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EVALUATION REPORT

Rugby Football League – Inspiring Futures Educate Mentoring Programme

Feasibility and pilot trial report

**Kevin Wong, Stephen Morris, Stephanie Wallace, Anton
Roberts, Paul Gray and Emily Burchell**



**Manchester
Metropolitan
University**



**YOUTH
ENDOWMENT
FUND**

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 activity.

And just as important is understanding children and young people's lives. Through our Youth Advisory Board and national network of peer researchers, we'll ensure they influence our work and 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](#).

For more information about the YEF or this report, please contact:

Youth Endowment Fund
C/O Impetus
10 Queen Street Place
London
EC4R 1AG

www.youthendowmentfund.org.uk

hello@youthendowmentfund.org.uk

Registered Charity Number: 1185413

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About the Evaluator

The Manchester Metropolitan University evaluation team has extensive experience and knowledge of designing and delivering evaluations of interventions that target young people at risk and/or involved in antisocial/criminal behaviour. Our methodological expertise embraces knowledge and practical expertise in both experimental and quasi-experimental impact evaluation and an unrivalled experience of working with large and complex administrative data sets both independently and within the Office for National Statistics (ONS) Secure Research Service (SRS). We also offer expertise and experience in the use of validated tools and the Police National Computer to measure intervention outcomes and the design of longitudinal surveys of young people. Our track record highlights a commitment to mixed methods programme evaluation, using the latest qualitative and quantitative techniques, rooted in the experience of service delivery in challenging environments.

Enquiries for the evaluation team should be addressed to: kevin.wong@mmu.ac.uk

The project

The Educate Mentoring Programme aims to improve children's wellbeing, resilience, social relationships and confidence while building their awareness of risky behaviours. In the long term, the programme hopes this leads to a reduction in offending and substance use and an increase in engagement in education. Delivered by the Rugby Football League (RFL) (in conjunction with RFL professional club Community Foundations across Leeds, Huddersfield, Warrington, St Helens, Hull, Wigan and Leigh), Educate Mentoring is a 12-week programme targeted at 11–14-year olds. Weekly mentoring sessions are offered, which focus on building core personal skills (such as communication and teamwork) and improving children's awareness of risky behaviours and positive choices. Topics covered include self-control, drug and alcohol awareness, healthy lifestyles, self-esteem and goal-setting for the future. Sessions, delivered by RFL club Foundation coaches, are typically provided in school, last two hours, and comprise a mentoring conversation followed by physical activity. Pupils also complete an accredited SLQ Young Leaders award as part of the intervention. 'At risk' young people are selected for Educate Mentoring by schools, which target children with poor behaviour and attendance and an interest in sport.

YEF funded a feasibility and pilot evaluation of Educate Mentoring. The feasibility study aimed to ascertain whether the programme could achieve its intended outputs for the intended target groups; explore the facilitators and barriers to delivery; detail how many mentoring sessions children received; and assess the quality, responsiveness, and reach of the programme. To explore these questions, the evaluators interviewed 17 pupils and 14 project staff and partners. Project delivery monitoring data on 218 programme participants was also analysed, alongside an online satisfaction survey with 82 children. The pilot study then aimed to assess the extent to which an efficacy randomised controlled trial of Educate Mentoring might be feasible, acquire detailed information that could inform the design of a future evaluation, and ascertain whether there was any preliminary evidence of promise. To explore these questions, the evaluator analysed demographic data and project delivery data relating to 111 pupils, administered surveys that included validated measures (the Strengths and Difficulties Questionnaire (SDQ) and Problem Behaviour Frequency Scale (PBFS)), and conducted interviews and focus groups with eight project staff, seven teachers, and 29 pupils. The pilot was delivered as a randomised controlled trial, with 10 schools and 111 pupils; schools recruited to the pilot were allocated to either receive the programme or to a waitlist control group. The evaluation ran from November 2019 to June 2022. Both the feasibility and pilot studies took place during the coronavirus pandemic, requiring both the delivery and evaluation teams to adapt to challenging circumstances.

Key conclusions

The feasibility study found that 218 young people received the programme across five areas. Mentoring was generally delivered as intended; the aims, structure, themes and session content corresponded to the intended design. No significant barriers to delivery were identified, and the challenges posed by COVID-19 were effectively surmounted.

Two-thirds of the participants captured in feasibility study monitoring data (116/177) received 12 or more sessions, thus completing the programme. Young people reported that the programme was engaging and addressed their expectations and needs. The lived experience of coaches, the relational nature of the programme and the novelty of the non-school activities featured in the intervention were perceived to support engagement.

In the pilot study, RFL recruited 10 schools (out of a target of 14). They did not meet the target, in part, because of a requirement to not recruit schools that had previously been involved in the programme, while COVID-19-related challenges and short time frames also hampered recruitment. The project team was able to explain the trial to schools; school staff understood randomisation; and RFL, schools and parents found the design acceptable.

Schools recruited an average of 11.6 pupils per school to the project in the pilot (slightly under the target of 12). 100% of pupils provided data at baseline. 78% provided data 5 months after randomisation. Due to a smaller sample size than anticipated, the evaluator was unable to assess whether there was evidence of promise.

In the pilot study, as in the feasibility phase, RFL reported no significant adaptations to the delivery of the programme. The programme's intended sessions were generally delivered, and in 4 out of 5 of the intervention schools, all pupils who commenced the programme were recorded as completing the sessions.

Interpretation

The feasibility study found that 218 young people received Educate Mentoring across five areas. The mentoring programme was generally delivered as intended; the aims, structure, themes and session content corresponded to the intended design. Some small adaptations were made to content to tailor it to the needs of particular schools. No significant barriers to delivery were identified, and the challenges posed by COVID-19 were effectively surmounted. Perhaps the most significant adaptation to Educate Mentoring was the delivery of sessions at school rather than at the local RFL stadium (as had initially been envisaged). However, in one area, sessions were still delivered at the stadium.

Two-thirds of the participants captured in the feasibility phase monitoring data (116/177) received 12 or more sessions, thus completing the programme. Just under a third (53/177) received more than 12 sessions, indicating that they were provided with further support by coaches. Young people reported that the programme was engaging and addressed their expectations and needs. Data from the feasibility study focus groups also indicated that a level of trust was built up between project staff and young people, while the participant survey suggested that young people liked the project, found it helpful, wanted to spend more time on it and got on well with coaches. The lived experience of coaches, the relational nature of the programme and the novelty of the non-school activities featured in the intervention were perceived to support engagement. It was unclear from the feasibility study monitoring data the extent to which the young people engaged were 'at risk'.

In the pilot study, RFL recruited 10 schools (out of a target of 14). They did not meet the target, in part, because of a requirement to not recruit schools that had previously been involved in the programme, while COVID-19-related challenges and short time frames also hampered recruitment. For instance, the staff in schools responsible for liaising with RFL clubs regarding the pilot may have been absent due to the pandemic, while there were a number of requirements needed from schools in a short time frame to join the project (including obtaining pupil and parent consent, signing off memorandums of understanding, collating pupil data and implementing a baseline survey). The project team was generally able to explain the trial to schools; school staff understood the process of randomisation; and RFL, schools and parents found the design acceptable. Schools recruited an average of 11.6 pupils per school to the project (slightly under the target of 12). All of the pupils (100%) provided data at baseline, and 78% provided data five months after randomisation. Due to a smaller sample size than anticipated, the evaluator was unable to assess whether there was evidence of promise.

In the pilot study, as in the feasibility phase, RFL reported no significant adaptations to the delivery of the programme. The programme's intended sessions were generally delivered, and in 4 out of five of the intervention schools, all pupils who commenced the programme were recorded as completing the sessions (in the fifth, 6/10 children completed the intervention). The small number of pupils interviewed reported being excited to participate in Educate Mentoring due to the programme involving sport and the link to the local RFL club; other reasons for engaging included the programme being a more attractive option compared to school lessons. Aspects of the sessions that pupils praised included the space that mentoring provided children to talk honestly about their behaviour and what had occurred in the previous week. Pupils also noted that having staff with similar experiences of school as they had served to both enhance pupil engagement and provide a positive role model.

Given the proliferation of sports-based programmes that aim to divert at-risk young people from criminal activity and the sizeable gaps in the evidence base relating to these programmes, the evaluator recommends that YEF considers funding an efficacy randomised controlled trial of the Educate Mentoring Programme. YEF is, therefore, exploring whether an impact evaluation is possible.

1. Introduction

1.1 Background

This report presents the methodology and findings for the evaluation of a school-based group mentoring programme devised and delivered by the Rugby Football League (RFL) in conjunction with RFL Community Foundations (attached to RFL clubs) for young people aged 11-14 across local authorities in the North of England. These local authorities included: Leeds, Huddersfield, Warrington, St Helens, Hull, Wigan and Leigh.

The mentoring programme, along with other interventions delivered by the RFL Community Foundations (see 1.3 and Figure 3.1 for more details), were commissioned by the Youth Endowment Fund to test out a sports-based approach to divert young people (aged 10-14) from committing crime.

The aims of the Educate Mentoring Programme are to:

- Build resilience, self-confidence and character in young people.
- Support positive choices and provide young people with the ability to engage positively with society.
- Improve critical thinking skills.
- Provide a healthy, stable and supportive framework at home and in school.

The design of the programme was based on an existing mentoring programme delivered by some of the local RFL Community Foundations (hereafter referred to as RFL Foundations), which were involved in the evaluation.

The mentoring programme was one of four programmes delivered by the RFL Foundations, which made up the package of programmes referred to as the Inspiring Futures programme detailed in the theory of change logic model in Figure 3.1.

In consultation with the RFL and YEF, it was agreed that the evaluation would focus on the mentoring programme, given that it was the most intensive and structured programme of the Inspiring Futures programme.

The evaluation comprised a feasibility study and a pilot randomised control trial (RCT). The methodology and findings for these two studies are reported separately in the sections below. Information presented in this section applies to both studies.

The principal purpose of the feasibility study is to answer the overarching research question:

Can the programme achieve its intended outputs for the intended target groups?

The purpose of the pilot RCT is to:

1. *Assess the extent to which an efficacy study evaluating the effectiveness of the RFL's programme, Educate Mentoring, might be feasible.*
2. *Acquire detailed information to inform the design of such an efficacy study.*
3. *Assess the programme for preliminary evidence of promise.*

1.2 Research literature

The central claim of RFL's Educate Mentoring Programme is that it will provide young people with the ability to make more positive choices and contribute more constructively to society by providing them with a comprehensive and supportive mentoring framework.

Youth mentoring is a concept that is poorly defined but widely used, as exactly what constitutes a mentoring relationship can be hard to define. Mentoring programmes may be formal or informal. They can be delivered face to face or virtually; they can be one-to-one or group-based. Some programmes are described as mentoring but really focus on befriending or one-off support (Armitage, Heyes & O'Leary, 2020, p. 6). In simplest terms, a mentoring programme typically has an established set of goals. In RFL's Educate Mentoring Programme, these goals are to utilise the social capital of the RFL Foundations staff and their association with the local RFL club to promote the self-esteem, teamwork, skills and wellbeing of young people at risk of committing crime. The building of rapport and a relationship is central to any form of youth mentoring. This is then utilised to provide a range of assistance from emotional/social support to advice and, in some cases, skills, e.g. employability training (McArthur, Wilson & Hunter, 2017). It is alleged that building a positive relationship between the mentor and the mentee facilitates an improvement in other social relationships. The literature also suggests that the mentors themselves can provide a vehicle for change through the presentation of themselves as positive role models with a variety of pro-social traits for the young person to emulate (Newburn & Shiner, 2006).

There is considerable literature around Giordano et al.'s (2002) 'hook for change' theory – that sources of inspiration can be provided for the person in question (in this case, young people at risk of offending) to enable them to choose to desist. While Giordano et al. did not apply this to sporting interventions, with the 1996 report on misspent youth (Audit Commission, 1996), there has been a sustained interest in sport within criminology more generally, arguing that sport-based interventions (SBIs) could be used as early interventions for young people and that they can provide a positive identity change and an alternative to an offending trajectory. Chamberlain's (2013) review of the effectiveness of SBIs in reducing rates of offending/re-offending found that many interventions were associated with reduced rates of crime and antisocial behaviour – provided that young people attended regularly. Such a programme of personal youth development can encourage the 'developmental assets' of a community, promoting positive development and skills within an individual, and not just a focus on potential 'deficits' (Lerner, 2004). Another SBI study by Armour et al. (2013) on youth/physical activity interventions in the UK (HSBC/OB project and the Sky Sports Living For Sport (SSLfS) programmes) tracked school pupils over a four-year period. This demonstrated sustained improvements (70%) three years after completion. As with many case studies, the young people themselves reported that the sport intervention provided opportunities for socialisation, the building of positive relationships and personal development.

On balance, however, one of the main evidential issues with SBIs is the nature of the data, which, while robustly collected, tends to be based on small sample sizes and utilise qualitative methods which rely on self-reported measures (Chamberlain, 2013). Wilson & Hoge (2013) conducted a meta-analysis on 73 studies of youth diversionary programmes and found a significant effect on reducing recidivism; however, other meta-analysis studies have reported conflicting results (see Gensheim et al., 1986). It is likely that for some youth at risk, any involvement with the criminal justice system would increase their rates of offending; therefore, any diversionary activity would have a positive desistance effect regardless of intervention type. Many of the authors also report there is huge variation in the study level variables, e.g. the research designs,

target groups – such as low and high-risk youth – and caution approaches. The complex needs of young people are also widely reported in the literature, e.g. substance abuse or childhood neglect, and it is likely that sports-based programmes will only ever be one element of a much larger criminological puzzle (Andrews & Andrew, 2003). There is considerable agreement that more longitudinal studies are required to unpick the processes at play in order to exclude the multitude of extraneous variables involved.

Historically, rugby as a sport had a reputation for being more violent and hyper-masculine than its contemporaries, such as football, although, arguably, it has undergone a dramatic professionalisation since the 1990s and has become a far more accessible and classless sport (Crowther, 2022). Although it is worth noting that while the sport has historically functioned as an escape for the working classes (Holt, 1992), Collins (2009) contrasts this to rugby union, which was considered a more middle- and upper-class game, predominately played in the South of England. While rugby league was traditionally considered a working-class game played predominately in the North of England.

Unfortunately, far more evidence exists for the efficacy of other sports, such as boxing and football, as a diversionary intervention for desistance (Jump, 2020). Exceptions are present, such as the case of the Dallaglio RugbyWorks programme, which is associated with rugby union. This rugby mentoring scheme had comparable aims and skills focus as the RFL programme (however, in this case, targeted young people enrolled in the pupil referral unit (PRU) system). They reported behavioural and educational improvements which correlated positively with young people's attendance in the programme (RugbyWorks Social Impact Report, 2017). Meek and Lewis (2014) argue that in the criminological context, programmes such as RFL provide a mechanism for the release of stress, negative emotion and aggression in a more positive and controlled environment, and rugby is unique in its offer of allowing for adolescent displays of masculinity. This is not without criticism, however, as Pollock (2014) warns that the catharsis argument, i.e. the assumed beneficial release of anger, can be problematic when applied to such a mentoring scheme – the mere expression of negative emotions does not remove the reasons for such frustration, i.e. structural poverty/deprivation and exposure to criminality. Rugby interventions akin to the Inspiring Futures programme can run the risk of just providing a means of pacification without providing a vehicle for real, lasting change.

The unique claim of the RFL mentoring programme – that a combination of association with a locally high-profile RFL club, sporting intervention and a school mentoring group programme can effectively divert youth from offending behaviours by providing a viable 'hook for change' – is understandably difficult to determine. As summarised by this review, there is considerable disagreement as to what the secret ingredient of change is in sports-based mentoring programmes, and it would be reasonable to state that the RFL programme occupies a relatively under-researched space in the literature. Part of the uniqueness of the Educate (group) Mentoring Programme's claim lies in its combination of rugby and general fitness, therapeutic practices and school interventions. In consideration of the literature, it is likely that the group-based mentoring programme will maximise its potential for impact by focussing on skill building, having a consistent programme and targeting the appropriate level of support to those with more complex needs (Lipsey, 2009).

1.3 Intervention

Educate Mentoring is a 12-week programme for young people recruited through schools. Each weekly session is built around small, achievable goals and objectives, which in themselves can be classified as short-, medium- and long-term goals. Examples of these include making improvements in social relationships and

wellbeing, reducing antisocial, risky and criminal behaviour and, ultimately, reducing participants' risk of re-offending.

Participants receive 12 group-based mentoring sessions delivered by the coaches from the local Rugby League Foundation (attached to the local rugby league football club), initially focussing on core personal skills such as trust, communication and teamwork before moving on to topics designed to improve their awareness of risky behaviours and encouraging more positive choices. This includes self-control, drug and alcohol awareness, healthy lifestyles, self-esteem and goal-setting for the future. These classroom-based activities are then followed by a sports session. The pupils also complete an accredited SLQ Young Leaders award as part of the project. The aim of this is to highlight the positive influence they can have over others, leading to greater self-awareness and improving their confidence and resilience. Where appropriate, the sessions consist of a blended approach of both theory and practical elements, enabling the messages and learnings to be reinforced within a sporting context.

