rely on the lawful basis of 'legitimate interest' for collecting and using information about young people because it is for societal benefit.

What are young people's rights?

We have produced a [Data Privacy Notice](#) which outlines the young people's rights as a participant in this research. Young people can opt-out of the project at any time, without giving a reason.

Who will have access to young people's information?

Mentors will only have access to the information they enter onto the online portal about young people. They will not have access to the young person's questionnaire responses, or any other data collected from feedback or interviews. In any research findings, the identity of your child will be entirely anonymised and if necessary, disguised – so that there is no way that your child can ever be identified in relation to any results.

The research team will access anonymised demographic data, the information about the mentoring sessions they receive, and questionnaire responses from the online portal. The research team will not be able to identify any particular young people from the data or have access to their contact details.

Is all the information about young people confidential?

All the data collected as part of the study will be kept completely confidential. The only exception to this is, if while taking part in the interviews, a young person says something which makes the research team concerned for their welfare or the welfare of others. If this happens, then the research team will inform our safeguarding lead or another relevant professional.

Where will it be stored and for how long?

Young people's information will be stored in a secure password protected online database belonging to The Centre for Youth Impact. All data will be destroyed a maximum of two years after the end of the project.

What if the young person doesn't want the research team to use their information?

The young person can contact us to change or delete their information up to three months after ending their involvement, so long as their data can be extracted from the analysis. However, it will not be possible to do this after a report has been published.

What if the young person or I change their mind?

Participation in the study is voluntary and so young people can withdraw at any time.

Who is funding this study?

The study is funded by the [Youth Endowment Fund](#) (YEF) whose mission is to prevent children and young people becoming involved in violence, and has been reviewed and approved by the Research Ethics Committee at the University of Cumbria (insert REC number).

All data collected as part of this evaluation will be managed in as secure a way as possible. This includes pseudonymising all data so that it is impossible for anybody accessing the data once it's been stored to identify the children on whom data is held.

The Department for Education will receive the data collected from the project when it ends and ensure anything that could directly identify a child (like names or dates-of-birth, addresses etc.) has been replaced with a unique reference. The Department for Education will then send the data to the Office of National Statistics, where it'll be held in a secure archive.

The Youth Endowment Fund will become legally reasonable for what happens to the data and how it's protected once the project has finished. The Youth Endowment Fund will never allow the data in the archive to be re-identified and the Department for Education would never facilitate this.

If you would like to make a complaint about how your research data has been handled, you can contact Dr Colette Conroy, Chair of Research Ethics at the University of Cumbria: research.office@cumbria.ac.uk

If you have any complaints about the way the research data is treated, you can report them here: www.ico.org.uk/concerns

If you have any other questions, please speak to [add in details for staff member at DPO name] or contact Dr Stephanie Smith (project manager) on trials@youthimpact.uk

Please click here to complete the [Parent and Carer Consent Form](#)

Appendix H.C. DPO staff information sheet

A research study of youth mentoring – Information Sheet for Mentors

Dear Mentor,

We would like to invite you to take part in the research study about youth mentoring. Please read this information sheet carefully. It tells you all about the study and provide details about what information we would like to collect from you, why the research is being done, what you will be asked to do if you take part in the interviews, and how your data will be used and safely stored.

There is a **link** at the end of this information sheet to a **Consent Form** for you to sign when you are happy you have all the information needed to take part. We can also provide a **paper copy** if that is preferred.

If you would like any further details or to discuss anything about the study at any time, please contact Jamie Rowland from the research team at trials@youthimpact.uk.

What is the study about?

Seventeen youth organisations across England and Wales have come together with a team of researchers from the [Centre for Youth Impact](#), the [Centre for Evidence and Implementation](#), and [Bryson Purdon Social Research](#). The study is being funded by the [Youth Endowment Fund](#).

The study is looking at how small youth organisations that are usually excluded from research can be supported to participate in a randomised controlled trial using a shared approach to youth mentoring, and the impact of this approach. You can find out more here <https://www.youthimpact.uk/yef-multi-site-trials>.

When we talk about mentoring, we mean an intentional 1:1 ongoing relationship between a trusted professional adult and a young person, with the aim of supporting young people's personal goals and socio-emotional development.

What information and data will be collected?

As well as the information and data being collected from young people, we also want to collect some data from you as a mentor. This will include:

1. Some background information about you at the start of the study ('mentor background information'). This will include demographics: your age, gender, ethnicity, and some questions about your mentoring experience, including any relevant academic or professional qualifications and lived experience.
2. A brief survey about your mentoring practice towards the end of the study ('the mentor feedback survey'), which will include a reflection on the quality of your therapeutic relationships with your current mentees and your views on how the shared practice model compares with your usual mentoring practice.

3. Some brief administrative data about each of your mentoring cases at the end of their mentoring sessions, e.g., how many mentoring sessions were offered vs. attended ('administrative information')
4. We may also invite you to take part in an interview with the research team to further understand the implementation of the shard practice model and your thoughts on the trial arrangements. If you are selected, we will provide more information about what would be involved, and you can decide whether to take part in this interview.

How will the information be collected?

We will ask you to enter the mentor background information, mentor survey, and administrative information onto an online portal. When you first enter your background information into the system, you will be given an ID number, and this will be used to protect your identity.

The data for this research will be collected in accordance with the law in England and Wales, under the UK General Data Protection Regulation (GDPR). We will be collecting and using information about young people and mentors under the lawful basis of 'legitimate interest' because it is for social benefit.

What are your rights?

We have produced a [Data Privacy Notice](#) which outlines the young people's and professionals' rights as a participant in this research. You can opt-out of the project at any time, without giving a reason.

Who will have access to your information?

The research team will access the data you provide from the online portal. The research team will not be able to identify any particular mentor from the data or have access to their name or contact details.

Other staff in the mentoring organisation will be able to view the mentor background information entered into the portal and the administrative data. They will not be able to view your responses to the mentor survey.

Is all the information about you confidential?

All the data collected as part of the study will be kept completely confidential. The only exception to this is, if while taking part, a mentor tells us something which makes us concerned for their welfare or the welfare of others.

Where will it be stored and for how long?

We will store your information in a secure password protected online database managed by The Centre for Youth Impact. All data will be destroyed a maximum of two years after the end of the project.

What if you don't want us to use your information?

You can contact us to change or delete the information stored about you. This is possible up to three months after ending my involvement, providing your data can be extracted from the analysis. However, it will not be possible to do this after a report has been published.

What if you change your mind?

Participation in the study is voluntary and you can choose to withdraw at any time.

Who is funding this study?

The study is funded by the [Youth Endowment Fund](#) (YEF) whose mission is to prevent children and young people becoming involved in violence, and has been reviewed and approved by the Research Ethics Committee at the University of Cumbria ([insert REC number](#)).

All data collected as part of this evaluation will be managed in as secure a way as possible. This includes pseudonymising all data so that it is impossible for anybody accessing the data once it's been stored to identify the children on whom data is held. The Department for Education will receive the data collected from the project when it ends and ensure anything that could directly identify a child (like names or dates-of-birth, addresses etc.) has been replaced with a unique reference. The Department for Education will then send the data to the Office of National Statistics, where it'll be held in a secure archive. The Youth Endowment Fund will become legally responsible for what happens to the data and how it's protected once the project has finished. The Youth Endowment Fund will never allow the data in the archive to be re-identified and the Department for Education would never facilitate this.

If you would like to make a complaint about how your research data has been handled, you can contact Dr Colette Conroy, Chair of Research Ethics at the University of Cumbria: research.office@cumbria.ac.uk

If you have any complaints about the way the research data is treated, you can report them here: www.ico.org.uk/concerns

If you have any other questions, please speak to [add in details for staff member at DPO name](#) or contact Dr Stephanie Smith (project manager) on trials@youthimpact.uk

Please click here to complete the Mentors' [Consent Form](#)

Appendix I. Literature review of multisite trials

What can we learn from the existing literature on running multi-site trials?

One of the early tasks for the evaluation team has been to review what is already known about running multi-site trials (MSTs). The purpose of this task has been to understand what elements contributed to the success of these MSTs, as well as the practical challenges experienced and the attempts that were made to overcome these. This learning should help mitigate against similar pitfalls in the design of the current MST, building on and/or testing out the approaches taken by others.

This exercise has not been a comprehensive review of the literature of MST methodologies. Rather, the aim has been to extract key messages, drawing on a small number of papers which focus specifically on the practical learning from previous MSTs. Reflecting the body of evidence, the papers are largely about clinical MSTs, often conducted in the US.

The papers came up with a pretty consistent set of messages about the challenges involved and took broadly similar approaches to try to mitigate them. They highlight that, whilst having study protocols and procedures in place is essential, the success of an MST depends on how the evaluation team and sites react to challenges which happen during the course of the trial (Greer et al, 2020).

Arguably, the key conclusion from all these trials was the importance of strong communication channels. This was a theme for avoiding or mitigating against nearly all the challenges identified. The key factors discussed can be categorised as being in relation to:

1. Engagement of Delivery Partner Organisations (DPO) staff in the trial
2. Investing in the training of DPO staff
3. Monitoring to ensure progress and fidelity to the study protocol
4. Recruitment of trial participants and ensuring a standardised, high-quality approach to data collection

1. Engagement of Delivery Partner Organisations (DPO) staff in the trial

A key theme within the literature is that the 'buy in' of DPOs and their staff is crucial to the trial's success. Weinberger et al (2001) highlight the enthusiasm of senior and other staff as a key criterion for the inclusion of a DPO in the MST. Others (e.g. Friese et al, 2017) stress the need for leadership engagement, with MSTs requiring the endorsement and ongoing support of senior staff within each DPO. A number of the papers described the value of having a study 'champion' within the DPO (Kutner et al, 2010; Greer et al, 2020; Weinberger et al, 2001), whose role included selling the importance of the trial both to DPO staff and participants.

In general, all the papers talked about fostering the engagement of DPO staff via open channels of communication between the evaluation team and each site. In part, this related to the need to have a close eye on how the trial is running in each site and troubleshooting issues (see point 3 below). However, the communication was equally about keeping the trial 'top of mind' within DPOs and ensuring that DPO staff appreciated the importance of what they were doing to contribute to its success.

The nature and frequency of the engagement with DPOs varied across MSTs. However, elements commonly cited as important included:

Fostering a collaborative approach

- Fostering a collaborative communication style, assuming that the evaluation and DPOs play equal roles rather than adopting a direct management approach (Forjuoh et al, 2015);
- Involving DPOs in the planning stage of the MST, so partnerships are built an at early stage. This involves facilitating two-way communication (e.g. sending presentations in advance so that staff have a chance to absorb and be in a position to discuss and ask questions) (Goodlett et al, 2020);
- Having frequent online meetings of all the DPOs to provide opportunities for shared learning across the sites and facilitating active discussion between DPOs (Goodlett et al, 2020). Friese et al (2017) held quarterly webinars to keep DPOs informed on progress and maintain enthusiasm.

Establishing strong and open communication channels

- Making face-to-face visits to each DPO, including of senior members of the evaluation team (e.g. Friese et al, 2017; Kutner et al, 2010). Whilst these often happened at the start, and sometimes end, of the study, within some MSTs, face-to-face visits happened more frequently (e.g. Kutner et al made yearly visits). They sometimes involved being included as an agenda item on a DPO staff meeting (Kutner et al, 2010). Such visits were used to encourage and thank staff, and collect best practice from each site (Kutner et al, 2010);
- However, Forjuoh et al (2015) highlighted the difficulties that can arise from distances and travel times in MSTs where sites are widely spread. In this instance, their recommended solution was for frequent phone (or online) meetings;
- Asking each DPO to appoint a trial coordinator, a member of staff who oversees all elements of the trial and acts as a liaison point for the evaluation team (Friese et al, 2017; Kutner et al, 2010), ideally retaining one person in the post for the duration of the trial (Forjuoh et al, 2015);
- Establishing trust between the evaluation team and DPO coordinator via regular communication (Forjuoh et al, 2015);
- Use of both written and verbal communication (Forjuoh et al, 2015).

Providing positive feedback and maintaining enthusiasm for the trial

- Providing feedback, praising and acknowledging DPOs for best practice and achievements during the trial (Goodlett et al, 2020), thereby boosting morale (Greer et al, 2020). If appropriate, this could involve the use of staff incentives (Greer et al, 2020), with the nature of the incentives decided by the DPOs (Kutner, 2010);
- Producing regular newsletters keeping DPO staff up-to-date and, again, highlighting what DPOs were doing well and sharing good ideas (Goodlett et al, 2020; Rahbar et al, 2011). Rahbar et al (2011) suggest asking DPOs to be proactive in offering ideas for newsletter content;
- Intermittent all-DPO face-to-face meetings (e.g. Forjuoh et al (2015) describe bi-annual retreats);
- Involving DPOs in the write up and dissemination of findings (Goodlett et al, 2020). Weinberger et al (2001) highlight the fact that the benefits of involvement in a trial may be less obvious to DPOs in MSTs, rather than in a single-site trial. Recognising their contributions and including them in the authorship of findings may be one way of maintaining DPOs' buy in and enthusiasm for the trial.