The syllabus for the Educate Mentoring sessions is provided in Appendix 1, along with the intended session outcomes. Each session incorporates classroom-based activity with physical activity. The sessions are intended to be delivered flexibly by programme staff responding to the needs of the participants and issues identified by schools. During the feasibility study and the pilot trial, the programme was primarily delivered in schools, although in a few instances, it was delivered at the local rugby league stadium. The intervention was intended to be delivered at a Foundation setting away from the school. However, due to COVID-19, this often was not possible, and the intervention was instead largely delivered in school.

At the end of the 12-week programme, the coaches hold a celebration event to highlight the steps that each individual has taken during the sessions. Throughout the course of the project, Foundation coaches are asked to record significant events, changes and achievements displayed by the participants as part of their post-session evaluation and data capture. These can be referred to as the basis for the celebration event. This assumption is supported by the findings of focus group discussions and interviews conducted for the Rugby League Dividend Report, which, within its four main themes of social capital benefits of rugby league clubs, spotlighted the ability of the clubs, through their players, to provide aspiration and role models. Using this notion, it is anticipated that by assigning staff from the local professional club, Foundations can deliver the targeted interventions and provide additional time and support to the pupils – the influence of the club the staff represent and the esteem in which the club is held will amplify the impact of the project.

As set out in the theory of change logic model presented in Figure 3.1, the Educate Mentoring Programme was one intervention in a suite of four interventions delivered by the RFL Foundations as part of the funding received from the YEF for the collective programme known as Inspiring Futures. It was agreed between the evaluation team, the YEF and the developers that both the feasibility study and the pilot RCT would focus on the Educate Mentoring Programme. The reasons for this were:

- The Educate Mentoring Programme offered the most structured and intensive of the suite of four interventions which made up the Inspiring Futures programme.
- Referral criteria for the Educate Mentoring Programme could be applied in a systematic manner which would target young people who needed support.
- Recruitment and delivery were through schools and, therefore, allowed for pupil data to be collected.

- Because of the above three points, the Educate Mentoring Programme was most amenable to a pilot RCT.

1.4 Ethical review

The research team received ethical approval from the University's Arts and Humanities Committee for the research activities described in this report. This required the submission of a lengthy and detailed application for the feasibility study and a later and separate application for the pilot study. Both applications were subject to review by two independent (and anonymous) peer reviewers and scrutiny by the Arts and Humanities Head of Ethics. It is a requirement that no fieldwork/research is undertaken until ethical approval has been granted.

The ethical approval for the feasibility study was registered on the University's Ethos Ethics application and received approval on 12 December 2019. Due to COVID-19, an amendment to the original application and approval was made to extend the time frame of the study. Ethical approval for the extension was granted on 17 June 2020.

The ethical approval for the pilot RCT was registered on the University's Ethos Ethics application and received approval on 21 June 2021.

It should be noted that in compliance with the University's ethical processes for undertaking research, the research team were required to obtain consent from the young people and their carers for:

- The sharing of the programme participants' personal data and monitoring data with the research team for the evaluation and archiving by the YEF; and
- Undertaking a pre- and post-survey for the pilot study and the archiving of the results of the pre- and post-survey with the YEF.

This requirement for consent impacted the level of data that the research team were able to obtain for the pilot RCT, which is detailed in 7.3.

Details of participation in the pilot RCT by the schools and pupils and the consent processes are provided in the Memorandum of Understanding (MoU) in Appendix 2.

The pilot RCT was registered on the Open Science Framework on 23/11/2021. The trial registration DOI is <https://doi.org/10.17605/OSF.IO/32CW9>.

1.5 Data protection

A data-sharing agreement was established between MMU and the RFL as the lead agency for the Educate Mentoring Programme.

A full Data Protection Impact Assessment (DPIA) was undertaken for this evaluation by the research team supported by the university's Deputy Data Protection Officer and colleagues from Records Management and Information Security. It incorporated relevant elements from the YEF's DPIA, in particular, in relation to the YEF archive, where data from this pilot study will eventually be stored after the completion of the study. The MMU DPIA was signed off by a senior manager within the university – the designated Data Owner. This DPIA was shared with the YEF and the RFL. Summary details of the DPIA and the lawful basis for processing the data are presented in Appendix 3.

In accordance with the processes set out in the DPIA, the MMU research team will be the only persons with access to the data during and after the research period. While authorised personnel from the university might be given limited access to the data in the event of an audit of the research project, no third parties will have access to any of the data. As previously mentioned, all digital data will be stored on the university's Research Data Storage (RDS) system. All interview transcripts will be redacted and anonymised. No digital data will be stored on the personal computers of any of the research team. Any hard copies of documents will be stored in a locked filing cabinet in the PERU office at MMU.

1.6 Project team/stakeholders

Staff from the RFL were involved with the research team in:

- developing the theory of change logic model for the programme detailed in Figure 3.1;
- designing the personal and monitoring data collection template used for the feasibility study and the pilot RCT;
- the selection of individuals who were interviewed for the feasibility study and the pilot RCT;
- determining the wording and finalisation of the data-sharing agreement between MMU and the RFL; and
- determining the wording and finalisation of the MoU between MMU and schools that participated in the pilot RCT.

Staff from the local RFL Community Foundations across local authorities in the North of England delivered the Educate Mentoring Programme and other interventions commissioned by the YEF but not evaluated here. Additionally, they were involved with the research team in the selection of individuals who were interviewed for the feasibility study and the pilot RCT and liaised directly with schools in relation to the delivery of the pilot trial, including pupil recruitment, collation of pupil data and survey administration.

The MMU evaluation team and their roles are detailed below:

- Kevin Wong – Project Director
- Paul Gray – Project Manager/key liaison with RFL and validated survey tool lead
- Stephen Morris – Pilot RCT and quantitative data lead
- Stephanie Wallace – Pilot RCT researcher
- Jamie Crowther – Qualitative fieldwork researcher
- Anton Roberts – Monitoring data researcher
- Emily Burchell – Quantitative researcher

2. Feasibility Study

2.1 Overview

Research questions

The overarching research question for this feasibility study has been:

Can the programme achieve its intended outputs for the intended target groups?

It should be noted at this stage of the report that the challenges of programme delivery meant that there were limitations in the methodology employed and data collected. Within these limitations, the research team have sought to answer this question as fully and robustly as possible. Details of the limitations are set out in 3.3.

The overarching research question has been underpinned by the implementation and process evaluation (IPE) framework adapted from Humphrey et al. (2016). Initially developed by Durlak and DuPre (2008), it is based on a systematic assessment of programmes examining which dimensions of implementation are most crucial in terms of identifying problems and improving performance.

This report has, therefore, focussed on these dimensions as a framework for understanding and examining the implementation of the Educate Mentoring Programme.

The dimensions and related questions are:

1. Fidelity – how far was programme delivery consistent with design, identifying facilitators and barriers?
2. Dosage – the amount of a service received by the target young people.
3. Quality – how well were the services delivered, including how far did the services conform to regulatory or professional service standards/guidance?
4. Responsiveness – how well did the programme engage with the young people, and did they see it as addressing their needs?
5. Reach – to what extent did the targeted young people come into contact with the programme?
6. Service differentiation – to what extent was the programme genuinely new and innovative? Did it offer support in ways not previously available and to specific priority groups?
7. Adaptation – has the service diverged from its initial design? What is the nature of these adaptations and the reasons for them? Are they beneficial or detrimental?

In considering the implementation of the mentoring programme as captured in the theory of change logic model (see Figure 3.1), this IPE framework has guided the questions for the feasibility study, the data collected, and the analysis undertaken. The findings in Section 3 are grouped together and themed according to these seven dimensions. Where appropriate, given the level of data available, some themes have been grouped together, and the findings presented under these combined themes.

Success criteria and/or targets

A pilot RCT was commissioned at the same time as the feasibility study; therefore, success criteria for moving from a feasibility study to a pilot RCT did not apply to this evaluation.

It should be noted that delivery of the Educate Mentoring Programme as part of the overall Inspiring Futures programme was paused by the developer and RFL Foundations in 2020 due to the COVID-19 pandemic.

A launch round grant review was undertaken by the developers for the overall programme in conjunction with the YEF and the evaluation team in September 2020. This review determined that the overall programme (including Educate Mentoring) would be extended by six months to account for the programme delay and disruption arising from COVID-19.

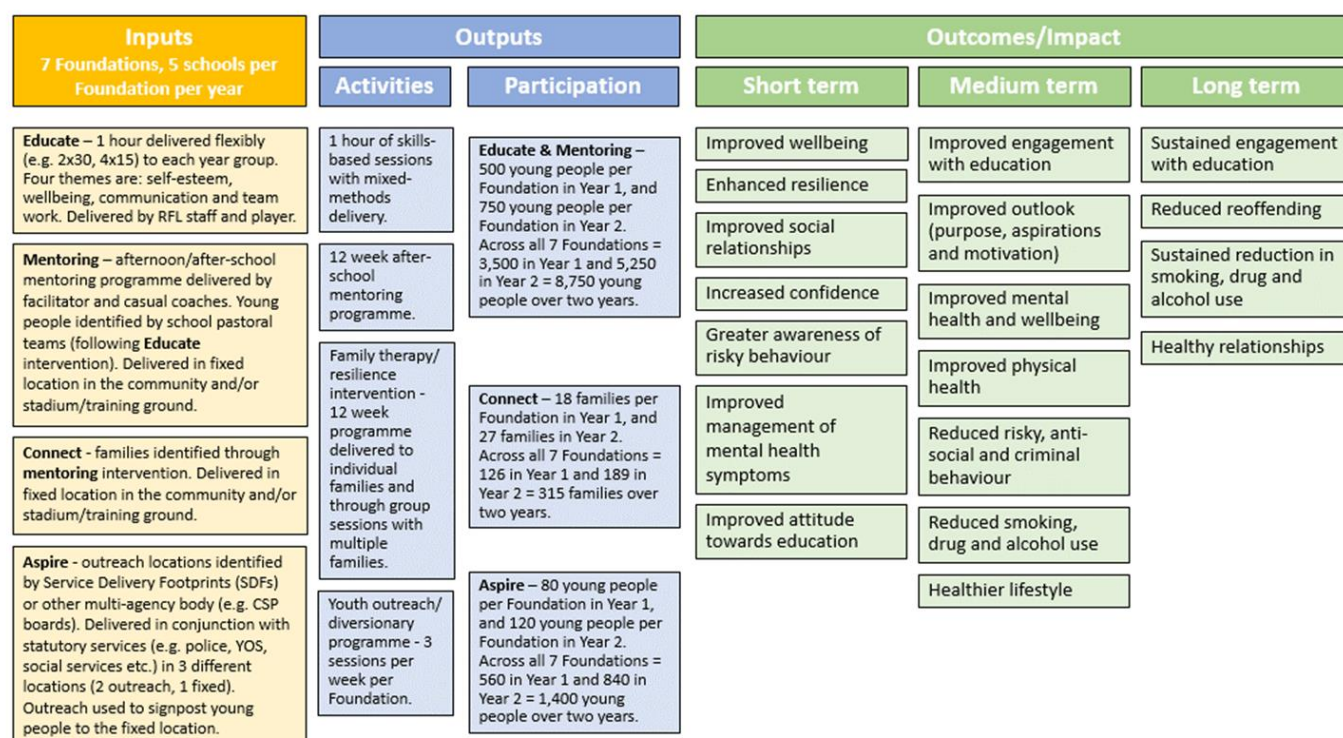
3. Methods – Feasibility Study

3.1 Theory of change/logic model development

This theory of change logic model (Figure 3.1) was developed by the research team, the RFL and RFL Foundations staff shortly after funding for the project and the evaluation was confirmed. The version presented below was the result of several iterations and was finalised in January 2020. In subsequent discussions with the project, including the project/evaluation review in September 2020, the impact of the COVID-19 pandemic on the delivery of the project was considered. However, discussions between the project and research teams concluded that the Theory of Change still applied. At this point, no delivery had been undertaken by the local RFL Foundations due to the pandemic.

In Figure 3.1 below, CYP refers to children and young people.

Figure 3.1 Educate Mentoring Programme incorporated as part of the overall Inspiring Futures programme – Theory of change logic model



3.2 Data collection – feasibility study

The research team completed the following activities summarised in Table 3.1 in relation to the Educate Mentoring Programme.

Table 3.1 Summary of data collection

Data collection method	Participants/data source	Data analysis methods	Research questions addressed
Qualitative interviews with project staff and partners; focus groups with programme participants	Mentoring programme participants n=17 across 3 focus groups Project staff and partners n=14	Thematic analysis related to the intervention implementation questions	Intervention implementation evaluation questions
Quantitative monitoring data on intervention take-up	Data on 218 mentoring programme participants recorded by the RFL Foundations using a data collection monitoring tool developed by the evaluation team in conjunction with developers	Descriptive analysis	Intervention implementation evaluation questions
Online satisfaction survey following completion of the programme	82 mentoring programme participants completed the survey tool	Descriptive analysis reporting response rates	Intervention implementation evaluation questions

Interviews and focus groups

Interviews were completed with 14 agency stakeholders, including project staff and partners (managers and frontline staff, i.e. the coaches delivering the mentoring programme and teachers)¹ – 13 were undertaken

¹ Given the small sample size, the individual agencies have not been named to preserve interviewee anonymity.

by telephone, and one was completed in person. All of the interviewees had experience with the programme: overseeing the programme, delivering the programme and/or facilitating the delivery of the programme. Interviews lasted between 45 minutes and an hour. All were recorded and transcribed.

Three focus groups were undertaken in person, with a total of 17 young people applying opportune sampling. The young people were attending the programme on the day and time when the focus groups took place. Focus groups lasted around an hour. All were recorded and transcribed. The interviews and focus groups were undertaken across three of the seven RFL Foundation areas. The three sites were sampled on the basis that, at the time when the fieldwork was undertaken (between April and June 2021), they were the most advanced in the implementation of the Educate Mentoring Programme.

The interview and focus group data were analysed thematically in relation to the seven dimensions of the IPE framework detailed in 2.1. Further detail on analysis is provided in 3.4.

The agency stakeholders were drawn from a purposive sample identified by the lead individuals from the three RFL Foundations. The young people participants were drawn from a purposive and opportune sampling of young people who were attending a group mentoring session on the date that the researcher attended.

Monitoring data

Monitoring data for 218 young people were collected by the project (using a template provided by the research team). Details of the data variables requested are provided in Appendix 5.

Monitoring data was received from five of the seven Foundation areas. Warrington did not deliver any mentoring interventions during 2021, and, therefore, they provided no monitoring data. While Hull did deliver mentoring interventions during 2021, no monitoring data was recorded.

Satisfaction surveys

Descriptive analysis was undertaken of satisfaction survey data completed using an online survey tool (developed by the research team) for 82 young people between 10/5/21 and 20/7/21.

The surveys were completed by young people from Huddersfield, Leigh, Leeds and St Helens at the end of their time with the project.

3.3 Interpreting the findings and limitations

In common with much evaluation research of similar projects undertaken by the research team, there were methodological limitations to this study which need to be understood when interpreting the findings. These are set out below. However, it is also important to note that both the delivery of the programme and the evaluation were undertaken during a period following the 2020 COVID-19 pandemic lockdowns, which, while relatively limited, may have affected the access and delivery of the programme, with a subsequent knock-on impact on the data collected through the evaluation. Local lockdowns may have affected the opening of schools during the period when the programme was run. This would have meant that some programmes, which were intended to run, did not. Additionally, coaching staff and teacher absence due to COVID-19, coupled with the requirement to test and isolate, may have also affected the running of programmes, with a consequent impact on the collection of data.

Interview and focus group data

The agency staff (project and partners) who were interviewed may not have represented the whole range of views amongst all these stakeholders. They were sampled from three of the seven RFL Foundations areas. These areas were most advanced in the implementation of the programme. They were chosen to enable data capture from interviewees who had received the greatest involvement in the delivery of the intervention.

For the same reasons, the young people who participated in the focus groups may not have represented the range of views of all the young people who were engaged with the mentoring programme across all the Foundation areas. They were sampled from the same three Foundation areas as the agency stakeholders with the intention of capturing the experiences of young people in areas where implementation was most advanced. The rationale for this was that their experiences were intended to be as close to 'business as usual' delivery of the programme rather than where programme delivery was still being refined. Given the challenges of recruiting and involving young people in research activities, it is likely that these focus group participants were more likely to be engaged with the local Foundation, had more exposure to their programme and, therefore, were more likely to view the service positively.

Monitoring data and survey data

These data sets represented some, but not all, of the young people who the project worked with. Therefore, the findings from these data sources may not fully represent the full range of young people's experience of the project.

In particular, in relation to the survey data, 82 young people completed the end-of-project survey. This is just over a third of the 218 young people for which five of the Foundation areas were able to provide monitoring data.

It should be noted that there were gaps in some of the monitoring data records for the 218 young people. These are described in Section 4, Findings – Feasibility Study.

3.4 Analysis – feasibility study

Qualitative data

Thematic analysis was used to identify, analyse and report patterns (themes) (Braun & Clarke, 2006). This was initially guided by the implementation evaluation questions set out above. The transcribed interview data was read and re-read several times. Pertinent data were grouped into themes provided by the dimensions of the implementation evaluation questions. Sub-themes from these grouped data emerged. The findings from the themes and sub-themes were then refined to ensure narrative cohesion in reporting.

The qualitative data findings were combined with the quantitative data findings to answer the seven IPE dimensions/questions set out in Section 1.