2. Investing in the training of DPO staff

A second key theme from the papers was the crucial importance of investing in the training of DPO staff. This included not only training at the start of the MST but putting in place mechanisms for refresher training throughout the trial. Staff turnover was recognised as one of the key challenges of any MST (Kutner et al, 2010), with the risks that it introduces in terms of adherence to the protocol, staff engagement in the trial and missed participant follow-ups and attrition (Forjuoh et al, 2015). MSTs were seen to bring additional challenges in relation to training, given that different DPOs may have different needs and requirements in terms of training and support (Forjuoh et al, 2015).

The MSTs within the review tended to have face-to-face training at the start of the MST, either on site (e.g. Kutner et al, 2010; Rahbar et al, 2011) or bringing all DPOs together (Forjuoh et al, 2015). In addition, having an extensive training manual, together with training videos, were seen as essential. These could act as reference documents and reminder for those who had attended the training and training for other staff coming on board later (Kutner et al, 2010). It was recognised that variability in the training of staff could lead to discrepancies about how the trial was administered across DPOs (Forjuoh et al, 2015).

In addition to the above, the following approaches were taken to augment and consolidate training for DPO staff:

- Further onsite training (e.g. Kutner et al, 2010);

- Periodic webinars (Friese et al, 2017), refresher training and individual calls where required (e.g. a more private space for sharing issues) (Forjuoh et al, 2015).
- Creating a binder of all study materials, including the full protocol, clean consent form, a document of FAQs (Friese et al, 2017; Rahbar et al, 2011);
- Trying to promote continuity of staff in the trial wherever possible, stressing the importance of a consistent approach and rapport with trial participants (Forjuoh et al, 2015);
- Building relationships between the evaluation team and staff who enter the MST later on (Goodlett et al, 2020);
- A ‘train the trainer’ model, where the DPO coordinator was tasked with training new staff involved in the MST (Kutner et al, 2010);
- Shadowing staff more experienced in the trial (Kutner et al, 2010);
- Training including role play and demonstrations (Rahbar et al, 2011);
- Regular supervision and feedback (Reynolds et al, 2014);
- Verbal tests to check knowledge and competence (Kutner et al, 2010).

3. Monitoring to ensure progress and fidelity to the study protocol

Whilst emphasising the collaborative nature of an MST, all the papers stressed the importance of close monitoring of the progress being made by each DPO, as well as fidelity of the intervention model and compliance with the study protocol. The key mechanisms which were perceived as being effective were:

Ensuring that capacity and processes are in place before the trial start

- Site visits to assess how the trial will work within each context. Goodlett et al (2020) used a predetermined set of questions to elicit DPOs’ strategies for promoting the trial, participant engagement, potential challenges and preferences for methods of contact;
- Assessing each DPO to ensure that it has an adequate infrastructure for the requirements of the MST (Rahbar et al, 2011).

Keeping DPOs on target in terms of recruitment

- Setting monthly recruitment goals for each DPO, based on the information they provided on the number of people going through the service (Kutner et al, 2010);
- Sending a monthly progress report to all DPOs, to allow for DPOs to compare themselves against other sites (said to encourage healthy competition and camaraderie) (Kutner et al, 2010).

Troubleshooting and providing ongoing support

- Individual meetings between the evaluation team and each DPO coordinators to discuss challenges and issues (Forjuoh et al, 2015). Rahbar et al (2011) had a research team member assigned to each DPO who made site visits every three to six months.

- Frequent (e.g. Rahbar et al, 2011 quarterly; Kutner et al, 2010 monthly) conference calls with all DPOs to reinforce best practice and share collective problem-solving (Kutner et al, 2010);
- A dedicated ‘hotline’ or single point of contact for DPOs to handle questions and troubleshoot issues. This would include the distribution of the questions that come up and the evaluation team responses, to ensure consistency across the DPOs (Forjuoh et al, 2015);
- Summary reports after site visits (Rahbar et al, 2011), so things are in writing for future reference;
- Revising study materials in light of learning throughout the trial (Goodlett et al, 2020).

Monitoring fidelity and compliance

- At least annual site visits to monitor adherence to the protocol, address issues and collect ideas of best practice (Kutner et al, 2010; Goodlett et al, 2020);
- Where MSTs involve DPOs providing an intervention with some core components but some variation, meticulous record-keeping is required of the intervention provided in each DPO (Weinberger et al, 2001);
- Likewise, detailed information is required on ‘usual care’ within each DPO (Weinberger et al, 2001). Greer et al (2020) highlighted the challenges in a long MST of DPOs experiencing changes (e.g. because of funding) in what constituted ‘business as usual’;
- Ensuring that, among the evaluation team, those working on the Implementation and Process Evaluation (IPE) liaise closely with those working on the quantitative trial, in order to maximise the learning across the elements (Reynolds et al, 2014).

4. Recruitment and retention of trial participants, and ensuring a standardised, high-quality approach to their data collection

Both the recruiting and retaining trial participants and ensuring that the data collected from and about them is consistent and high quality were seen as being key elements of a successful MST. Whilst the challenges and solutions to successful recruitment and retention might vary across DPOs, having highly standardised approaches to data collection tended to be viewed as a more ‘top down’ responsibility.

The papers highlighted the following approaches as being valuable.

Recruitment and retention of trial participants

- Producing study information flyers for potential participants and their families (Kutner et al, 2010);
- Minimising staff wanting to act as gatekeepers, guarding potential participants from being involved in the trial (Kutner et al, 2010);
- Using informal discussions (described as ‘fireside chats’) with potential participants to talk through what involvement in the trial would be like, and overcome concerns (Greer et al, 2020);

- Minimising participants withdrawing from the trial by providing very careful explanation early in the process of their 50:50 chance of selection, and what will be available to them as an alternative (Kutner et al, 2010);
- Centrally-run randomisation process, with a program designed for ease of use by the DPO coordinator (Rahbar et al, 2011);
- Offering different modes of data collection (e.g. by phone rather than in person) (Forjuoh et al, 2015) to ensure retention in the study;
- Providing the option for consenting for their outcomes to be tracked via administrative data, if they decide not to continue with taking part in primary data collection (Forjuoh et al, 2015).

Data collection

- A common theme across the papers was the need for the evaluation team to produce study specific templates and uniform data collection tools, including for data usually held elsewhere within the DPO system. While some spoke of downloadable documents (e.g. Forjuoh et al, 2015), Rahbar et al (2011) used a user-friendly web-based system with separate parts for recruitment, intervention information, outcome measurement, with separate log-ins to the different parts for those requiring access. This system included tools to improve data accuracy and timely data collection procedures;
- Piloting testing by DPOs prior to the launch of the trial (Weinberger et al, 2001);
- Checks for data completeness (Rahbar et al, 2011) and quality assurance audits to ensure data integrity (Forjuoh et al, 2015).

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Rapid review of mentoring – Multi-site trials of mentoring practice

Introduction

As part of the preparatory work for the YEF-funded multi-site trials of mentoring practice, we undertook a rapid review of the literature (academic, practice-focused, and grey) on mentoring practice, models, and impacts. The review targeted systematic reviews and meta-analyses, and empirically supported quality and practice frameworks. We also utilised the evidence gathered for mentoring interventions as part of YEF's evidence gap maps⁵³ and the recent YEF Toolkit review focusing on mentoring⁵⁴, which collated evidence from three systematic reviews of mentoring.

This rapid review focused particularly on exploring effective mentoring practice and the conditions which make it effective. Studies included were systematic analyses and meta-analyses whether the mentoring intervention, population, and outcomes were relevant to the multi-site trials. Searches in the Campbell Review and Scopus identified 103 and 139 articles, respectively. Data was extracted from 13 articles that best met our inclusion criteria.

Two empirically based practice frameworks were also included in this review, providing more granular insight into what the broad component parts of effective mentoring look and feel like in practice.

The rapid review highlighted that mentoring can have a mild to moderate positive impact on a wide range of outcomes, though the long-term impact of mentoring is not typically studied. Mentoring's positive impact is frequently linked to the quality of relationship between the mentor and mentee.

Few studies specified practice elements that were linked to positive outcomes, however the practice frameworks included in addition to the literature review provided granular detail for high-quality mentoring both in terms of programme design and relationships.

Findings from this rapid review are being used to develop the shared practice model with the study team and DPOs with the aim to identify a core set of components, supported by evidence, that the DPOs will include in their mentoring offer being delivered through the trials. Additionally, we seek identify the flexible components of mentoring practice and the parameters for that flexibility.

Research questions

Articles were reviewed and data extracted to answer four key questions.

⁵³ https://youthendowmentfund.org.uk/wp-content/uploads/2021/05/YEF-map_10052021-1.html

⁵⁴ <https://res.cloudinary.com/yef/images/v1625825790/cdn/Mentoring-Technical-Report/Mentoring-Technical-Report.pdf>

1. How is mentoring defined?
2. What impact on outcomes can mentoring have?
3. For whom is mentoring most effective?
4. What are the common elements of effective mentoring programmes?

Methods overview

1. Systematic search of two academic databases – Campbell Library and SCOPUS
2. Review articles included within ‘mentoring and supportive relationships interventions’ in the YEF evidence gap map and identify additional articles that meet the inclusion criteria
3. Review articles found for CEI’s Groundwork rapid review and identify additional articles that meet the inclusion criteria
4. Extract information from articles that meet the inclusion criteria, describing definitions of mentoring, common elements within mentoring interventions, evidence for effectiveness and for which populations

Inclusion and exclusion criteria

Given that this was a ‘rapid’ review of mentoring evidence, we sought to identify 15 articles to review. In the end, data was extracted from 13 articles.

Population	<ul style="list-style-type: none"> • Mentoring interventions involving young people aged 10-17 years • Inclusive of all gender identities and sexual orientations 	<ul style="list-style-type: none"> • Interventions involving children under the age of 10 or adults over the age of 17 years • However, studies that include some individuals outside of the target age range will be included only if most of the study sample is aged 10-17 years
Study design	<ul style="list-style-type: none"> • Meta-analyses of RCTs and QEDs • Systematic reviews of RCTs and QEDs • Scoping reviews of RCTs and QEDs 	<ul style="list-style-type: none"> • Systematic reviews, meta-analyses, and scoping reviews of pre/post studies without a comparison group • Review protocols • Study protocols • Case studies • Primary studies • Pure determinant studies (e.g., studies that just explore implementation barriers/enablers) • Commentaries, editorials, and opinion pieces
Intervention	<ul style="list-style-type: none"> • Mentoring intervention delivered within the context of youth provision • Adult delivered mentoring • 1:1 or group-based • Online or in-person 	<ul style="list-style-type: none"> • Very low dose programmes, e.g., anything less than two sessions of mentoring support • Natural mentoring • Peer mentoring

	<ul style="list-style-type: none"> • Studies where mentoring was one type of several interventions evaluated and where it is possible to extract information on the mentoring aspect only 	
Setting	<ul style="list-style-type: none"> • Interventions delivered in community, education, or prison/juvenile justice settings • Interventions designed and delivered in high-income countries as defined by the World Bank • Online mentoring programmes 	<ul style="list-style-type: none"> • Interventions delivered in workplaces • Interventions delivered in healthcare settings • Interventions designed and delivered in low and middle-income countries
Outcomes	<p>The search will not be limited by outcome; we will note any outcome reported by the included studies. However, we have a special interest in the following outcomes for young people and prioritised studies that reported on the following:</p> <ul style="list-style-type: none"> • Mental health, including emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and prosocial behaviour • Self-efficacy, confidence, locus of control • Socio-emotional learning (SEL), including domains of emotion management and regulation, empathy, teamwork, responsibility, initiative, and problem solving • Risk of involvement in crime and serious youth violence • Outcomes that act as risk or protective factors for involvement in youth crime, such as academic attainment and school attendance/exclusion, and employment-related outcomes 	<p>While some studies included physical health and psychiatric outcomes, studies that focussed entirely on these outcome areas were excluded.</p>
Publication	<ul style="list-style-type: none"> • Studies published in English • Studies published since 2005 	<ul style="list-style-type: none"> • Studies published in any other language • Studies published before 2005

Searches

Date of searches: 19 August 2021

Limiters: 2005 - current

Database: Campbell Library

1	(child* OR adolescen* OR teen* OR “young person” OR youth* OR “young people” or youngster* OR juvenile* OR boy* OR girl*)	516
2	(mentor*)	107
3	(metaanal* OR "meta anal*" OR "meta-anal*" OR “systematic review*” OR "systematic synthesis" OR “scoping review*” OR “systematic literature review*”)	551
4	1 AND 2 AND 3	103

Database: Scopus

1	(child* OR adolescen* OR teen* OR “young person” OR youth* OR “young people” or youngster* OR juvenile* OR boy* OR girl*)	2,776,475
2	(mentor*)	46,295
3	(metaanal* OR "meta anal*" OR "meta-anal*" OR “systematic review*” OR "systematic synthesis" OR “scoping review*” OR “systematic literature review*”)	509,325
4	1 AND 2 AND 3	139