Quantitative data

The monitoring data collected by the Educate Mentoring Programme was analysed descriptively. The results of this analysis were considered in relation to the implementation evaluation questions. The quantitative

data findings were presented alongside the qualitative data findings to provide nuance and/or additional insight to answer the implementation evaluation questions.

The survey data provided by programme participants were analysed descriptively. The results of the analysis were primarily combined with qualitative data findings to provide insight into the experience of the young people who undertook the programme – responding to IPE dimension/Question 4 – ‘Responsiveness – how well did the programme engage with the young people and did they see it as addressing their needs?’ (See Section 4).

3.5 Timeline – feasibility study

Table 3.2 below sets out the timeline for the feasibility study.

Table 3.2 Timeline

Date	Activity
November 2019 to January 2020	Theory of change development
March 2021 to July 2021	Monitoring data collected for individuals who started with the programme between these dates
April 2021 to June 2021	Qualitative interviews with agency stakeholders and focus groups with young people participants
May 2021 to July 2021	Satisfaction survey completed by programme participants

4. Findings – Feasibility Study

The findings from the feasibility study are presented in this section in the following order. Demographic information about the programme participants (where available) is provided first. Each of the subsequent sections is then themed according to Humphrey et al.'s (2016) implementation evaluation framework (see 2.1): fidelity, dosage, quality, responsiveness, reach, service differentiation and adaptation. Where appropriate, these themes have been combined.

4.1 Participants

It should be noted that the demographic characteristics of the young people engaged in the Educate Mentoring Programme are provided here for context. Neither gender nor ethnicity was set out by the project as selection criteria for the programme. No data were provided to enable the age of participants to be identified.

Analysis of the monitoring data shows records for 218 young people, of which 15% (32 of 218) were female and the remaining 85% (186 of 218) were male.

Ethnicity was recorded for 118 (of 218) of the young people. As shown in Table 4.1, the majority, 73% (86 of 118), of young people were White. The second largest group of young people, just under a quarter (23% – 27 of 118), were recorded as a mixed ethnic group.

Table 4.1 Ethnicity of young people (n=118)

Ethnicity	Number of records	Percentage of records where ethnicity recorded
White	86	73.0
Mixed ethnic group	27	23.0
Black	2	2.0
Asian	1	1.0
Other	1	1.0
Ethnicity recorded as not known	1	1.0
Total	118	100.0

4.2 Intervention feasibility

Fidelity: How far is the programme delivery consistent with design – identifying facilitators and barriers?

Programme structure and delivery

Interviews with project staff who delivered the mentoring programme confirmed the overall purpose and aim of the mentoring programme:

“To build resilience within our young people. To engage them in school but also to try and engage them in activities outside of school. To support them with issues around antisocial behaviour, grooming, exploitation, risk-taking, risky behaviours.” (Project staff)

They also confirmed the intended structure of each session:

“Our sessions run an hour in the classroom and an hour of physical activity... The twelve-week course, based around that, involves physical activity and classroom-based activities all around certain subjects.” (Project staff)

And the ‘enabling choices’ ethos underpinning their programme delivery:

“I never tell anyone not to do anything, but I give them as much information as I can on what they’re doing, and hopefully they will then make the educated choices and the right choices.” (Project staff)

In relation to the number and type of sessions delivered, this is presented in Table 4.2 based on the monitoring data provided by five of the RFL Foundations areas. Nine of the 12 intended mentoring programme session themes/topics set out in Appendix 1 are represented in the table as shaded rows. The other 10 recorded in the monitoring data appear to be variants on some of these themes as well as bespoke sessions tailored to school/pupil needs. These latter sessions, such as ‘Knife Crime’ (16 sessions) and ‘Reducing Risky Behaviours’ (17 sessions), were understandably less numerous than intended sessions such as ‘Sports Leaders’ (361 sessions) and ‘Celebration’ (125 sessions). ‘Building Relationships’ (230 sessions), while not listed as an intended theme/topic (see Appendix 1), nevertheless was heavily featured, which suggests that, de facto, this was a core element of the programme.

Table 4.2 Type/content of mentoring sessions delivered by number and percentage

Type/content of mentoring session	Number	Percentage
Aspirational	53	2.3
Building Relationships	230	10.5
Celebration	125	5.7
Communication	19	0.9

Community Intervention	45	2.0
Drugs and Alcohol Awareness	169	7.7
Goal Setting for the Future	140	6.4
Healthy Lifestyles	155	7.2
Inspiration	188	8.5
Life Lessons	45	2.0
Mental Health	28	1.3
Mentoring	108	4.9
Reactionary (Weekly Hot Topic)	33	1.5
Reducing Knife Crime	16	0.7
Reducing Risky Behaviours	17	0.8
Self-control and Stress	156	7.1
Sports Leaders	361	16.4
Trust and Teamwork	178	8.1
Volunteering	131	6.0
Total	2200	100.0

Programme take-up

The mentoring programme was designed for up to a maximum of 12 pupils per programme. Due to COVID-19, project staff reported that, in some instances, fewer pupils were involved in the programme:

“We would normally start with between eight and twelve in a group but [due to COVID-19] at some point ... we only had five of them because they were all self-isolating.” (Project staff)

Programme attendance was also affected by the attitude and behaviour of the young people themselves, as observed:

“When you contact schools, you ask for 10–15 or 10–12 kids in a group, and then when you get there, you end up with six because [with] the nature of the kids that you’re working with, they’re not always consistent with their attending.” (Project staff)

In a similar vein, project staff reported that young people may be prevented from attending sessions due to their behaviour – they were ‘put into isolation’ or had been excluded by the school.

Project staff acknowledged that they were reliant on the schools to identify and refer young people to the programme, which affected take-up and attendance as illustrated by the following:

“Some schools will over-promise [young people] and then under-deliver with it. But then you’ve got the other side where some schools don’t engage, and then you struggle to hit the targets.” (Project staff)

In other instances, project staff reported that schools were willing and able to refer more than 12 pupils per programme. Despite this, project staff adhered to the maximum numbers, although the rationale for this was unclear for some staff:

“Because we’ve been told twelve kids, we’ve just taken the twelve kids.” (Project staff)

Aside from issues about the number of young people in the programme, it was recognised by project staff that there were challenges in ensuring that the right young people received the intervention.

In particular, ensuring that the young people who were referred to the mentoring programme from the schools would be receptive to the intervention and not be disruptive:

“They [the RFL] made it clear from the start that they didn’t want the schools just giving us twelve kids that don’t want to be in class, and they’d just disrupt everything. It [the RFL project] wasn’t a chance for them just to get rid of the kids for that half a day, a day, or whatever it was.” (Project staff)

Programme duration

Some project staff reported that COVID-19 had also been a barrier in relation to programme duration. In some instances, it had not been possible to run the complete mentoring programme over the 12 weeks as intended:

“The isolation and stuff like that, it has lost us a few weeks of working with the groups. ... But we’ve done our best with the time we’ve had.” (Project staff)

This appears to be confirmed by the monitoring data. The average duration of the involvement of young people with the project was 78 days, which equates to 11 weeks. The duration of young people’s involvement with the project ranged from two days to 170 days. The latter figure suggests that some programmes may have been delivered over a longer period than 12 weeks and also that additional sessions/activities outside of the mentoring programme were also delivered. This latter assumption appears to be confirmed by the data on the number of sessions which young people attended. Just under a third (53 of 177) received more than 12 sessions (see 3.3).

Post-programme follow-on support

Arguably, while outside the design of the mentoring programme itself, concerns were expressed by some project staff about the potential lack of follow-on support and/or interventions available to the young people after the mentoring programme ended:

“We know that it’s working well, and there’s been anecdotal evidence from a few of the schools that have said it’s work well, but when those 12 weeks finishes, what else is left after that?” (Project staff)

Drawing on the research team’s experience of evaluating similar programmes, the issue of follow-on support is a common issue for interventions of this type – addressed in other instances through signposting to other provisions and/or onward referral to other agencies.

Dosage: What is the level/amount of service received by target young people?

As shown in Figure 4.1, there was considerable variation in the number of sessions received by the 177 young people, ranging from just one session to 65 sessions, the average (mean) being 12 sessions.

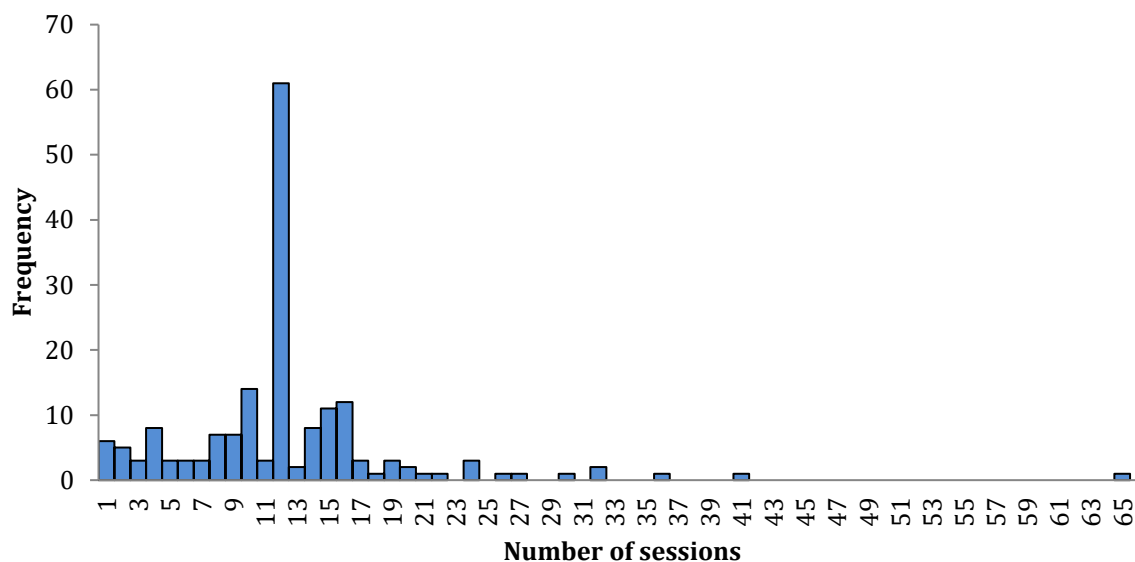
Approximately a third (61 of 177) of the young people received fewer than 12 sessions, while approximately a third (63 of 177) received 12 sessions, and just under a third (53 of 177) received more than 12 sessions.

Given that just under a third of the young people received more than the required 12 sessions for the programme suggests that, firstly, almost one in three young people required additional support, and secondly, that staff were able to provide the additional resource/time to meet the individualised requirements of those young people who needed a larger number of ‘doses’.

The records indicate that 125 young people completed the programme.² This suggests that just under a third (52 of 177) of young people did not complete the programme, which partially accords with the numbers of young people (61 of 177) who received fewer than 12 sessions, i.e. they did not complete the 12-week programme; although, as suggested above, some programmes may have lasted less than the 12 intended sessions. Additionally, as indicated in 4.2, some pupils may have been prevented from attending because they were excluded and/or were in isolation.

Figure 4.1 Frequency of sessions undertaken by the young people

² This is based on the number of sessions where the purpose was recorded as celebration. As advised by the project, celebration sessions marked the end of the programme.



Quality and responsiveness: How well are the services delivered? How well does the programme engage with the young people, and do they see it as addressing their needs?

Sharing practice

Interviews with project staff suggested that being able to share practice and learn from the other Foundations involved in delivering the Inspiring Futures programme had facilitated consistency of delivery across local areas:

“I think that's been the best thing ... with the other [RFL] Foundations. I think it would have been a lot harder if nobody spoke to each other and didn't like the idea of sharing stuff ... I think if they [the RFL] just let each Foundation basically go and do it themselves without talking ... you'd have completely different planning of programmes and delivery.” (Project staff)

Addressing the specific needs of schools and their pupils

As reported above, based on the monitoring data, the themes/content of the mentoring sessions appeared to be a mix of topics which the Foundations intended to run, such as ‘sports leaders’ and ‘celebration’, as well as bespoke sessions in response to requests from schools with topics such as ‘knife crime’.

School staff reported that the programmes run by the Foundations had been responsive to the specific needs/concerns of individual schools – notwithstanding the requirement to deliver similar programmes across schools and areas:

“The topics that they've covered this year have been quite generic to all schools, but they've [also] met with individual schools to look at specific problems in specific areas. So, the issues that we have here might be different to the issues that they have in a school eight miles down the road.” (School staff)

Confirming this tailoring of content, project staff reported that they adapted the content of their sessions at the request of schools. For example, providing additional content around knife crime in one school and, as illustrated below, at another school exploring issues around child criminal exploitation:

“They [the school] wanted us to look at child criminal exploitation and sexual assault because there's been some incidences in school. ... And then, we've had some weeks where something's happened in school with the group that we're working with, and the teacher has just said, 'Oh, this week can you touch on this subject?' so it's worked really well working with the schools.” (Project staff)

From the perspective of the schools receiving the mentoring programme, there was an appreciation of the responsiveness of project staff to their enquiries:

“The staff that were delivering it, their level of communication was really good. [They're] always in touch when they needed to be, always replying to emails if need be. That was a real strength.” (School staff)

Trust

Data from the focus groups with the young people indicated that a level of trust had been built up over the programme between the young people and the project staff. The young people also spoke about how they regarded the sessions as a space where they could seek advice on challenges they were facing:

“Say if something's happening in school, for example, you're getting bullied, you could come to these [RFL sessions] on a Thursday, and they'll tell you what you could do instead of going straight into a fight and maybe getting excluded or worse.” (Young person)

This trust (by young people) also extended to the other young people participating in the programme:

“I was actually excited because the people that was around me, they had good energy, and I felt safe around them, and I knew that they weren't going to be doing stuff that I didn't like, so I liked it [the RFL project].” (Young person)

User-led delivery

The project staff interview data and young people focus group indicated that the project staff aimed to be responsive to the needs of the young people. This appeared to be manifested in two ways.

Firstly, directly in response to how and what the young people presented to the staff during the sessions, including diverting from the intended session plan:

“Everything's planned [in advance], but I'm led by the group, really. If, for example, I'll have a group chat in the morning with them, that's planned normally to last 15-20 minutes. If that lasts for an hour because I'm getting a lot of good conversation or they're willing to talk about stuff, I'll let it last for an hour, simply because I'm letting them lead that session a little bit.” (Project staff)

This same interviewee saw this as a means of better understanding the young people and information exchange, encouraging the young people to talk about their behaviour.

As illustrated below, the flexing of the programme and session content in response to the young people appeared to contradict the indications of programme consistency reported earlier:

“Although we have a structured programme, it really depends on the group as to what we may or may not deliver. We have key workshops that we can include but may not include depending on the group ... Sessions such as the drug and alcohol element may be included, maybe not, depending on whether we feel that it's needed.” (Project staff)

However, for this same interviewee, this appeared to fit with the “loose structure” of the programme and its “overall ethos”. This point was echoed by other project workers who felt that the programmes were interactive and, critically, were led by the young people themselves:

“We’re not just stood at the front talking to them for an hour; it’s all interactive. They’re always leading discussions; they’re always taking part in certain games or content that we’re doing. It’s all really led by them.” (Project staff)

Young people feedback

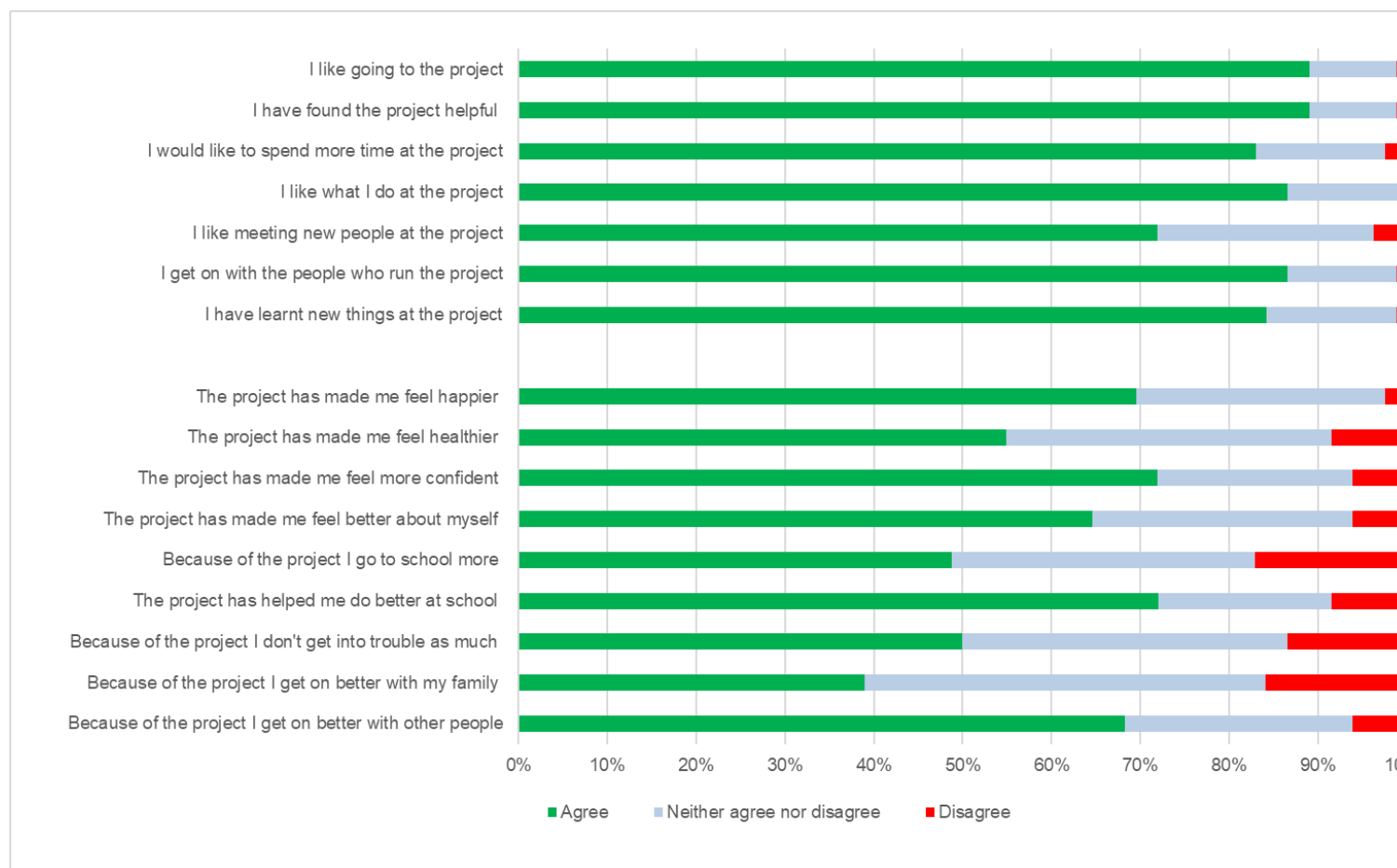
Figure 4.2 provides feedback from a satisfaction survey completed by some of the young people (n=87) at the end of their time with the project. It should be emphasised that these results should be treated with caution and should not be cited as evidence of impact. That said, in broad terms, they provide some assessment from the sample of young people that the mentoring programmes were positive experiences for them.