Studies selected for data extraction

Lead Author	Publication year	Title	Study design	Studies included	Country conducted
Patrick Tolan	2013	<i>Mentoring Interventions to Affect Juvenile Delinquency and Associated Problems: A Systematic Review</i>	Systematic review	RCT: 7 QED: 19	USA or other predominantly English-speaking country
Lillian T. Eby	2008	<i>Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals</i>	Meta-analysis	Quantitative studies – RCT and/QED not specified	USA
Roger E. Thomas	2011	<i>Mentoring adolescents to prevent drug and alcohol use.</i>	Systematic review	RCT: 4	USA
Sarah Wood	2012	<i>School-Based Mentoring for Adolescents: A Systematic Review and Meta-Analysis</i>	Systematic review and meta-analysis	RCT and QED - split not specified	
Roger E. Thomas	2013	<i>Systematic review of mentoring to prevent or reduce alcohol and drug use by adolescents</i>	Systematic review	RCT: 6	Canada
Laura S. Abrams	2014	<i>Juvenile re-entry and aftercare interventions: is mentoring a promising direction?</i>	Systematic review	RCT: 1 QED: 2	United States
Sally Lindsay	2018	<i>Electronic mentoring programs and interventions for children and youth with disabilities: Systematic review</i>	Systematic review	RCT: 3 Other: Surveys: 7 Case study: 1 Feasibility study: 1 Theoretical frameworks: 12	Canada
Elizabeth B Raposa	2019	<i>The Effects of Youth Mentoring Programs: A Meta-analysis of Outcome Studies</i>	Meta-analysis	RCT and QED- split not specified	United States

Lead Author	Publication year	Title	Study design	Studies included	Country conducted
Kristen M. Christensen	2020	<i>Non-Specific versus Targeted Approaches to Youth Mentoring: A Follow-up Meta-analysis</i>	Meta-analysis	RCT and QED – split not specified	United States
Kate F. Plourde	2020	<i>Boys Mentoring, Gender Norms, and Reproductive Health—Potential for Transformation</i>	Systematic review	RCT: 3 QED: 15 other: 11	United States
Wendy de los Reyes	2021	<i>Mentoring Latinx Children and Adolescents: A Systematic Review</i>	Systematic review	RCT: 1 QED: 5 Other: Single group pre-post: 1 Longitudinal: 4 Cross-sectional: 3 Descriptive: 1 Qualitative: 6	United States
Levi van Dam	2021	<i>Youth Initiated Mentoring: A Meta-analytic Study of a Hybrid Approach to Youth Mentoring</i>	Meta-analysis	RCT: 12 QED: 2	
Cyanea Y S Poon	2021	<i>A Meta-analysis of the Effects of Mentoring on Youth in Foster Care</i>	Meta-analysis	RCT and QED – split not specified	United States

How is mentoring defined?

Noting that we excluded natural and peer mentoring from this review, definitions of mentoring were broadly consistent and erring towards characterising formal mentoring relationships between an older person and young person.

Based on this review, we can define mentoring for the multi-site trials as a formal supportive developmental relationship between a young person and an adult, (definitions of adult vary, and tended to mean ‘more experienced’ and above 18+) intended to support positive outcomes for the young person. Mentors can offer support, guidance, and concrete assistance to the mentee and should model positive socio-emotional behaviours for young people.

Definitions of mentoring varied if reviews were focussing on very targeted, issue-based interventions.

What impact on outcomes can mentoring have?

Author/year	Outcomes reported
Tolan 2013	25 studies reported delinquency as an outcomes, 25 reported academic achievement outcomes 6 reported drug use outcomes 7 reported aggression as an outcome.
Eby 2008	Behavioural, attitudinal, health-related, relational, motivational and career outcomes.
Thomas 2011	alcohol use, drug use, substance use
Wood 2012	Academic achievement, school attendance, attitude (e.g. toward school or family), behaviour (e.g. substance use), self-esteem
Thomas 2013	Reduced substance and alcohol misuse
Abrams 2014	Recidivism
Lindsay 2018	An extensive list of measures including self-efficacy, self-management, self-determination, confidence, quality of life, pain inventory
Raposa 2019	1. School functioning 2. Social relationships 3. Health 4. Cognition 5. Psychological symptoms.
Christensen 2020	Psychological symptoms, social functioning, academic functioning, health problems, or cognitive functioning
Plourde 2020	1. Soft Skills (positive self-concept, self-control, higher order thinking, social skills communication, goal orientation, empathy, negotiation, self-efficacy, decision-making) 2. Gender norm transformation, 3. Violence reduction 4. Substance use reduction 5. Social assets (social networks, 6. Increased reproductive health knowledge and behaviour change 7. Financial security

Author/year	Outcomes reported
de los Reyes 2021	Formal mentoring: Academic, psychosocial, language and culture identity
van Dam 2021	Academic and vocational, social-emotional, physical health, psychosocial problems

Most studies found significant mild to moderate effects across outcomes, with mixed results reported for academic attainment, health outcomes, substance misuse, and delinquency. As one study summarises:

“In general, attitudes (e.g., work satisfaction, attitudes toward school, career expectations), interpersonal relations, and motivation/involvement may be the most easily influenced by mentoring, whereas health-related (e.g., substance use, psychological stress & strain) and career outcomes (e.g., promotions, salary) may be less influenced by mentoring” (Eby, 2008).

One study found that effect sizes were small, and in many cases not significant, across the outcomes measured: academic achievement, school attendance, attitudes (e.g. towards school or family), behaviour (e.g. substance misuse), and self-esteem. In this study, the strongest effects were seen in self-esteem $g=0.09$. The author notes that there was no evidence of mentoring causing harm, however they raise concern about negative impact caused by mentor/mentee relationships breaking down (Wood, 2021).

A meta-analysis found the following small significant effects across the outcome domains of school functioning, social relationships, health, cognition, and psychological symptoms, however argues that they could be considered medium/moderate compared to universal preventative youth provision (Raposa, 2019). These findings suggest that mentoring can enhance outcomes beyond universal forms of provision, and as mentoring often sits alongside and within a variety of provision, the extent to which mentoring features as a component of a young person’s support network or ‘package’ should be taken into consideration when assessing its impact.

For whom is mentoring most effective?

In most cases, the studies included a range of populations and did not analyse impact on outcomes between populations.

The table below summarises the populations included in the studies that were reviewed as they were specified in the studies. Not all studies provided equal amounts of detail of the populations that were included in their studies. Populations were specified in the following levels of detail in the studies included in this review:

- Risk factors
- Demographics: age, gender, ethnicity, disability, family income
- Broad developmental categories: young adult, child, adolescent, etc.

The table below presents the level of detail that populations were specified, followed by a detailed summary of populations included in the studies reviewed.