The majority of respondents (over 80%) liked going to the project, found it helpful, wanted to spend more time with the project and liked what they did at the project. Similarly, the majority (over 80%) got on with the people who ran the project and confirmed that they had learnt new things.

The survey asked the respondents to rate any change that had occurred as a result of being involved with the project. Around seven out of 10 respondents reported that the project had made them more confident and had helped them do better at school. Just over six out of 10 respondents reported that the project had made them feel better about themselves, and because of the project, they got on better with other people. Just under half reported that they went to school more and, because of the project, did not get into trouble as much.

It should be noted that these results are not intended to quantitatively evidence impact. Nevertheless, they tentatively suggest that for the young people surveyed, the mentoring programme appears to be meeting the short- and medium-term outcomes – as set out in the theory of change (see Figure 3.1).

Figure 4.2. Young people feedback



Reach: The extent to which targeted young people come into contact with the programme.

It was unclear from the analysis of the monitoring data the extent to which the young people engaged in the mentoring programme were 'at risk'. This, in part, reflects the limitation of data capture in being able to assess being at risk based on the proxy indicators below and the extent to which these variables were recorded in the monitoring data.

As a means of focussing their resources on young people who were likely to be at risk, the RFL Foundations prioritised working with schools in areas which served communities which had high rankings according to the English Indices of Deprivation.³

The two variables captured through the monitoring data as proxy indicators of risk for the individual young people were the following:

- exclusion from school; and
- living with one or more parents/guardians – where living in a single-parent household is a proxy indicator of risk.

As stated, these variables have been used as proxy indicators of being at risk; therefore, caution is advised in interpreting these as being definitive indicators of risk. At most, they are suggestive of potential risk.

Additionally, it should be noted that these proxy indicators were not being used by the Foundations as inclusion criteria for recruitment and involvement in their mentoring programmes.

Of the 218 young people attending the programme, 25 were recorded as having been excluded from school (five were female, and 20 were male). This suggests that 11% (25 of 218) of the young people in the data set had been excluded from school. It should be noted that it is unclear the extent to which all data variables were recorded for each young person. Absence of data may be an indication that the young person was excluded, or it could be an indicator of data not recorded.

Of the 218 young people, records (where provided) of their family arrangements are presented for females and males in Tables 4.3 and 4.4, respectively. For the female young people, 27 records were provided for the 32 females in the overall data set. This shows that half of the females (14 of 27) lived in single-parent households. For the males, 148 records were provided for the 186 males in the overall data set. This showed that just under half (64 of 148 records) lived in single-parent households.

Table 4.3 Family arrangements for females

Family arrangement – living with	Number	Percentage
1 parent	14	52

³ These are based on the domains of: Income; Employment; Health Deprivation and Disability; Education, Skills Training – Crime, Barriers to Housing and Services; and Living Environment. (Ministry of Housing, Communities and Local Government 2019).

2 parents	9	33
Carer	3	11
Other	1	4
Total	27	100

Table 4.4 Family arrangements for males

Family arrangement – living with	Number	Percentage
1 parent	64	43
2 parents	49	33
Carer	3	2
Not known	31	21
Other	1	1
Total	148	100

Interview data from the project staff reinforced the requirement for the mentoring programme to be delivered to no more than 12 young people at any one time – confirmed in 3.2. At a session level, it allowed for each individual young person to receive appropriate attention as illustrated:

“I always put a cap on it [the group size] because I’ve worked with bigger groups before, and it doesn’t work because you do get a bit of a mob mentality when there’s more of them. Also, you don’t get round to knowing everyone properly ... you don’t get a chance to speak to them all ... I always say between eight and ten. I think it’s a bit more manageable, and you can get to know everyone, even the weaker characters in the group, or the shy ones, or the less confident ones.” (Project staff)

While the intended target group for the mentoring programme was described by project staff as young people at risk of or involved in crime, the young people focus group data suggested that some felt privileged rather than stigmatised by being selected to be involved in the programme:

“It felt special [to do the RFL project] because some other people [in school] didn’t do it because you couldn’t get the whole year group to come and do it, so to get chosen to do that was a nice opportunity for me.” (Young person)

Interview data from some school staff suggested that at their request, some groups may have included pupils who were at risk and others who were not at risk:

“Initially, [name of the RFL foundation] wanted us to pick purely a cohort of sort of disengaged children that can have quite challenging behaviours. And we said that that wasn’t what we wanted to do. We do want those children involved, but they need to be around other children who are good role models because otherwise, you just create a den of iniquity, and you are going to have problems.”
(School staff)

The mixing within mentoring programme cohorts clearly had the potential to reduce the number of at-risk young people involved across the programme. However, data was not available within the monitoring data set to assess the extent of this. As suggested in the above account, there appeared to be a trade-off between maximising the provision of the programme to at-risk young people and programme efficacy – in the view of school staff – that the programme would be more effective with a mixed group of pupils.

Service differentiation: The extent to which the programme is genuinely new and innovative – does it offer support in ways not previously available and to specific priority groups?

A hook to engage young people

There was an acknowledgement by project staff that rugby was being used as a means to engage the targeted young people in a way that other sports are similarly deployed. However, the vehicle for delivery, i.e. through the Community Foundations attached to local RFL teams and the deployment of rugby players, was regarded by staff as providing an additional point of engagement with young people:

“Give them any sport, whether it be rugby, football, whatever, give them any sort of sport, and it gives you that foot in the door. It gives you a reason to start talking to them. It truly is an engagement tool and an engagement vehicle. Then if you put on top of that a club badge, whatever that club badge be, plus potentially players or ex-players, it just builds up a layer of actually being able to converse with them.” (Project staff)

The significance of the RFL ‘brand’ in engaging the attention of the target young people was confirmed by school staff:

“We always underplay how impactful the [RFL] brand can be within the school. When the [name of RFL] come in, there’s always a buzz.” (Project staff)

The role of lived experience in engagement

One of the intended critical elements of the mentoring programme was the deployment of coaches and rugby league players whose life experiences potentially matched those of the at-risk young people targeted for the intervention, i.e. that they had been involved in crime when they were young but had moved on from that and were now players or coaches. This sharing of their life histories was deployed both as a means of engaging with young people as well as enhancing the credibility of the messages and learning what the programme was intended to impart:

“I use my own experiences because I wasn’t the best lad at school. ... I was arrested 30-odd times, you know, so I just talk about different pathways. ... There’s that many jobs out there that if you want to do something, there’s no one telling you can’t. So, I just try to instil that self-belief in them.” (Project staff)

“We had two players [come in] as well. ... [One of them] has been through a lot; he was a naughty kid at school ... he’s come from a rough background. ... So, the two players weren’t just talking to them, they were like, ‘We’ve been where you are, we’ve lived those experiences’, so the kids could relate to the players. ... It gave them something to look to and look up towards.” (Project staff)

Interview data from school staff and focus group data from the young people also confirmed the deployment of such individuals and the intended connection between these players and the young people:

“We’ve had an ex-player as well [come in] who probably would fit into this group of kids when he was at school himself. That has probably helped.” (School staff)

“We had some players, and they told us what kind of backgrounds they’ve come from and how they’ve grown up to become a rugby player.” (Young person)

Novelty and reward of non-school activity

The incorporation of physical activity was regarded by project and school staff as a critical element of the mentoring programme. Project staff spoke about how the project was designed to address the needs of the targeted young people – in particular, their lack of success at school – and, in doing so, appeared to facilitate engagement and programme take-up:

“The students we’ve got [on the project] are not thriving in a school environment. ... So we’ve tried to make it that we do an hour in the classroom, and then we go outside and do some physical activity. And we’ve noticed that numbers have increased because of having that physical activity thing there.” (Project staff)

Additionally, as acknowledged by school staff, young people’s engagement with the programme was enabled because the programme activities were regarded as being enjoyable and because they were demonstrably out-of-school activities:

“I think they just enjoy being out of school for one, but also doing fun activities, and [having] the classroom activities being different to what they would be in a school. So [they’re] still very much engaged in what they should be doing, and still doing some learning, but just doing something a bit different, something a bit fun. It has been a massive plus for them.” (School staff)

While not replicated across all the Foundations, interview data indicated that in at least one area, the young people undertook activities at the RFL stadium, further enhancing the novelty and attractiveness of the intervention for the young people.

It was reported by project staff that the physical activity elements were organised as a reward for the young people engaging in the classroom-based activities:

“The [classroom-based] content of the course [is in the morning], and the sporting activity is in the afternoon. That’s the reward. If they do well in the morning and they engage with the session, then they’re going to get rewarded in the afternoon by playing potentially football or going boxing, a bit of Jujitsu or golf.” (Project staff)

Relational nature of the programme

Consistent with other programmes/interventions that rely on establishing relationships between staff and young people, having the right person with the right approach and experience to deliver the mentoring programme was identified as crucial by both staff and young people:

“They’re funny, they’ve got a good personality and they’re patient, because sometimes some of us work slow and they don’t really get angry at us, they help us ... they’re understanding.” (Young person)

“He [the RFL coach] has got a really good way of working with hard-to-reach young kids. He’s done a lot of work previously in primary and secondary schools with those kinds of groups, and he’s just got a very nice way about him. I think that’s the biggest strength of the programme, having the right character delivering it.” (School staff)

As observed by school staff, a further critical element of the relational nature of the programme was staff continuity – the young people saw the same RFL person each week. The fact that the programme ran for several weeks was also identified as important. This appeared to contrast with other school interventions provided by external agencies, which, as the account below suggests, tend to be one-off, single-occasion interventions:

“It’s very unique because I feel like when you are doing other interventions, you’re basically getting different people from all aspects or risk [come into school]. You’re not building those relationships. You get to see them once when they speak to you, but with this [the RFL project], you’re getting the same person week in, week out. ... The students have actually built up a relationship with [the coach], so I feel like they’re listening to her much more than they would with a person that they’ve just met once.” (School staff)

As reported by school staff, this continuity of delivery – by the same RFL staff – appeared to also combine with an affective genuine commitment from the project staff to the young people:

“The staff that were delivering it [the RFL project] were so invested in the kids as individuals. ... They knew so much about the students, and they were really rooting for them. It was really genuine, and that was lovely for the kids to know as well that somebody was so interested in them and helping to support them really coming on and making progress. I loved that; it was really good.” (School staff)

Adaptation: The extent to which the service has diverged from its initial design. What is the nature of these adaptations and reasons for them? Are they beneficial or detrimental?

Responding to COVID-19

Interview data from project staff and school staff indicated that project staff had adapted the mentoring programme to restrictions arising from the COVID-19 pandemic. For example, in one site, shifting the delivery from the intended location – the local stadium – to the school, as illustrated:

“We have a classroom ... or an education base–building, and a stadium. The guys [young people] were supposed to be coming to us, so they were going to get picked up in our minibus and brought back here to take them out of that school environment. But because of Covid and the bubble system ... we’ve had to go and deliver in schools.” (Project staff)

Guest input

In relation to the content of the mentoring programme, some project staff reported that they had made changes to the delivery of certain sessions, inviting guest speakers to provide input to meet two purposes. Firstly, to introduce variety – i.e. other people providing input in addition to the project staff – and secondly, to add greater credibility, for example, to the messages being delivered on drugs and alcohol by deploying a charity specialising in addressing drug and alcohol problems:

“We changed a few things. Like we added in guest speakers coming in because certain things, like drugs and alcohol, the children wouldn’t necessarily have taken what I said into account. So [instead] we got a charity in to help us deliver that, so they were hearing it from someone else. It wasn’t always my voice talking.” (Project staff)

Responding to school requests

As detailed earlier, the coaches responded to requests from schools to include content to address issues which had arisen at schools, such as knife crime.

5. Conclusion – Feasibility Study

This report has focussed on the Educate Mentoring Programmes delivered by RFL Foundations in the North of England as part of the RFL’s Inspiring Futures programme. As detailed in 3.3, while programme delivery occurred across six of the seven intended foundations, programme data were only available from five of these foundations; survey data from four foundations; and interview and focus group participants were purposively sampled from three foundations.

The conclusions set out in this section need to be read and understood against the context of the limitations of the research methodology set out in 3.3. Principally, the findings are derived from a limited sample of monitoring data records, small interview samples of agency stakeholders and young people participants, and a limited sample of participant survey respondents, all of which limited range and diversity. Therefore, there are substantial limitations to the generalisability of the findings.

The Educate Mentoring Programme has generally been implemented as intended, although delivery has been adapted to adjust to the effects of the COVID-19 pandemic. It should be noted that the programme was not delivered in 2020 when the lockdowns, including school closures, occurred.

The programme has been well received by the young people that the project engaged with.

Can the programme achieve its intended outputs for the intended target groups?

As set out in the theory of change logic model (see Figure 3.1), the projected numbers of pupils undertaking the Educate Mentoring Programme were bundled together with the estimated numbers attending the Educate Assembly sessions; therefore, no specific estimates for the mentoring programme itself were identified. Therefore, it has not been possible to directly answer this question.

The programme data shows that 218 young people were involved in the programme across five sites. Based on the intended number of young people per programme – 12 participants – this suggests that 18 to 19 mentoring programmes were run across five Foundation areas. These recruitment numbers suggested that it may be feasible to achieve the sample size specified for the pilot RCT set out in Section 6.

The extent to which the programme as delivered addressed the dimensions of the implementation evaluation (IPE) framework adapted from Humphrey et al. (2016)⁴ is summarised in Table 5.1.

Table 5.1 Summary of feasibility study findings

Can the programme achieve its intended outputs for the intended target groups?	Programme data shows that 218 young people were involved in the programme across five sites (local authority areas). Based on the intended number of young people per programme – 12 participants – this suggests that 18 to 19

⁴ Humphrey, N., Lendrum, A., Ashworth, E., Frearson, K., Buck, R., & Kerr, K. (2016). Implementation and process evaluation (IPE) for interventions in educational settings: A synthesis of the literature. London: Education Endowment Foundation.

	mentoring programmes were run across five Foundation areas.
Fidelity – To what extent was programme delivery consistent with design – identifying facilitators and barriers?	<p>The mentoring programme was generally delivered as intended; the aim, overall purpose and structure of the sessions were as prescribed in part. The themes/content of sessions, as recorded by five of the Foundations, generally corresponded to some of the intended themes/contents of the programme. The session data (in the diversity of activity recorded) also suggested flexibility to respond to identified needs of the young people and/or schools.</p> <p>No significant barriers to the delivery of the mentoring programme were identified. The findings suggest that challenges posed by the COVID-19 pandemic were surmounted.</p>
Dosage – How much of the service was received by the target young people?	<p>Monitoring data was not available for all of the 218 young people who received the programme.</p> <p>Based on the records available, approximately two-thirds of young people (116 of 177) recorded in the monitoring data received 12 or more sessions, which suggests that these young people completed the 12-week mentoring programme. This was also confirmed by the 125 sessions recorded as Celebration – which marked the end of the programme.</p> <p>Just under a third of young people (53 of 177) received more than 12 sessions, which suggests that they presented with additional needs which were addressed through further engagement by project staff.</p>
Quality – How well was the service delivered, including how far did it conform to regulatory or professional service standards/guidance?	<p>The mentoring programme was generally delivered according to the prescribed programme based on theme/content.</p> <p>The findings from school staff and young people suggest that the mentoring programme met their requirements.</p>
Responsiveness – How well did the programme engage with the young people, and did they see it as addressing their needs?	Findings from the feedback survey and focus group data suggest that young people found the programme engaging and generally addressed their expectations/needs.
Reach – The extent to which the targeted young people came into contact with the programme.	The qualitative findings appear to confirm that some of the targeted young people – i.e. those at risk – were engaged in the programmes run by the Foundations. However, it has not been possible to unequivocally confirm this through the monitoring data. In part, this is due to a reliance on proxy indicators (and related data) for factors which are linked to young people being at risk, school exclusion and family circumstances and the gaps in these records.
Service differentiation – To what extent was the programme genuinely new and innovative? Did it offer	The mentoring programme delivered by the Foundations was developed from similar interventions which had been

support in ways not previously available and to specific priority groups?	<p>previously delivered in some form by the Foundations prior to YEF funding of the programme.</p> <p>Features of the service which were identified as contributing to the engagement of the young people included being delivered by project staff with lived experience which matched those of the at-risk young people; linked to this, the relational nature of the programme and the novelty of the programme featuring non-school activity.</p>
Adaptation – Did the service diverge from its initial design? What was the nature of these adaptations and reasons for them? Were they beneficial or detrimental?	<p>Generally, the mentoring programme, as prescribed, was delivered without significant adaptation. Perhaps the most significant adaptation reported was holding the sessions at school rather than at the local RFL stadium. Although in one area, some sessions were held at the stadium.</p>

5.1 Implications for pilot study

Referral criteria

The findings indicate that a clearer articulation and specificity for the referral/inclusion criteria into the programme are required to test out the mentoring programme through the pilot RCT and to enable scalability of the intervention.

This was addressed through consultation and discussion between RFL and the research team in preparation for the pilot RCT.

Data gaps

As reported in the methodology and findings, there were gaps in the monitoring data. The research team provided feedback to the RFL on the nature and prevalence of the data gaps across the Foundation areas to ensure that a more comprehensive data set was recorded for the pilot RCT.

6. Pilot Trial

6.1 Research aims and objectives

The aim of this pilot study is to:

- Assess the extent to which an efficacy study evaluating the effectiveness of the RFL's programme *Educate Mentoring* might be feasible.
- To acquire detailed information to inform the design of such an efficacy study.
- Assess the programme for preliminary evidence of promise.

To meet the aims of this pilot study, a programme of mixed methods research has been carried out to address a number of research questions. These research questions fall under four broad headings:

- 1) trial implementation questions;
- 2) trial statistical design questions;
- 3) evidence of promise; and
- 4) intervention implementation questions.

It is important to note, at the outset, that due to a lower achieved sample size than anticipated, the approach of assessing “evidence of promise” as described in the study protocol has not been carried out. In short, the analysis envisaged was felt, on seeing the data, to be uninformative due to the smaller-than-anticipated achieved sample size. A full discussion of the changes made to the analysis and the justification for the decisions made are given below.

Before outlining the questions above in detail, we first discuss the assumptions that form the basis for this pilot study and which ones underpin the choice of questions. These assumptions draw on findings from the feasibility assessment of the intervention discussed above. These starting assumptions are as follows:

- The intervention will be delivered through schools, i.e. participants will be pupils recruited through schools, and the intervention will be delivered at schools.
- It will target pupils that meet specified inclusion criteria discussed further below.
- RFL Foundations staff will work with schools to recruit 12 students per school from Years 8 and 9 (aged 12–14) who meet their referral criteria.
- The trial under consideration is a cluster or group randomised trial; thus, randomisation takes place at the level of the school.
- The effects of the intervention will be measured at the level of the student – thus, the study sample is nested or multi-level, consisting of students grouped or clustered within schools.

The justification for a group or cluster randomised controlled trial design (cRCT) is that evidence from the feasibility work suggests that schools form a promising channel through which to recruit and work with young people, particularly in the case of sports-based interventions, such as that studied in this pilot trial.

Where interventions are delivered to pupils in school settings, however, concerns emerge around the potential for interference between pupils. Pupils within schools will likely share similar characteristics, geographies and experiences and, therefore, cannot be considered statistically independent of one another. To statistically control for this problem (the lack of independence between pupils in the same school settings), it is common practice to randomise whole schools to an intervention or control group. In the case of this pilot, the randomisation of whole schools has been chosen as the most useful approach. In this way, the pilot trial is designed to provide information that can be used to design an efficacy cRCT of RFL's Educate Mentoring. Although such a cRCT design helps us handle the problem of statistical dependence between units (without removing such dependence), this solution comes at a price; namely, larger sample sizes are required than would be the case for an individual pupil-level RCT.

6.2 Trial implementation questions

This pilot is designed to address a number of questions relating to the practical requirements of an efficacy RCT.

Recruitment and eligibility questions

1. Can RFL identify and gain the agreement of schools to participate in the trial in the numbers required?
2. Do developers feel confident explaining the trial to the schools? Are they sufficiently clear in their description of randomisation and its consequences? Do schools understand the messages about randomisation that they receive?
3. How acceptable is the experimental design to the various stakeholders (the developer and schools)? Does it lead to difficulties in recruitment?
4. What reasons are given for schools not wanting to participate?
5. Can schools recruit students to the programme in advance of randomisation in sufficient numbers and consistent with the inclusion criteria (detailed in 7.3)?
6. Can the team successfully access baseline information (e.g. full name, date of birth, unique pupil reference number – see 7.4 for full details) from schools for those pupils deemed as meeting the inclusion criteria?
7. Can the study meet the legal/GDPR requirements for linking trial data to the National Pupil Database via the ONS SRS?
8. How many parents withdraw their child from the study? What were the reasons given for withdrawing post-randomisation?

Randomisation

9. Subsequent to recruitment of the target sample, can randomisation procedures be successfully initiated, and what is the reaction of schools to the outcome of randomisation?
10. How many schools/pupils withdraw from the study post-randomisation, and what were the reasons given for withdrawal?

Data collection – primary and secondary data

11. Can baseline data in the form of questionnaires be successfully collected from identified eligible pupils in all participating schools prior to randomisation? What response rate is achieved? Can any barriers to successful completion of questionnaires be identified?
12. Can follow-up data at five months post randomisation, in the form of questionnaires, be collected successfully from all pupils in both schools randomised to intervention and control? What is the overall response rate? And what are the response rates in intervention and control schools? What factors act as barriers to completion of questionnaires, and do these differ in intervention and control schools?

6.3 Statistical design questions

The statistical data collected through this pilot trial is also used to provide information to perform sample size calculations for a larger efficacy cRCT. Sample size determination proceeds on the basis of calculating the number of schools required using the following equation (Dong & Maynard, 2013):

$$J = \left(\frac{M_{Jr_2-g^*-2}}{MDES} \right)^2 \left(\frac{\rho(1-R_2^2)}{P(1-P)r_2} + \frac{(1-\rho)(1-R_1^2)}{P(1-P)nr_1r_2} \right) \dots [1]$$

Where J is the number of schools, $MDES$ the effect size a possible efficacy trial might be powered to detect, r_2 and r_1 the response rates at the school and pupil levels, ' n ' the average number of pupils per school recruited to the trial, ' ρ ' the intraclass correlation coefficient and ' P ' the proportion of all participating schools assigned to the intervention. The terms R_1^2 and R_2^2 are the proportion of the outcome response variances explained at the pupil and school levels through the inclusion of a baseline score on the Strengths and Difficulties Questionnaire (SDQ) or Problem Behaviour Frequency Scale (PBFS) in the regression model from which treatment effect estimates will be obtained. This equation represents a minor departure from the equation specified in the protocol for this study because it takes into account the reduction in outcome variance that is between schools, resulting from the inclusion of the baseline response measure as a covariate. The omission of this term in the equation specified in the protocol would lead to sample size estimates that were too conservative.

In less technical terms, this equation takes into account the variability in the response measures derived from the SDQ and PBFS and how this variability is assumed to occur among pupils within schools and on average between different schools; the statistical tests we will perform on the data; the statistical model from which we intend to obtain our estimates; and the size of effect or difference between intervention groups that an efficacy study would wish to be able to detect. Together, this information is used to try and assess how many schools we might seek to recruit for a much larger efficacy study.

From the data we have collected during this pilot, statistical estimates of ρ , r_1 , r_2 and R^2 can be obtained. Due to the size of the sample, which stems from the fact that this is a pilot study and that there has been appreciable sample attrition, some estimates are quite uncertain. Furthermore, some pupils were excluded from the trial in intervention schools and from the trial sample as a result of decisions made by the school and the RFL. From looking at the baseline scores on both the SDQ and PBFS, we can see that intervention group pupils score lower at baseline, but how much these differences are due to chance or are more systematic is difficult to determine. We use our judgement based on experience and prior research to arrive at what we believe are values we would likely see in a larger efficacy study. Further, we assume that an

efficacy study will involve randomisation of schools 1:1 to intervention and control and thus $P = 0.5$, and approximately 12 pupils from each school will participate in the proposed efficacy study, so $n = 12$. Finally, we assume $MDES = 0.25$ (simple, standardised difference in means) and that for the proposed efficacy study, Type I and II error rates will be set at 5% and 20%, respectively. Values for the MDES were arrived at after holding discussions with the YEF and the RFL to determine what size of an effect they would wish a full efficacy study to be capable of detecting at the 95% level of statistical confidence. In part, this discussion was informed by the YEF's view as to the likely effectiveness of these types of interventions at the time the study was designed. We note that the YEF now requires efficacy studies to be powered to detect an effect size of 0.20.

6.4 Evidence of promise questions

The next set of questions we sought to address through this pilot surrounds whether the intervention itself demonstrated any evidence of promise. In accordance with guidance from the YEF, we deployed two validated scales from which outcome or dependent variables are derived: the SDQ and the PBFS. Full details of these scales and their implementation in the context of this pilot study can be found in this study's protocol (<https://osf.io/9yd2v>).

The two questions we hoped to address in relation to evidence of promise were:

1. What is the adjusted difference in mean score on the total difficulties score derived from the SDQ between intervention and control group pupils at follow-up with 75%, 85%, 90% and 95% confidence intervals?
2. What is the adjusted difference in mean score on the PBFS between intervention and control group pupils at follow-up with 75%, 85%, 90% and 95% confidence intervals?

Due to the smaller-than-anticipated sample achieved, we have not conducted the analysis as described above. As noted in the previous section, our results could also be affected by the systematic exclusion of a small number of pupils from both the intervention and the study sample.

6.5 Intervention implementation questions

Some aspects of the intervention will necessarily change due to reasons such as (1) the experimental study design and its implications for the delivery of the intervention and (2) due to the scale of the activities required. Thus, the pilot study addressed the following questions primarily through qualitative research, although Question 3 below will also be addressed through analysis of monitoring data collected by RFL:

1. To what extent has the intervention, as described in the feasibility study, been adapted?
2. Were there any challenges in delivery? What was the nature of these? What adaptations were deemed necessary, and did these adaptations address the perceived challenges successfully?
3. How did students respond to the intervention? To what extent did they engage? Did students complete the programme? What proportion dropped out?

6.6 Success criteria and/or targets

The following success criteria are defined for this pilot study. These criteria are assumed to be reasonable based on experience of previous studies and the best judgements of the researchers who carried out a feasibility test of RFL's Educate Mentoring Programme:

- RFL can recruit 14 schools to the pilot, and at least 12 of these schools remain in the study until the follow-up data are collected from pupils.
- Schools can recruit 12 pupils per school.
- That a baseline response rate to the questionnaire reaches at least 80%, and the follow-up rate should reach 70%.

7. Methods – Pilot Trial

An overview of the methods deployed in this study is provided in Table 7.1 below.

Table 7.1 Methods overview

Data collection methods	Participants/data sources (type, number)	Data analysis methods	Research questions addressed
Quantitative – school records	Data on 111 pupils, including demographics, school attendance, free school meals, pupil premium and educational attainment	Simple descriptive summary statistics and comparisons between intervention and control groups	Trial implementation questions
Quantitative – questionnaire data using validated tools	Pre-surveys administered to 111 pupils Follow-up surveys administered to 87 pupils	Descriptive analysis reporting response rates at baseline and follow-up	Trial implementation questions
Quantitative – monitoring data on intervention take-up	Data on 111 pupils recorded by RFL	Descriptive analysis	Intervention implementation questions
Qualitative interviews with project staff, teachers and focus groups with pupils	Project staff n=8 Teachers n=7 3 focus groups with 29 pupils	Thematic analysis related to the study implementation questions and intervention implementation questions	Trial implementation questions Intervention implementation questions

7.1 Trial design

This trial is a two-arm, parallel pilot cRCT. Schools recruited to the trial were allocated at random to intervention and control groups on a 1:1 basis. Prior to randomisation, pupils in range of the trial were identified on a common basis. Subsequent to randomisation, pupils in schools allocated to the intervention group were invited to take part in the intervention. Outcomes were measured at the pupil level through the administration of questionnaires, with measures obtained both prior to randomisation, that is, at the

baseline and at five months subsequent to randomisation at follow-up. Schools were also asked to provide a range of specified data items from their data systems prior to randomisation for each participating pupil, thus forming part of the pupil baseline record, along with measures from the baseline questionnaire.

8.1 Recruitment of schools and randomisation

Participating schools were enrolled in the study by the RFL and RFL Foundations, located in the following local authorities:

- Leeds
- Huddersfield
- St Helens
- Warrington
- Leigh

In addition to Leeds, Huddersfield, Warrington and St Helens, the original intention set out in the protocol was for schools to be recruited from Hull, Leigh and Wigan. During the implementation of the pilot trial, the following changes occurred:

- Hull was unable to participate in the trial. While one of the selected schools in this area was able to obtain parent/pupil consent and signed off on the MoU (between the school and the research team) within the specified deadline for the trial, the other school was unable to meet the deadline. Because schools were paired and randomised within areas, Hull could not be included in the pilot trial.
- Wigan was unable to participate in the trial. The schools in this area were not able to meet the deadline for obtaining the parent/pupil consent and sign off on the MoU.

Each of the RFL foundations in the above areas recruited two schools. Viable schools within their local authority were identified using a ranking matrix based on six indicators set out below:

- Percentage of pupils receiving free school meals
- Percentage of pupils eligible for free school meals over the last six years
- Index of Multiple Deprivation (IMD) ranking applied to school location
- Overall pupil absence
- Persistent pupil absence
- Attainment 8 score

The original intention set out in the protocol was for foundations to identify two of the top three ranking schools in each area to deliver the Educate Mentoring Programme. During implementation of the pilot trial, it was not feasible for the RFLs to adhere to this principle. This was further complicated for the foundations by the trial requirement that schools had not previously received the intervention. The schools that were

recruited to the trial were all (apart from one) included in this matrix but were included in the trial based on those being willing and able to meet the conditions of the trial within the deadlines for obtaining parent/pupil consent, signing off on the MoU and production of pupil data prior to randomisation. The schools which were invited to participate in the pilot trial were those where the RFL had some existing contact and/or relationship.

In order to facilitate the trial, purely for pragmatic reasons and particularly the implementation of the intervention, randomisation was performed in pairs, where schools were paired on the basis of local authority and RFL Foundations. Once a pair was formed, each school within the pair was allocated a random number from a zero/one uniform distribution to four decimal places. Within each pair, the school assigned the highest random number was allocated to the intervention, with the remaining school to control. The randomisation was performed in STATA v17 statistical software.

Randomisation was performed in a single batch. The random number sequence was generated by a researcher blind to the identities of the schools concerned, who also carried out the randomisation (see Appendix 4).

The outcome of randomisation was stored in the designated trial data file. The outcome of the randomisation process was then communicated to the RFL.

7.3 Participants

Within each participating school, school representatives identified a minimum sample of 12 pupils who they encouraged to take part in the intervention. Prior to randomisation, the parents of pupils identified in this manner were asked to consent to their child taking part in the study. Pupils also had to assent. Pupils who assented, and where parental consent was received, were asked to complete a baseline questionnaire, and the schools were asked to provide pre-agreed data items from their systems for each pupil (see below).

All pupils invited to take part in the study were in Years 8 and 9 in participating schools at September 2021 and met the criteria below.

Schools were instructed to recruit 12 pupils into the programme. Selection criteria were provided to each school to ensure consistency across all participating schools. The selection criteria were based upon ratings across four risk factors devised by the RFL (with advice from the research team), with each section given a risk rating based on its importance (0-1) and a scoring system (shown below):

- Behaviour log: Incidences of adverse behaviour entered on chosen school system (e.g. SIMS):

Risk rating = 1	
4	Top 1% of offenders in school
3	Between top 1–2% of offenders in school

2	Between top 3–4% of offenders in school
1	Between top 5–6% of offenders in school

- Pupil attendance: Where it fell into an area of concern for the school but was not so low that they would be unlikely to attend mentoring sessions:

Risk rating = 0.7	
4	Below 90%
3	90–92%
2	93–95%
1	96–100%

- Pastoral input: Opinion from the key pastoral staff assigned to pupils regarding their likelihood to engage and their potential to make a change:

Risk rating = 1	
4	Resistant to change
3	Could change with right influence
2	Open to change
1	Wants to change

- Attitude to Physical Education (PE) lessons/interest in sport (based on the assessment of school staff): This was viewed by the RFL as the most important part of the selection tool. As a sports-based intervention, if potential candidates were not interested in sport and did not engage in PE lessons in school, they would not be considered suitable for this project.