Author/year	Population specificity	Populations included
Tolan 2013	Risk factors	Young people involved with or exhibiting behavioural risk indicators of juvenile delinquency
Eby 2008	Broad developmental	Child, adolescent, or young adult

Author/year	Population specificity	Populations included
	categories	
Thomas 2011	Demographics: age	aged 13 - 18
Wood 2012	Demographics: age, gender, family income, ethnicity	<ul style="list-style-type: none"> Mainly in middle school, with an average age of 11 years. Just over half of the participants in the review are female. Most participants were from low-income families; for example, in the two largest studies, 86% of participants (Bernstein et al., 2009) and 69% of participants (Herrera et al., 2007) were eligible for free or reduced school meals. Across trials, about 34% of participants were Black, 31% Hispanic, and 24% White.
Thomas 2013	Demographics: age	Young people aged 6 - 18, divided into children (6 - 12), and adolescents (13 - 18).
Abrams 2014	Risk factors	Juvenile, incarcerated youth, adolescent, youth offender
Lindsay 2018	Broad developmental categories; demographics: disability	Children or youth with disabilities
Raposa 2019	Demographics: age	Average age 12 (from 70 studies)
Christensen 2020	Demographics: age	Under 18
Plourde 2020	Demographics: gender, age	Boys aged 10+,
de los Reyes 2021	Demographics: ethnicity, age	Latinx youth with mean age <18
van Dam 2021	Risk factors	various risk factors: mental health, suicide ideation, delinquent youth, school dropout, foster care, first generation college, transition to college, out of home placement

One study noted that mentoring was less effective for young people with needs making them particularly ‘at risk’ as they required more intervention than mentoring can offer (Eby, 2008). Conversely, another study found that there mentoring could have stronger effect on higher risk young people, though those results were not consistent (Tolan 2013).

What are the common elements of effective mentoring practice?

Very few of the studies name specific elements of mentoring practice that were linked to effectiveness.

"most mentoring studies are not rigorously evaluated, do not test which are the core elements of mentoring, and do not assess how mentoring could meet the needs of mentees with different genders, social situations and cultures" (Thomas, 2013).

"there is not enough research to know which techniques or combinations of techniques are most effective" (Abrams, 2014).

Still, however, it was recognised in the evidence reviewed that there are elements of mentoring practice that can be linked to effective mentoring. Thomas (2011) cites DuBois (2002) in stating that programmes “*with four or more empirically-based best practices or six or more theory-based best practices as characteristics of effective mentoring.*”

The quality of relationship between the mentor and mentee was often cited as a contributing factor to positive outcomes (Eby, 2008; Wood, 2021; Raposa, 2019; Plourde, 2020). Wood (2012) citing Herrera, et al. (2007) found that improved mentor training, support, and resources were associated with both relationship quality and duration.

Detail, however, was not provided as to what constitutes ‘high quality’ in a mentoring relationship, beyond terms such as ‘caring’, ‘close’, or ‘trusting’.

One study found that part of effective mentoring for was appropriately matching a mentor and intervention aligned with young people’s needs.

“Programs that explicitly matched specific interventions to mentee's presenting problems are more effective than those exclusively focused on relationship-building and non-specific recreational activities.

High mentee stress exposure and pre-existing emotional and behavioural difficulties make implementation of non-specific mentoring models difficult. Relationship building cannot be replaced by rigid prescriptive approaches.” (Christensen, 2020)

MENTOR have identified a number of empirically based best practices for mentoring which are detailed in their publication Elements of Effective Practice for Mentoring™⁵⁵. Elements are grouped under six broad practice domains:

1. Recruitment
2. Screening
3. Training
4. Matching and initiation
5. Monitoring and support
6. Closure

Developing the shared practice model with the DPOs taking part in the study will involve agreeing which practice elements within each of these six areas are core to the model and which are flexible.

In order to articulate precisely what the constitutes quality within relationships, the Search Institute’s Developmental Relationships⁵⁶ framework provides a useful framing. This framework is based on empirical research and acknowledging that positive, developmental relationships are key for young people’s development. Actionable components are presented under these five elements:

- Express care: *Show me that I matter to you.*
- Challenge growth: *Push me to keep getting better.*
- Provide support: *Help me complete tasks and achieve goals.*
- Share power: *Treat me with respect and give me a say.*
- Expand possibilities: *Connect me with people and places that broaden my world.*

⁵⁵ [Garringer, et al. 2015. Elements of effective practice for mentoring. 4th Edition](#)

⁵⁶ [The Developmental Relationships Framework may be reproduced for educational, non-commercial uses only. Copyright ©2020 Search Institute, 3001 Broadway Street NE, Suite 310, Minneapolis MN 55413; 800-888-7828; www.search-institute.org. All rights reserved.](#)

Developmental relationships can, and should, exist across domains of young people’s lives. How an adult provides a young person with support outlined in the Developmental Relationships Framework will vary depending on the role that the adult has in the young person’s life, e.g. a teacher and a youth worker will provide support in different ways, and a parent different again.

The Developmental Relationships Framework fits closely with another of the Search Institute’s widely used frameworks: Developmental Assets⁵⁷. Developmental Assets are external assets that young people need in many areas of their lives in order to thrive. They are:

- Support
- Empowerment
- Boundaries and expectations
- Constructive use of time

Developmental Relationships can be thought of as the actions that individuals can take to support young people they have relationships with to thrive.

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Centre for Evidence and Implementation

Privacy Notice for the “YEF Multisite Trials - Phase 2” Project

1. Introduction

The purpose of this privacy notice is to explain what personal data we collect about you, how we use it, who we share it with, and what your legal rights are.

The Youth Endowment Found (“YEF”) has funded a team of researchers from the Centre for Evidence and Implementation (“CEI”), Bryson Purdon Social Research (“BPSR”), and Centre for Youth Impact (“CYI”, also known as YMCA George Williams College (“GWC”)) to conduct an evaluation of mentoring.

We are committed to protecting the privacy and security of your personal data collected as part of the project.

Please read this privacy notice carefully as it provides important information about how we handle your personal information and your rights. If you have any questions about any aspect of this privacy notice you can contact us using the information provided below or by emailing us at dpo@theevidencequarter.com quoting ‘YEF Multi-site Trials Project’ in the subject or body of the email.

2. Information about providing your data

- At the start of the project, you will be asked to fill in a consent form which provides consent for your information to be processed and explicitly states that your information will be shared with the research team as part of the ‘YEF Multisite Trials’.
- Your mentor will *not* share any details about your meetings, or what you talk about.
- Providing responses for this project is entirely voluntary and it is up to you if you wish to provide the information we ask for.
- Your answers will be put together with the answers from other people involved in the project and presented as anonymous findings and insights to YEF.
- Your answers to surveys will be kept confidential by the research team. Nobody will be able to identify you in any results that are published.

3. Personal data we collect

Your mentor will collect your personal details when you consent to take part in this study. This includes:

- Your name
- Your age
- Your gender
- Your email address
- Your phone number
- Your ethnicity
- Whether you have a disability
- Signatures of your parent/legal guardian
- Whether you have any Special Educational Needs
- Whether you are receiving Free School Meals
- Whether you have been on or are currently on a Care Protection Plan, Child in Need plan or have/had Child Looked After status
- Whether you receive any academic or emotional support
- An ID number associated to you within the survey platform that we create

- Answers you provide in recorded interviews and the transcription of the interview
- Information about yourself that you volunteer when we communicate with you
- Your route of referral for receive mentoring
- Selection criteria for participation is based on YEF’s “unmet needs” list

This information, excluding your name and contact details, will be shared securely with the research team who will use it for analysis. Your name will only be shared with us if you consent to taking part in an interview.