If more than 12 pupils from the group of identified potential participants remain after the selection criteria have been applied, then the 12 pupils with the highest attendance will be selected for the programme. This rule is applied consistently regardless of whether the school is eventually allocated to intervention or control. The rationale for this method of selection is that there is an increased likelihood that these pupils will be in school to attend the Inspiring Futures mentoring sessions, which will maximise contact time with the mentor and increase the possibility of positive behaviour change.

7.4 Data collection/outcomes

This is a mixed methods pilot trial comprising both quantitative and qualitative data collection.

Quantitative data collection methods

Quantitative data were collected from pupils participating in the trial at two stages: 1) prior to randomisation in November and December 2021; and 2) at follow-up five months later. Baseline data records for each participating pupil were compiled from two sources. First, for each pupil for whom consent was obtained, we asked schools to provide the following information from their data systems for each pupil:

- Unique Pupil Number (UPN)
- School unique reference number (URN)
- School postcode (backup in case of URN change)
- Full name of pupil
- Date of birth
- Sex
- Racial or ethnic group
- Year group
- Free School Meal (FSM) status
- Pupil Premium (PP) status
- Special Educational Needs and Disability (SEND)
- Educational Health Care Plan (EHP or support)
- English as Additional Language (EAL) status
- Number of temporary exclusions in the previous school year
- Number of authorised absences in the previous school year
- Number of unauthorised absences in the previous school year
- Scaled score and test score for KS2 Reading
- Teacher assessment for KS2 Writing
- Scaled score and test score for KS2 Maths⁵

These records were appended to the pupil-level record and were used to generate a trial database held as a STATA v17 data file.

⁵ Schools do receive a raw score – see <https://www.gov.uk/guidance/understanding-scaled-scores-at-key-stage-2>. Scaled scores run from 80 to 120. Raw scores can be obtained using a conversion: <https://www.gov.uk/government/publications/2019-scaled-scores-at-key-stage-2>

Second, prior to randomisation, each pupil was asked to complete a baseline questionnaire. Administration of the survey was overseen by RFL. In some instances, the questionnaires were implemented by the schools; in other instances, RFL visited the schools and supervised the completion of the questionnaires. The baseline questionnaire included items from the SDQ and PBFS, details of which are provided in the study protocol [<https://osf.io/9yd2v>]. Other data collected included:

- informed assent of the pupil to complete the questionnaire; and
- questionnaire completion date.

Records from the baseline survey questionnaires were merged with the trial database by linking each survey form to the existing trial record using the pupil's full name and date of birth.

Using a procedure similar to the one described above, pupils in the trial sample were surveyed again five months post-randomisation. The follow-up questionnaire contained the same survey items with, additionally, the inclusion of:

- duration of time spent on the programme.

There were extensive data gaps for this item, and therefore, this has not been used for this report.

Using the same procedures described above, the follow-up survey questionnaire data was appended to the pupil records held in the trial database.

In addition to these data sources, RFL collected data on treatment dosage, intensity and duration:

- number of sessions attended by pupils undertaking the intervention;
- nature of the sessions;
- duration of the sessions;
- dates of the sessions;
- who the sessions were delivered by; and
- completion/non-completion of the full programme.

Qualitative data collection

To qualitatively evaluate the implementation of the pilot, a series of interviews were undertaken with the RFL project staff (n=8) and teachers (n=7) from intervention and control schools involved in the process. These individuals were sampled based on having direct experience of either setting up the pilot RCT and/or delivery of the programme. Three focus groups were undertaken with an opportune sample of young people from the intervention schools who were attending the programme on the day that focus groups were conducted (n= total of 29).

The interviews were undertaken following informed consent from the participants applying the information and consent process approved through the University's ethics application process. The semi-structured interviews with project staff, teachers and other professionals were undertaken virtually, guided by an interview schedule, and lasted between 30 minutes and an hour. Focus groups with young people were undertaken face to face, guided by a focus group schedule lasting an hour. All interviews and focus groups were recorded and then transcribed.

It should be noted that the original intention set out in the study protocol was that interviews would be undertaken with the young people in both intervention and control schools. In consultation with the RFL Foundations, due to the challenges of accessing the young people for interviews, it was agreed that the research team would undertake focus groups instead. Additionally, these would only be undertaken at the intervention schools.

7.5 Interpreting the findings and limitations

Consistent with the points raised in Section 3.3 of the feasibility study, there are a number of methodological limitations with the pilot study that need to be understood when interpreting the findings. While the pilot study occurred post all nationwide lockdowns, schools were still enduring the effects of COVID-19 with high levels of staff and pupil absence, which had some impact on the process of collecting data, though limited impact on the completeness of data. The COVID-19 pandemic contributed to the challenge of achieving the sample size anticipated at the protocol stage and, therefore, contributed to the decision not to undertake an assessment of 'evidence of promise' in the manner discussed in the protocol. This change has been noted above and is discussed further in subsequent sections of this report. It is also important to note that a small number of pupils were excluded from the intervention and the sample by schools due to behavioural problems. This could introduce bias and, as a practice, will need to be guarded against if the study moves to the efficacy stage. The remainder of this section highlights additional limitations that have implications for the interpretation of the results.

Quantitative data

Baseline data were collected prior to randomization in the form of pupil information collated by school staff and pre-survey questionnaires completed by pupils. As can be seen in Section 8.1, baseline data were collected for 100% of pupils enrolled in the trial. However, there was some missing data relating to pupil attainment, and this was a direct consequence of the COVID-19 pandemic. This information was not readily available and, therefore, for most pupils, was not provided.

Any further and pertinent limitations of the quantitative data are detailed in Section 8 alongside the findings.

Qualitative data

Interviews were conducted with the RFL project staff and teachers from both the intervention and control schools from three out of the five RFL Foundations areas (St Helens, Leigh and Leeds). One of the RFL Foundations areas was selected because the programme was delivered within the RFL club, as opposed to the school delivery. Furthermore, this Foundation had previously designed the mentoring programme and, therefore, had greater oversight and knowledge of the programme. The other two RFL Foundations areas were selected at random from the remaining four. It should, therefore, be noted that those interviewed may not have represented the whole range of views amongst all project staff and teachers across all Foundations areas.

Similarly, the young people that took part in the focus groups from the intervention schools were based in the same three RFL Foundations areas as above. Therefore, we acknowledge they may not have represented the full range of views of all young people involved in the intervention from across all the Foundation areas.

7.6 Approach to data analysis

Quantitative data analysis

The quantitative data analysis involved a range of simple descriptive statistics as well as fitting a series of multiple regression models to the trial data set. Results from regression models were intended as input into an assessment of ‘evidence of promise’. Unfortunately, the achieved sample was deemed too small to support the type of analysis initially proposed. The regression models were still estimated on the data, but due to concerns around the sample size, they take a different form from those originally set out in the protocol. Moreover, as we have discussed, after randomisation, some pupils were removed from the intervention and data collection by schools due to behavioural problems. If this study moves to an efficacy stage, such practices will need to be discouraged. It is important that outcome data are collected from all those pupils enrolled in the study, regardless of whether they went on to complete the intervention.

Output from the regression models is used primarily to inform judgements made in the sample size calculations. Generally, we urge caution in interpreting the results due to the size of the sample and attrition. Despite not informing an assessment of ‘evidence of promise’ as envisaged in the trial protocol, we ran two linear regression models each for the SDQ and PFBS outcome variable, four models in total, with results reported in Table 8.9.⁶ These are simple linear regression models. Standard errors and confidence intervals from the regressions are not reported due to concerns relating to the small number of schools. Instead, a test of the sharp null hypotheses⁷ on the estimated difference in outcomes between the two groups from the regressions is performed using randomisation inference (Gerber & Green, 2012; Hess, 2017). Using this approach was judged to be the best option in communicating results that have a high degree of uncertainty, given that classical parametric assumptions required for inference were unlikely to hold. The first of the two models, fitted for each outcome, took the form of a simple bivariate regression of the outcome on a dummy variable capturing whether pupils were in an intervention school. The second of the two models, in addition to this dummy variable, included a covariate capturing sample members’ baseline score on the outcome.

Table 8.9 also includes estimates of the proportion of the total outcome variances that is between schools. The regression models do not directly estimate this quantity. It is instead obtained from a user-written command in STATA v17 ‘cltest’ (Herrin, 2022). Again, these estimates should be interpreted with great caution.

As mentioned above, these analyses could be affected by the decision to exclude some pupils in the intervention group from the intervention and subsequent data collection after randomisation. Such practices will often lead to bias and may well have given rise to such a problem here.

To reiterate, in less technical terms, we are estimating two statistical models for each of the two outcomes (total difficulties from the SDQ and problem frequency from the PFBS) on the sample data. We hope to obtain some useful information from these models to plan a possible efficacy study. These models seek to

⁶ The user-written command ‘cltest’ was implemented in STATA v17 to estimate a cluster-adjusted unpaired t-test (Herrin, 2022). This command provided an estimate of the intraclass correlation coefficient that could not be obtained from the linear regression models. As with all the statistical estimates reported here, interpreting these results should be done with great care.

⁷ The sharp null hypothesis is that the true sample treatment effect is zero for all subjects (Gerber & Green, 2012). This differs from the classical null hypothesis test, which tests the assumption that the true sample treatment effect is, on average, zero.

explain variation in the post-test scores from the SDQ and PBFS instruments in terms of whether sample members were in the intervention group or control group and their score on the same instruments completed at the baseline prior to randomisation. The part of these models that captures whether pupils were in the intervention or control groups provides estimates of the effect of the intervention, but these estimates should be interpreted with great care due to the problems we have discussed. We test the hypotheses that the effect of the intervention is zero for all pupils and ask how compatible our data are with this assumption.

Further analysis beyond the regression models discussed thus far includes simple univariate sample estimates of the proportions of all randomised pupils completing questionnaires at the baseline and the follow-up; for the sample as a whole, then for intervention and control groups separately. Each univariate estimate is accompanied by the 95% and 80% confidence intervals to provide a sensitivity analysis in sample size determination for the efficacy study.

Qualitative data analysis

Qualitative data was analysed thematically (Ritchie et al., 2014; Braun & Clarke, 2006) using a framework related to the trial implementation questions and intervention implementation research questions. This enabled us to understand the experiences of pupils, project and school staff, perceptions of the processes, delivery, chronology of events, why activities/processes worked well/less well, and their reactions (positive and negative) to these.

7.7 Timeline of pilot trial

Table 7.2 sets out the timeline for the pilot trial.

Table 7.2 Timeline

Dates	Activity
September 2021	Commence pilot study
October 2021	Commence enumeration of young people
October 2021	Commence collection of quantitative monitoring data
November 2021	Implement pre-intervention survey
November 2021	Randomise schools
April 2022	Implement post-intervention/follow-up survey
April 2022	Qualitative fieldwork commences

June 2022	All data collection (quantitative and qualitative) completed
December 2022	Final report

8. Findings – Pilot Trial

8.1 Participants

Sex and ethnicity

It should be noted that the demographic characteristics of the young people engaged in the Educate Mentoring Programme are provided here for context. Neither sex nor ethnicity was set out by the project as selection criteria for the programme. No data were provided to enable the age of participants to be identified.

Analysis of the monitoring data shows records for 111 young people, of which the majority (82%) were male, and the remaining 18% were female.

The majority of young people (88%) were White, 4% were Black, 5% were Asian, and 4% were mixed ethnicity.

Inclusion criteria

Table 8.1 shows that all of the pupils met the inclusion criterion for being in Years 8 and 9 in September 2021. Across the intervention and control schools, 60% of pupils were in Year 8 and 40% in Year 9.

Table 8.2 presents data on other inclusion criteria: problematic behaviour, school attendance, and school pastoral team assessment of individual pupils' potential for change.

This shows that across the intervention and control schools:

- All of the pupils were assessed as being within the top 6% of pupils (within the school years) exhibiting problematic behaviour, i.e. within the range specified by the RFL.
- Almost a third (31%) had a less than 90% school attendance record; over a third (39%) had a school attendance record of 91–95%; and 30% had a 96–100% attendance record. These attendance records were within the range specified for this inclusion criterion.
- 96% were assessed as having the potential to change, with only 4% assessed as being resistant to change.

The monitoring data for the schools showed that all pupils across intervention and control schools were recorded as being interested in sport and/or PE. This was regarded by the RFL as the most important of the inclusion criteria.

Pupil needs

Table 8.3 presents data on pupil needs. Across the intervention and control school, this shows that:

- Just under half (46%) of pupils were in receipt of FSM.
- 60% of pupils were in receipt of the PP.
- Just under a quarter (23%) of pupils were assessed as having SEND.
- 11% of pupils had an EHCP.
- A small minority (4%) were recorded as having EAL.

It should be noted that these were not used as inclusion criteria but provide useful context about the level of disadvantage (FSM and PP) and complexity of the needs of the pupils included in the trial (SEND, EHC and EAL).

Table 8.1 Demographics for pupils who completed a baseline survey

	Pupils' Sex		Pupils' Year Group		Pupils' Ethnicity			
	Males	Females	Year 8	Year 9	White	Black	Asian	Mixed
Intervention schools total	91%	9%	51%	49%	82%	7%	5%	5%
Control schools total	73%	27%	70%	30%	95%	0%	4%	2%
Grand total	82%	18%	60%	40%	88%	4%	5%	4%

Table 8.2 Inclusion criteria for pupils who completed a baseline survey

	Problematic Behaviour				Attendance				Potential to Change				Total Score
	Top 5–6% of pupils	Top 3–4% of pupils	Top 1–2% of pupils	Top 1% of pupils	Below 90%	90–92%	93–95%	96–100%	Resistant to change	Could change with right influence	Open to change	Wants to change	
Intervention schools total	31%	33%	29%	7%	22%	16%	29%	33%	0%	16%	49%	35%	5.54
Control schools total	55%	20%	20%	5%	39%	16%	18%	27%	7%	50%	14%	29%	5.98
Grand total	43%	26%	24%	6%	31%	16%	23%	30%	4%	33%	32%	32%	5.76

Table 8.3 Needs of pupils who completed a baseline survey

	FSM		PP		SEND		EHCP		EAL	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Intervention schools total	38%	62%	51%	49%	24%	76%	2%	98%	7%	93%
Control schools total	54%	46%	70%	30%	23%	77%	20%	80%	0%	100%
Grand total	46%	54%	60%	40%	23%	77%	11%	89%	4%	96%

8.2 Trial implementation

In this section, we present the findings in answer to the trial implementation questions set out in 6.2. Our findings draw on Figure 8.1 and Table 8.4 below. We first consider recruitment and eligibility, then responses to randomisation and finally, data collection, response and attrition. Throughout, we compare our results to the proposed design set out at the protocol stage.

Recruitment and eligibility

As the CONSORT diagram in Figure 8.1 shows, 116 pupils within 10 schools across five RFL Foundations were recruited and agreed to participate in the study. This is less than the intended sample size at protocol, where the intervention was to recruit 14 schools across seven RFL Foundations. Furthermore, it was proposed that participating schools would recruit a minimum of 12 pupils each to the trial, as set out in the MoU for the pilot RCT (see Appendices). Thus, at protocol, the intended sample was to comprise 168 pupils in 14 schools.

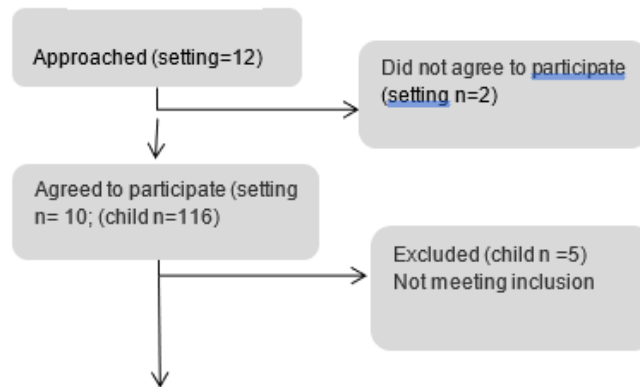
As reported in 7.2, two of the intended RFL Foundations set out in the trial protocol were unable to participate in the trial due to the schools being unable to meet the requirements and deadline for obtaining parent/pupil consent, signing off on the MoU between the school and research team, collating the pupil data and implementing the baseline survey for pupils by the required deadline.

Factors which facilitated the recruitment of schools and the implementation of the trial were:

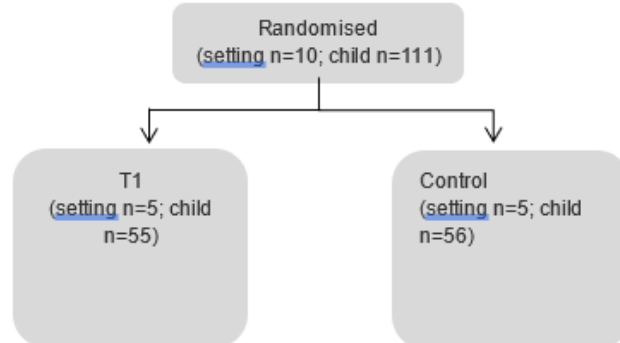
- schools valuing the potential of the RFL mentoring programme for their pupils;
- existing relationships and contacts between RFL staff and the school, which enabled the RFL staff to determine which schools were most likely to be able to administer the trial processes within the necessary time frames;
- a senior person within the school championing the pilot trial and, thereby, facilitating the timely implementation of the trial processes;
- RFL staff attending the school to implement the survey with pupils rather than rely on school staff who were busy with their core duties;
- RFL staff making it easier for the schools to distribute requests for parental consent by packaging up the project information sheets and consent forms into individual envelopes for each pupil to take home to their parents; and
- school staff following up with parents via telephone to promote the programme and obtain parental consent.

Figure 8.1 CONSORT diagram

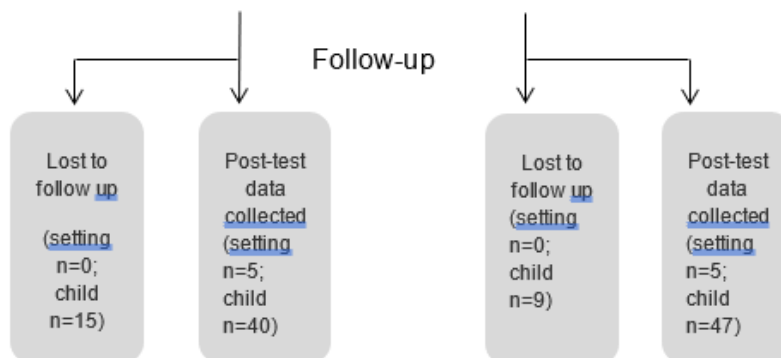
Recruitment



Allocation



Follow-up



Analysis

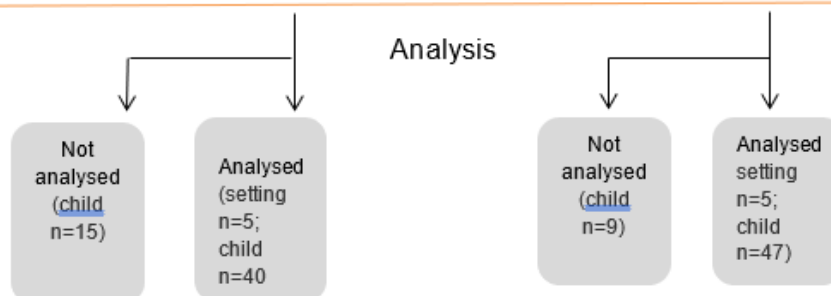


Table 8.4 Participant numbers at different stages of the trial

	<i>Pupil recruitment target</i>	<i>Pupils recruited and randomised (school data received)</i>			<i>Pupils withdrawn from the study post-randomisation</i>		<i>Baseline data (any SDQ or PBFS)</i>		<i>Follow-up data (any SDQ or PBFS)</i>	
	<i>Total (N=)</i>	<i>Total (N=)</i>	<i>Males (row %)</i>	<i>Females (row %)</i>	<i>Total (N=)</i>	<i>% of pupils recruited and randomised</i>	<i>Total</i>	<i>% of pupils recruited and randomised</i>	<i>Total</i>	<i>% of pupils recruited and randomised</i>
		<i>A</i>			<i>B</i>					
<i>Intervention schools</i>										
A	12	12	100%	0	0	0	12	100%	9	75%
B	12	11	100%	0	0	0	11	100%	9	82%
C	12	12	100%	0	0	0	12	100%	11	92%
D	12	10	70%	30%	0	0	10	100%	3	30%
E	12	10	80%	20%	0	0	10	100%	8	80%
<i>Total (N=)</i>	60	55	91%	9%	0	0	55	100%	40	73%
<i>Control schools</i>										
A	12	14	64%	36%	0	0	14	100%	11	79%
B	12	11	73%	27%	0	0	11	100%	9	82%
C	12	8	87%	13%	0	0	8	100%	6	75%
D	12	11	73%	27%	0	0	11	100%	9	82%
E	12	12	75%	25%	0	0	12	100%	12	100%
<i>Total (N=)</i>	60	56	73%	27%	0	0	56	100%	47	84%
<i>Grand total (N=)</i>	120	111	82%	18%	0	0%	111	100%	87	78%

All of the schools, whether intervention or control schools and those included and not included in the trial, found it challenging to meet these initial pre-randomisation trial requirements due to the following factors:

- Staff who were responsible for liaising with the RFL Foundations about the pilot trial being absent due to COVID-19, which delayed completion of the processes.
- Staff who were responsible for overseeing the pilot trial having to juggle this among core school priorities, which in some instances were also exacerbated by COVID-19 due to their colleagues being absent and, therefore, having to manage additional duties.
- Obtaining consent from parents of pupils who were less engaged with the school, where the parents themselves were also less engaged and responsive to the school.
- Completing the number of processes which school staff were unfamiliar with and were required for the pilot trial.
- Obtaining the pupil data specified for the trial required school staff having to obtain information from different systems.
- Obtaining information about pupil behaviour required the lead person within schools having to liaise with a number of different colleagues who were busy and had other priorities. For example, in some schools, the lead person was the PE teacher; in order to obtain pupil behaviour information, they needed to secure the assistance of staff from the pastoral team.
- Pupils recruited for the trial being excluded from school and, therefore, not in attendance to complete the baseline survey.

While Foundation coaches were generally able to communicate the requirements for the trial to school staff, the time and effort required of school staff were not fully appreciated at the outset by the school staff and Foundation coaches. In some RFL areas, project staff needed to follow up with schools on a persistent basis to ensure that the schools were completing the processes and collating information and collecting consent to meet the deadline for inclusion in the pilot trial.

To facilitate the return of parental consent, staff in some schools adopted a direct approach, contacting parents on an individual basis, as illustrated by the following comment:

"... our team split the group up into, obviously, manageable numbers to contact the parents. Have the conversation with them, let them know, obviously, where the pupils are at in school and then, obviously, what we were looking to get out of the scheme." (School staff)

In some instances, Foundation coaches were themselves unclear about the pilot trial and how this differentiated from the other activity they were delivering as part of the YEF-funded overall programme. Additionally, this may have been compounded by updated information and documentation about the trial.

The rationale for undertaking a baseline and follow-up survey in both intervention and control schools was not fully understood by all Foundation coaches, although this did not materially affect the implementation of the trial. RFL staff working with the schools were provided with clear instructions for supporting the pilot RCT, which they were able to implement.

It should be noted that the study met the legal/GDPR requirements as set out in 1.5, Appendix 2 and Appendix 3.

The project information sheets (PIS) provided for the pilot trial pupils and their parents clearly set out the purpose of the study conducted by MMU, how the data would be managed and stored by MMU, and that following the completion of the evaluation, data from the study would be archived with the YEF. The PIS went on to explain that the archiving would enable the YEF and/or commissioned agent to link trial data to the National Pupil Database and other nationally collected management data held via the ONS SRS.

Parental consent was sought prior to pupil inclusion in the study. Parents of one pupil selected by a school for the programme refused parental consent for their child's inclusion. The principal reason for refusal was the transfer of data for the YEF archive. Following randomisation, no parents withdrew their children from the study.

Following recruitment, but prior to randomisation, five of the 116 pupils were removed from the study by schools due to poor behaviour or because they had been excluded from the school. As noted, the study set out to recruit a minimum of 12 pupils per school. In summary, the RFL successfully recruited 10 schools against a target of 14 (71%) and 111 pupils, compared to a target of 168 (66%). Despite these shortfalls, Table 8.4 shows that both the intervention and control schools were able to recruit what we deem to be sufficient numbers, and all met the inclusion criteria.

The pupil data showed that all of the pupils included in the trial met the inclusion criteria (see 8.1). However, school staff were also mindful of the appropriateness of the content of the programme when deciding which pupils to refer to the RFL programme:

"...Yes, we've got a list of x amount of pupils but then do these pupils fit into that programme, or would they be worthwhile going into a different programme? It's a very much mix ... programme content is very, very important to how we then choose the pupils." (School staff)

The adoption of referral/inclusion criteria for the selection of pupils for the pilot RCT was new to the RFL Foundations staff. The intention of the referral criteria devised by the RFL central team was to target pupils who had exhibited some problem behaviour at school but were likely to engage with the programme. When the RFL delivery staff were asked about the extent to which the selected pupils differed from pupils they had worked with before where the criteria had not been applied, there was general agreement that the appropriate pupils were selected:

"Yeah, they're not too far down the line, so there's no way of changing their attitudes and getting them to think differently; they're just at that cusp of where you've got room to work with them, and for them to grow ... " (Project staff)

During the pupil focus groups, they were asked how they got involved in the programme. Pupils reported that they had been not behaving in school:

"Something about not being the best behaved in school and stuff like that." (Pupil)

Another pupil from the same school reported being involved in fighting and getting detentions. Others mentioned that they had been excluded from school, and that was a reason why they were encouraged to attend the programme. In one school, pupils reported generally lower-level problem behaviours, described by one pupil as "disruptive talking and stuff", and another pupil described their behaviour as:

"Not like fighting and stuff like that, just silly behaviour." (Pupil)

Randomisation

Once pupils were identified as meeting the inclusion criteria and parental consent had been obtained for pupils to be involved in the intervention and pilot trial, baseline information (for example, *full name, date of birth (DoB), UPN, URN, gender, exclusions in last school year, absences, ever-FSM/PP*) was collected by the schools on behalf of the RFL for all pupils. As Table 8.4 reveals, five schools containing 55 pupils were randomised to the intervention arm and went on to receive the mentoring intervention, and the remaining five schools, containing 56 pupils, were randomised to the control (Intervention pupils = 55; Control pupils = 56). Schools were only randomised once this information had been collected.

Post-randomisation, no schools left the study. There were, however, some pupil losses at follow-up for both intervention and control schools. This is discussed further below. Furthermore, pupils were removed from the study by schools due to bad behaviour and, in some cases, removed from the school. For example, in one school, it was reported by project staff that three pupils who started the programme were excluded and removed to other schools for six months and another two were removed from the programme. In a few cases, school absence meant they were unable to complete the follow-up surveys and were, therefore, not included in the analysis.

Data collection – primary and secondary data

As Table 8.4 reveals, at baseline, the sample at randomisation was fully enumerated. We received the administrative records from school information systems for all pupils (n=111). We also received complete SDQ and PFBS assessment data for each pupil.

After randomisation, follow-up post-test surveys were collected from 40 pupils in the five intervention schools and from 47 pupils across the five control schools five months following random assignment. This means that in the intervention arm of the trial, 15 pupils were lost to follow-up, and a response rate of 72% was achieved. In the control arm, nine pupils were lost to follow-up, and the response rate was 84%. This gave an overall response rate at the pupil level of 78%. The difference in response rates between the intervention and control schools can be attributed to one of the intervention schools, where several of the pupils were removed from the study by the school due to bad behaviour. As a result, these pupils were not given the opportunity to complete the follow-up questionnaire, leading to a response rate of just 30%. At the intervention schools, RFL staff implemented the follow-up surveys during one of the latter programme sessions that they ran with the pupils. Additionally, where pupils may have been absent, they were encouraged to complete the survey at a later date. At the control schools, RFL staff made arrangements to visit the school to implement the follow-up surveys. Other than pupil absence, there were no other barriers to implementation of the follow-up surveys.

It should be noted that pupils who were removed and/or excluded did not complete the programme and, therefore, did not complete the follow-up survey.

8.3 Sample size determination

In this section, we use the information collected from the pilot sample and from other relevant sources to estimate the likely sample size for a possible efficacy study. The equation in Section 6.3 above is used to estimate the sample sizes required. Table 8.5 summarises the information we have obtained from the pilot sample, as well as from elsewhere, that is used to provide estimates of sample size. Our calculations assume that the primary outcome for a proposed efficacy trial would be the total difficulties score derived from the SDQ.

As can be seen in Table 8.5, the estimate for intraclass correlation coefficient, or ρ , from the SDQ obtained from the pilot sample is 0.08 for the SDQ outcome. (Estimated intraclass correlation coefficients can be found in Table 8.9.) We adjust this up slightly in order to be conservative and use a value of 0.10 in our calculations.

The point estimate of the response rate among pupils, or r_1 , was calculated as the number of SDQ questionnaires completed at follow-up divided by the sample of pupils at randomisation. As a result r_1 was equal to 0.78, with the lower limit of the 80% confidence interval 0.73. Our sample size calculations effectively assume that sample attrition is approximately random over the study arms. These calculations provide a sense of how the sample size would need to be adjusted up to maintain statistical power under different attrition scenarios. We did not have enough information to assess how far missing data patterns might be non-random. The point estimate of r_2 obtained from the pilot sample was 1.0 due to the 100% response rate of schools, though our calculations below alter this rate by presenting different scenarios. Finally, an estimate of R^2 at levels 1 and 2 was obtained by calculating the reduction in the total variance explained and apportioning this variance equally across the levels (see Table 8.9 for estimates and Table 8.5 for the assumption adopted).

Based on the assumptions/results presented in Table 8.5 and the equation in Section 6.3, a range of possible sample sizes are calculated and displayed in Table 8.6 so that readers can appreciate the extent to which sample size estimates are sensitive to the various inputs into the calculation. The number of schools implied by these calculations might appear, at first glance, quite high, but it is our experience that samples of this size are not uncommon in school-based cluster randomised trials.

Given an MDES of 0.25 and a school response rate of 90%, RFL would need to recruit approximately 90 schools for an efficacy trial. If a lower school response rate of 80% was assumed, then RFL would need to recruit around 100 schools (Table 8.6).

These estimates are based on a minimum detectable effect size of 0.25. More recently, YEF has been requesting that trials are powered to detect an MDES of 0.20. In such a case, Table 8.6 indicates a much larger number of schools would be needed.

Table 8.5 Assumptions for sample size calculations for an efficacy study

Input	Sample point estimate	80% confidence interval	Remarks
<i>Intraclass correlation coefficient (1)</i>			
1) SDQ	0.07	n/a	We use an estimate of 0.10
2) PBFS	0.12	n/a	See above
<i>Average response rate at pupil level (2)</i>			
1) SDQ	0.78	[0.73-0.83]	We use a lower limit in sample size calculation $r=0.73$; given that we cannot assess patterns of response in our data given the sample size, calculations assume sample loss is approximately random.
2) PBFS	0.78	[0.73-0.83]	See above
<i>Average response rate at school level (3)</i>			
1) SDQ	1.0	n/a	No post-randomisation school drop-out; thus, we provide a range of estimates based on 5, 10 and 20% and no school drop-out.
2) PBFS	1.0	n/a	As above
<i>Reduction in total variance from inclusion of covariate (4)</i>			
1) SDQ	0.27	n/a	Calculated from the difference in r -squared from the two models reported in Table 8.9 and apportioned equally over levels one and two.
2) PBFS	0.20	n/a	As above
<i>Average cluster size at recruitment</i>	11	n/a	Assume 11
Notes: (1) This is the intraclass correlation coefficients of rho from a null model (2) This is the proportion of pupils completing an SDQ or PBFS of those recruited and randomised for the whole sample (3) Note we achieved 100% school response (4) Variance explained at levels 1 and 2 from inclusion of covariate assumed to be equal (see estimates reported in Table 8.9)			

Table 8.6 Required sample sizes at randomisation with varying levels of school response and minimum detectable effect sizes assuming SDQ total difficulties score is the primary outcome

School-level response rates	Approximate number of schools at analysis			
	100%	95%	90%	80%
MDES=0.20	124	130	138	156
MDES=0.25	80	86	90	100
MDES=0.30	58	60	64	72
Notes: <ul style="list-style-type: none"> • Calculations performed using PowerUp for Excel sheet 3.1 N_CRA2_2r • Probabilities of Type 1 and 2 errors (long-run error control) 5 and 20% • Two-tailed tests of statistical significance performed • Randomisation of schools 1:1 • All other assumptions as Table 8.5 				

8.4 Intervention implementation

In this section, we set out the answers to the questions that relate to the implementation of the intervention during the pilot trial. The session monitoring data is drawn solely from the five intervention schools. The qualitative findings are drawn from analysis of data from focus groups with pupils solely in the intervention schools, teachers from the intervention schools and RFL project staff.

To what extent has the intervention, as described in the feasibility study, been adapted?

The RFL staff reported no significant adaptations to the delivery of the mentoring programme in the intervention schools during the pilot trial. The programme sessions and outcomes, as set out in Appendix 1, were generally covered, as confirmed by analysis of the session monitoring data presented in Table 8.7.

Table 8.7 shows that across the interventions schools: RFL staff completed the 12 weekly programme sessions as prescribed in two schools; in another two schools, 11 of 12 weekly programme sessions were delivered as prescribed. At the remaining intervention school, seven of 12 weekly programme sessions were delivered as prescribed. This was due to the staff member (responsible for delivering the mentoring programme) leaving the RFL during programme delivery. Other activities delivered by organisations, such as the Fire and Rescue Service and a local first aid organisation, were substituted for the prescribed sessions.

One of the RFLs reported that in relation to prior delivery experience, the school-based group programmes that they had run previously had been shorter, six instead of 12-week sessions (programmed for the feasibility study and pilot RCT). However, they had adapted to the longer programme, receiving advice and support from an RFL, which had considerable experience in delivering the mentoring programme in the format used for this trial.

While adhering to the shape of the programme and prescribed weekly sessions, RFL staff reported flexibility in the delivery of sessions either in response to a) the specific needs or issues presented by the pupils during the session, b) in response to concerns raised by the school or c) what could be achieved within the session depending on the level of attention and motivation of the pupils.

Were there any challenges in delivery? What was the nature of these? What adaptations were deemed necessary, and did these adaptations address the perceived challenges successfully?