4. How we collect information about you

We will collect personal data in different ways throughout your mentoring. We refer to “primary data collection” when data is collected directly from you, and we refer to “secondary data collection” when the data is coming from your mentoring organisation.

- From yourself in an online/telephone interview or group session (primary data collection)
- From yourself via an online or paper survey we send you (primary data collection)
- From your mentoring organisation (secondary data collection)

5. Purposes for which we use personal data and the legal basis

When conducting the research study, we require a legal basis to process your personal data. The table provides information on why we are collecting each data type:

Purpose	Lawful Basis for Processing
To write a research findings report based on information gathered, accessed and analysed. No personal data will be in the report.	The lawful basis we will be relying on is the legitimate interest of the Data Controller.
To request your informed consent for participation as part of ethical practices (you do not have to participate in the Study and can withdraw at any time). Please note: should you withdraw your participation when the data is being analysed, we may not be able to remove your data from our analysis.	The lawful basis we will be relying on is the legitimate interest of the Data Controller.
To identify whether you have agreed to participate in each area of the research we have requested from you.	The lawful basis we will be relying on is the legitimate interest of the Data Controller.
To send you a survey so you can take part in the research study.	The lawful basis we will be relying on is the legitimate interest of the Data Controller.
For us to contact you to participate in an interview or focus group as part of the research.	The lawful basis we will be relying on is the legitimate interest of the Data Controller.

For us to contact you to participate in an interview or focus group as part of the research which will be recorded.	The lawful basis we will be relying on is the legitimate interest of the Data Controller.
For administrative data to be pseudonymised so data can be put into an archive database for it to inform further research and secondary studies for the betterment of society. (At this point the data could no longer be deleted.) NOTE: Interview data will not be put into an archive.	Archiving is for societal benefit and therefore processing is necessary for the performance of a task carried out in the public interest, also known as “public task”, under UK GDPR Article 6.1(e).

6. Sharing your data

It is unlikely that we will ever share your personal data outside the UK. If, however, it becomes necessary for the purposes of the research, we will only share it with organisations in countries where they oblige by the UK recognised standard of data protection.

If we work with other organisations, we will only share the minimum data necessary for the task required. All organisations are subject to pre-approved review to ensure your data is kept securely. This might include:

- Research partners
- Digital communications and storage providers
- Pre-approved transcription vendors
- Pre-approved online survey platform provider (managed by CYI)
- The Office for National Statistics (archive location)

At the end of the project, statistical, anonymous research data will be transferred to the YEF secure data archive hosted and stored by the ONS ‘Secure Research Service’. This means that it will not include your name. Access to any data stored within the archive is controlled by the ONS and YEF only. The duration of retention is indefinite. Further information on how the ONS SRS keep data secure can be found by following this [link](#).

There may be scenarios where we are legally obliged to share your personal data, such as with law enforcement agencies or public authorities, in order to prevent or detect crime. We will only ever share your personal data to the extent we are required by law.

We may also share your personal data if we choose to sell, transfer, or merge parts of our business and/or group, or our assets in the future. During any such process, we may share your data with other parties. Other parties must keep your data safe and private and only use your data in the same way as set out in this notice.

7. How long we keep your data

Your data will be reduced, de-identified and deleted at appropriate times so we retain the minimum amount possible throughout the research study. We will keep your personal data for at least 3 years after the project ends in case there is a requirement to address any issues or complaints with the project, or in case the project is commissioned to continue.

Transcription agencies (who transcribe recorded interviews into written word documents) are instructed to confirm deletion of your data within 7 days of completion.

We will never reuse or retain your data unless there is a legal reason for us to do so.

8. How we protect your data

We use secure technical and organisational measures to make sure your data is secure. Data protection assessments have been conducted for this study.

Your information is securely stored on a dedicated drive, and access is controlled by YEF's secure access policy for the duration of the research study period.

We will always keep these procedures under review to make sure that the measures we have implemented remain appropriate.

Your personal data is not subject to any automated decision-making.

9. Your rights and options

Your rights about how your data is used and stored are set out in the General Data Protection Regulation as it applies in the UK, tailored by the Data Protection Act 2018.

You have the following rights in respect of your personal data:

- to access your personal data and can request copies of it and information about our processing of it.
- to ask to change or add to your personal data if it is incorrect or incomplete
- to withdraw consent for the use of your personal data at any time
- to object to use using your personal information because it is in our legitimate interests to do so

Additionally:

- We never use your personal data for direct marketing purposes. If we did you can object to us doing so.
- You can ask us to restrict the use of your personal data if:
 - It is not accurate,
 - It has been used unlawfully but you do not want us to delete it,
 - We do not need it anymore, but you want us to keep it for use in legal claims, or
 - if you have already asked us to stop using your data but you are waiting to receive confirmation from us as to whether we can comply with your request.
- In some circumstances you can compel us to erase your personal data and request a machine-readable copy of your personal data to transfer to another service provider.
- You have the right not to be subject to a decision based solely on automated processing (including profiling) that produces legal effects concerning you or similarly significantly affects you.

You will not have to pay a fee to access your personal data (or to exercise any of the other rights).

However, we may charge a reasonable fee if your request for access is clearly unfounded or excessive. Alternatively, we may refuse to comply with the request in such circumstances.

If you wish to exercise your rights, please contact us at dpo@theevidencequarter.com with "YEF Multisite trials" in the email subject.

10. How to Complain

If you are not happy with the way your data is being handled, you can lodge a complaint with the Information Commissioner's Office. They can be contacted using the information provided at:

Information Commissioner's Office
Wycliffe House
Water Lane
Wilmslow
Cheshire

SK9 5AF

Helpline number: 0303 123 1113

ICO website: <https://ico.org.uk/concerns/>.

11. Contact us

If you have any questions, or wish to exercise any of your rights, then you can contact:

Project: YEF Multi-Site Trials

Organisation: Centre for Evidence and Implementation

Address: The Evidence Quarter, Albany House, Westminster, SW1H 9EA

Alternatively, you can email us at dpo@theevidencequarter.com

12. Changes to this privacy notice

We may update this notice (and any supplemental privacy notice), from time to time as shown below. We will notify you of the changes where required by applicable law to do so.

Last modified January 2023

Appendix L. NCS domains and individual items

Domain: self-confidence: leadership and communication

The next question is about how confident you feel about different areas of your life. How do you feel about the following things, even if you have never done them before...?

Scale: Very confident/confident/neither confident nor not confident/not very confident/not at all confident/don't know/prefer not to say

- Having a go at things that are new to me
- Speaking in public
- Meeting new people
- Working with others in a team
- Explaining ideas clearly
- Being the leader of a team
- Managing disagreement and conflict

Domain: problem-solving and decision-making skills

How much do you agree or disagree with the following statements?

Scale: Strongly agree/agree/neither agree nor disagree/disagree/strongly disagree/don't know/prefer not to say

- When solving a problem, I try to think of as many solutions as possible
- I usually make good decisions, even in difficult situations
- I think about the long term and short-term consequences when I work through problems
- I enjoy finding new ways to do things

Domain: teamwork and social skills building

How much do you agree or disagree with the following statements?

Scale: Strongly agree/agree/neither agree nor disagree/disagree/strongly disagree/don't know/prefer not to say

- I get along with other people easily
- I am able to see things from the other person's point of view
- I notice quickly if someone in a group is feeling awkward
- It is hard to say no to friends
- If I needed help, there are people who would be there for me

- I can usually tell when someone says one thing and means another

Domain: resilience and emotional regulation

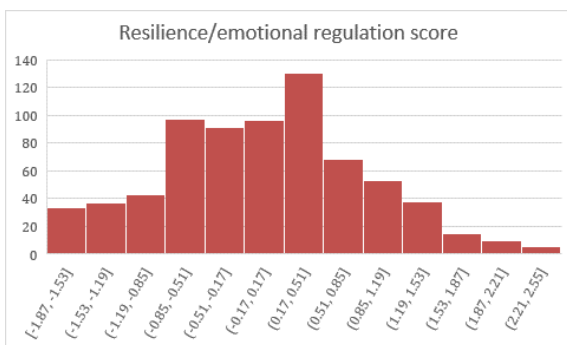
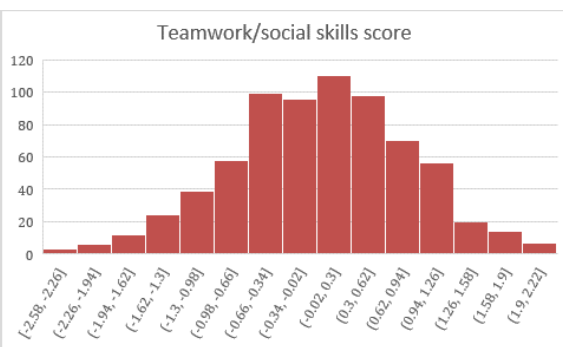
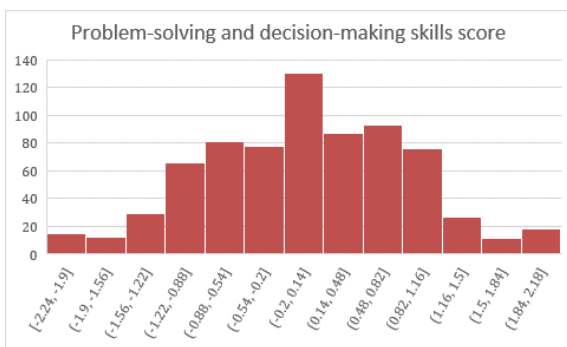
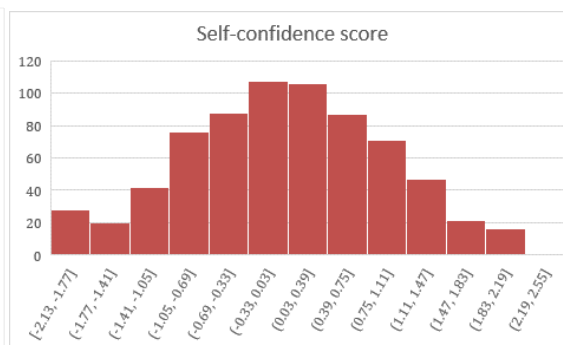
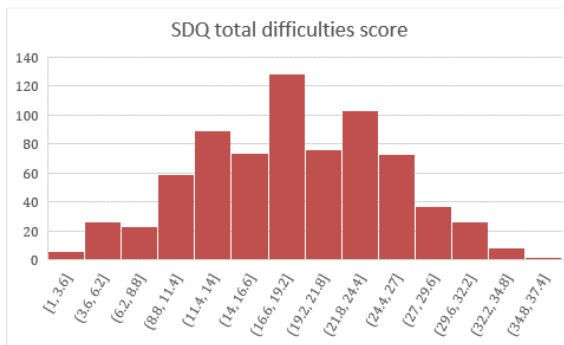
How much do you agree or disagree with the following statements?

Scale: Strongly agree/agree/neither agree nor disagree/disagree/strongly disagree/don't know/prefer not to say

- When things go wrong I usually get over it quickly
- Setbacks don't normally discourage me
- I can usually handle whatever comes my way
- When I am faced with a stressful situation I am able to stay calm

Appendix M: Further tables and graphs

Histograms of the primary and secondary outcomes at baseline



Appendix M table 1: Correlation between baseline and follow-up primary and secondary outcomes

Outcome	Pre-post correlation
SDQ Total Difficulties Score	0.558
Self-confidence score	0.598
Problem-solving and decision-making skills score	0.485
Teamwork/social skills score	0.366
Resilience/emotional regulation score	0.502

Appendix M table 2: Average pre-post change score by group

Outcome	Intervention group		Control group	
	Mean change score	p-value for test of zero mean change	Mean change score	p-value for test of zero mean change
SDQ Total Difficulties Score	-0.96	0.019	-1.12	0.001
Self-confidence score	0.17	0.002	-0.00	0.936
Problem-solving and decision-making skills score	0.15	0.007	-0.02	0.672
Teamwork/social skills score	0.10	0.090	-0.02	0.768
Resilience/emotional regulation score	0.23	<0.001	0.13	0.015

Appendix N: YEF Security Rating

Rating	Criteria for rating			Initial score	Adjust	Final score
	Design	MDES	Attrition			
5	Randomised design	<= 0.2	0-10%			
4	Design for comparison that considers some type of selection on unobservable characteristics (e.g. RDD, Diff-in-Diffs, Matched Diff-in-Diffs)	0.21 - 0.29	11-20%			
3	Design for comparison that considers selection on all relevant observable confounders (e.g. Matching or Regression Analysis with variables descriptive of the selection mechanism)	0.30 - 0.39	21-30%	3	Adjustment for threats to internal validity [-0]	3
2	Design for comparison that considers selection only on some relevant confounders	0.40 - 0.49	31-40%			
1	Design for comparison that does not consider selection on any relevant confounders	0.50 - 0.59	41-50%			
0	No comparator	>=0.6	>50%			

Threats to validity	Threat to internal validity?
Threat 1: Confounding	Low
Threat 2: Concurrent Interventions	Low
Threat 3: Experimental effects	Moderate
Threat 4: Implementation fidelity	Low
Threat 5: Missing Data	Low
Threat 6: Measurement of Outcomes	Low

Threat 7: Selective reporting	Low
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