There appeared to be few challenges to delivery, primarily because four of the five RFL foundations involved in the pilot had delivered mentoring programmes during the feasibility study period, which then facilitated their delivery during the pilot trial.

The duration of the programme – 12 weekly sessions – was (in part) designed to enable the RFL Foundations to deliver the programme within a school term.

Across the five intervention schools, as shown in Table 8.7, 12 programme sessions were completed in four schools as planned. In the remaining intervention school, 11 of 12 sessions were delivered, with the school being unavailable to the RFL Foundations for one week due to COVID-19-related issues.

Table 8.7 Overview of the weekly sessions run by intervention schools

	School A	School B	School C	School D	School E
Week 1	Communication	Communication	Communication	Communication	Communication
Week 2	Trust and Teamwork	Trust and Teamwork	Trust and Teamwork	Trust and Teamwork	Healthy Lifestyles
Week 3	Inspiration People	Self-Control and Stress	Inspiration People (Coach)	Inspirational People	Inspirational People
Week 4	Self-Control and Stress	Drugs and Alcohol Awareness	Self-Control and Stress	Self-Control and Stress	Trust and Teamwork
Week 5	Drugs and Alcohol Awareness	Healthy Lifestyles	Healthy Lifestyles	Drugs and Alcohol Awareness	Self-Control and Stress
Week 6	Healthy Lifestyles	Volunteer	Drugs and Alcohol Awareness	Sports Leaders 1	Self-Esteem
Week 7	Sports Leaders 1	Inspirational People	Sports Leaders 1	Sports Leaders 2	Accountability 'Actions Strike Back' (Youth Interventions, Fire Service)
Week 8	Sports Leaders 2	Sports Leaders 1	Sports Leaders 2 (MMU)	Sports Leaders 3	Mental Fitness (RLCares)
Week 9	Sports Leaders 3	Sports Leaders 2	Sports Leaders 3	Volunteer	Risky Behaviours (The Base)
Week 10	Self-Esteem	Sports Leaders 3	Self-Esteem	Volunteer	First Aid (Flat Stand First Aid)
Week 11	Celebrate	Self-Esteem	Volunteer	Self-Esteem	Celebrate
Week 12	Celebrate	Celebrate	Celebrate (Boomers and Swingers – Golf Range)	Celebrate	-
Total weeks completed	12	12	12	12	11
Total prescribed weekly programme content completed	11	12	12	11	7
% of prescribed weekly programme content completed	92%	100%	100%	92%	58%
Content not covered	Volunteer	-	-	Healthy Lifestyles	Sports Leaders 1, 2 & 3 Drugs and Alcohol Awareness Volunteer

It was not possible to assess the duration of programme sessions from the monitoring data due to data gaps. Based on the interview data across four RFL areas, the programme sessions lasted around two hours and took place at the schools.

How did students respond to the intervention? To what extent did they engage? Did students complete the programme? What proportion dropped out?

Table 8.8 provides an overview of pupil attendance. This shows that in four of the five intervention schools, all of the pupils who commenced the programme were recorded as completing the programme. In one school, six of 10 pupils who commenced the programme were recorded as completing the programme. Four pupils were excluded from the programme by the school due to poor behaviour, and no further data were collected from them. Of those pupils who were recorded as completing the programme, the monitoring data allowed the research team to assess the number (and proportion) of sessions that the individual pupils were recorded as attending. Across the schools, the table shows that pupils who were recorded (by the RFL) as completing the programme completed between 86% and 95% of individual programme sessions. This indicates a high level of engagement.

The make-up of the sessions, a mix of classroom-based activity and outdoor physical activity, was an important feature and recognised that pupils were only able to pay attention to classroom activity for a limited period of time:

“We just found after an hour and fifteen minutes that they’re not interested [in classroom activity], and the amount of time after that you spend talking to them to try and get them to engage, you might as well have stopped. They won’t be taking anything else in.” (Project staff)

In one RFL area, uniquely, sessions were reported to last between six and seven hours and involved the pupils being transported to the local stadium where sessions took place. The stadium setting facilitated a greater range of input than occurred at the school-based sessions in the other RFL area. For example, it was reported by project staff (and confirmed by the session monitoring data) that players from the rugby league club – who were well known to the pupils – joined the sessions and engaged with the pupils, an additional dimension which enhanced the attraction of the programme for the pupils. The sessions were undertaken in the players’ room at the stadium, which, it was reported, further enhanced the pupils’ experience.

Pupils who took part in the focus groups reflected on the level of support that they received from their parents/carers in relation to their attending the programme. Parents were reported to be generally supportive of their child to be involved in the programme. A minority of parents appeared to have some reservations about their child participating in the programme, but because their child was keen to undertake the programme, they consented. Some of these parents were reported to have become more supportive of the programme, and their child’s involvement, once the programme had commenced and they were able to observe perceived positive behaviour changes in their child, which they ascribed to the programme:

“She didn’t really know what it was at first, like, because of my behaviour, but now that I’m on it, I’m pretty well-behaved, so she likes it more.” (Pupil)

Some pupils reported that they had been encouraged by their teachers to participate in the programme because it would benefit them. In other instances, pupils reported that their teacher had told them about the programme and then contacted the parents directly to encourage them to allow their child to attend the programme.

Pupils generally reported being excited to participate in the programme due to the programme involving sport and the link between the programme and the local RFL club:

“Because it was something to do with [name of club].” (Pupil)

Other reasons for pupil participation included the programme being a more attractive option than normal lessons, i.e. *“getting out of lessons”* (Pupil).

In addition, the programme was considered by some pupils to be “something to do” (Pupil). One pupil also observed that they were less likely to get into trouble if they were away from normal lessons and in the programme:

“If you stay in normal lessons, there’s a chance you can get in even more trouble. If we’re not in lessons, then it’s better behaviour, isn’t it?” (Pupil)

Pupils were generally positive about their engagement with the programme. The findings aligned with those identified from participant data reported in the feasibility study. One of the aspects pupils valued was the confidentiality of the programme and the space it gave them to talk honestly about their behaviour and what had occurred during the past week, illustrated by this report:

“You can talk about stuff you’ve done without getting grassed on, basically. If you were to say to a teacher, ‘I did something outside of school and that,’ they’d go, ‘I’m going to have to report that,’ and then they’d just grass us. Whereas here, you can say stuff you’ve done, and you can actually talk about it without just getting grassed on.” (Pupil)

Importantly as illustrated from the account of the same pupil, the programme staff engaged with the pupils to identify ways to avoid getting into further trouble:

“And you can find solutions very easily because if you go to a teacher, they report it, and then you get in trouble, but if you talk to the guys at the back, they also try and help us with the next situation that we get in.” (Pupil)

RFL staff from the area where delivery occurred at the stadium viewed the non-school setting of the stadium environment as a safe space that gave an opportunity for pupils to be candid about their concerns and experiences:

“... it’s almost that sort of safe space that they know, like you say, they’re not going to get shouted at, nobody’s going to overhear it, it’s not going to necessarily go back to school” (Project staff)

It should be noted that the reported candour of the pupils at the stadium occurred with a teacher present, as a teacher was required to accompany the pupils to and from the school and at the stadium.

Also of importance to the pupils was their relationship with the RFL Foundations staff delivering the programme and their perception of the staff, which was positive. In particular, having staff with similar school experiences to the pupils served to both enhance pupil engagement and provide a positive role model:

“They get engaged with us. They’re not just observing. [name of RFL staff], he always tells us about when he was in school; he was exactly the same as us. When [name of RFL staff] says that he was the exact same as us when he was in school, it just shows you if you knuckle down, you can” (Pupil)

Table 8.8 Overview of pupil attendance for intervention schools

	School A	School B	School C	School D	School E
Number of students who started course	11	11	12	10	10
Number of students who classified as completing course	11	11	12	6	10
% of students who completed	100%	100%	100%	60%	100%
Number of sessions run by the school	12	12	12	12	11
Of those that completed, the average number of sessions completed	11.1	10.4	11.4	11.3	10.5
Of those that completed, the average proportion of sessions completed	92%	86%	95%	94%	95%

8.5 Evidence of promise

In this section, we had proposed to undertake an analysis of the intervention in terms of its ‘evidence of promise’ as set out in the study protocol. As mentioned at various points in this report thus far, we judge that the achieved sample is unable to support the ‘evidence of promise’ analysis as described in the protocol. As also noted previously, a small number of pupils in the intervention group were excluded by schools from both the intervention and data collection. This could have consequences for the results presented here and is another reason for caution. For these reasons, we were keen to avoid the risk that the analysis would be accompanied by a high degree of uncertainty and suspicion of unreliability while also potentially becoming the focus of attention and thereby acting as an unhelpful distraction. We acknowledge that this concern might also be expressed in relation to the evidence we do present in what follows. However, the results here are used in the sample size estimation, and they are heavily qualified throughout. For the sake of transparency and completeness, therefore, we proceed to discuss results obtained from the regressions comparing average scores on the SDQ and PBFS scales by intervention and control groups.

More specifically, in this section, we describe results from the multiple regression models that have been fitted on the data and that are discussed in Section 7.6. We present a fair amount of discussion concerning these models, but again, we urge readers to exercise great care in interpreting the results. Results should not be interpreted in a way that implies that the intervention is ‘effective’.

Table 8.9 contains estimates from linear regression models with a p-value for the intervention group dummy variables providing a test of the sharp null hypothesis derived on the basis of randomisation inference⁸.

In this sample, results show that the intervention group reported lower average SDQ total difficulties scores as well as lower average PFBS problem frequency when compared to the control group. Due to small sample sizes, our estimates are highly uncertain, which suggests that if we were to run this trial, we could obtain a quite different result, even one in which the intervention appeared to increase reported total difficulties and problem frequency.

Looking first at the total difficulties scores obtained via the SDQ, column 1 of Table 8.9 shows that the intervention group scored, on average, 1.4 points lower on this measure than those in the control group ($B=-1.44$, $p=0.436$). The permuted p-value reveals that our data are not inconsistent with a situation where the true effect of the intervention is zero for all pupils. It is worth noting that our data are consistent with no impact but also a wide range of other possible outcomes, which all point to a considerable degree of uncertainty.

In column 2, Table 8.9 presents results from a multiple regression model where the total difficulties score at post-test is the response or outcome variable, and we include the total difficulties score at the baseline as a

⁸ The package ‘ritest’ (Heß, 2017) was used to perform randomisation inference in STATA v17 that took account of the clustering of pupils within schools and randomisation of schools to intervention and control conditions. Monte Carlo simulation is used to generate a sampling distribution of the test statistic under the sharp null hypothesis. The sample result obtained for the test statistic is then compared to the rank of the absolute value of results from the simulations and the proportion of the distribution equal to or greater than the sample result obtained is the permuted p-value reported in the table. A p-value derived in this manner does not require that the classical conditions for valid inference for typical regression modelling hold.

covariate or adjustment factor. This approach, in general, given a sample of a more typical size, would provide an adjusted estimate that removes the effect of any initial differences between the two groups, at randomisation, in their pre-test SDQ total difficulties score. The results here indicate that intervention pupils scored approaching one point lower on the total difficulties scale relative to their counterparts in the control group ($B=-0.84$, $p=0.504$). Under the assumption that the intervention has no effect on any pupil, the p-value shows that the probability of obtaining a result of -0.84 or more extreme is one-half or 50%. This means that the result is quite compatible with a situation in which the intervention has no effect.

Turning attention to the problem frequency behaviour scale, column 3, Table 8.9, reports results from a simple bivariate regression. This shows that the intervention group reported, on average, a score on the problem frequency scale 1.4 points lower than the control group ($B=-1.36$, $p=0.500$). Finally, we consider results from a multiple regression model where the dependent or outcome variable is the post-test problem frequency score and the pupil baseline score on the PFBS is included as a covariate. The results suggest that intervention group pupils, on average, score 1.1 points lower on the problem frequency scale than those pupils in the control group ($B=-1.09$, $p=0.410$). The permuted p-values for both these estimates, again, show that our data are quite compatible with a situation in which the intervention has no effect on any pupil.

What can we conclude based on this evidence? In this sample, intervention group pupils reported, on average, fewer difficulties and reduced problem frequency when compared to their control group counterparts. There is, however, a wide margin of uncertainty. This is because, as a pilot study, the sample was never powered to provide a definitive picture; it is not large enough. Furthermore, as we have noted on a number of occasions throughout this report, some intervention schools excluded pupils displaying behavioural problems from both the intervention and the follow-up data collection. This is not good research practice and potentially introduces bias, and would need to be guarded against if an efficacy study is undertaken. Taken together, what these issues mean is that these results cannot be used as a justification for proceeding to an efficacy trial. Instead, they should be viewed as just one piece of evidence to be considered in the round and alongside the wider results of this pilot and the feasibility study before deciding to proceed further.

Table 8.9 Results from analyses of SDQ and PFBS outcomes

	SDQ		PFBS	
	Bivariate regression	Multiple regression	Bivariate regression	Multiple regression
	Coefficient [randomisation inference p-value] ⁽³⁾	Coefficient [randomisation inference p-value] ⁽³⁾	Coefficient [randomisation inference p-value] ⁽³⁾	Coefficient [randomisation inference p-value] ⁽³⁾
Intercept	16.79	8.41	13.53	7.38
Intervention group	-1.44 [0.436]	-0.84 [0.504]	-1.36 [0.500]	-1.09 [0.410]
Pre-test score		0.56		0.50
R-squared	0.02	0.28	0.02	0.22
Sample size				
Pupils	87	87	87	87
Schools	10	10	10	10
Intraclass correlation coefficient (1)	0.08		0.12	
Effect size (2)		-0.07		-0.14

Notes:

Models are linear regressions fitted in STATA v17 with the commands 'regress' and 'vce(cluster [cluster_id])

- (1) Intraclass correlation coefficients come from the user-written command 'cltest' (Herrin, 2022)
- (2) Effect sizes are obtained by dividing the estimated regression coefficient dummy by the standard deviation
- (3) P-values for sharp null hypothesis are obtained from 500 simulations taking into account randomisation of school clusters using the user-written command 'ritest' in STATA v17 (Heß, 2017)

8.6 Readiness for trial

The 12-week Educate Mentoring Programme is well defined and, as demonstrated by the trial, was able to be delivered as intended by the RFL Foundations staff to pupils meeting the inclusion criteria through local schools.

Although the achieved sample size was smaller than that anticipated in the study protocol, there was effective data collection during the pilot trial with minimal missing data, with pupils retained in the sample from pre- to post-surveys. This was despite some of the unique challenges posed by the consequence of the COVID-19 pandemic, school closures, self-isolation, as well as the very tight timescales the study was working to. This was enabled by:

- effective central co-ordination and programme and pilot trial management by the RFL central team;
- effective on-the-ground co-ordination and programme and pilot trial management by RFL Foundations staff;
- effective relationships between RFL staff and school staff;
- commitment to the programme and pilot trial by school staff; and
- weekly pilot trial meetings between the RFL central team and researchers to troubleshoot problems and address queries from RFL Foundations and schools. This troubleshooting also occurred on an ad hoc – as needs dictate basis – between weekly meetings.

As stated earlier, if an efficacy study were to proceed, it is important that data collection needs to occur for all pupils recruited to the study – importantly, including any pupils who may be excluded at any point following recruitment.

A critical factor which underpinned the pilot was the motivation and commitment of agency stakeholders. For the RFL, the delivery of the programme in deprived communities and the potential to demonstrate the efficacy of the programme through the pilot RCT exemplified their commitment to grassroots engagement with young people from deprived backgrounds with the potential to secure further funding to grow such activities. At a practical level, the RFL central team were in regular and, on occasion, intense contact with the foundations to ensure that the pre-randomisation processes were completed and, post-randomisation, that delivery and collection of data were progressed as required for the trial. They often troubleshoot in conjunction with the research team, resolving problems as quickly as possible.

For the foundations, the delivery of the programme and the pilot RCT was about:

- their commitment to their local communities in furtherance of their missions to, in particular, engage with individuals from deprived neighbourhoods; and
- the potential to secure further funds to continue to develop and deliver their programme and other activities to these neighbourhoods and individuals.

At a practical level, RFL Foundations staff took steps to make sure the trial happened; for example, by putting consent forms and information sheets for parents in envelopes labelled with the pupil's name to make it easier for schools to distribute this information to their pupils.

For the schools, the mentoring programme, which came as part of a pilot trial, was an opportunity to:

- offer provision over and above what the schools were able to deliver – to a cohort of pupils who would benefit from alternative (to school) activities; and
- use the draw of the association between the programme and local rugby league football club to engage pupils who may be less engaged with school activities.

At a practical level, school staff took steps to make sure the trial (and programme) happened by directly contacting parents to further explain both the programme and trial as well as the benefits to their children, encouraging parents to return signed consent forms.

The cultural significance and pride in the local RFL club in the towns where the pilot was trialled was an important factor for both school buy-in and pupil engagement. In many of these Northern English towns, local RFL clubs provide a central community focus and a sense of community pride.

A further factor which contributed to the effectiveness of the trial was existing relationships that the RFL Foundations had with schools, either through the foundation and/or the local club. This facilitated access to the schools and traded on the trust and positive prior experience/view that school staff had about the RFL Foundations.

The extent to which these factors could apply and be replicated across all the foundation/local authority areas requiring an efficacy trial would need to be tested with the RFL as part of planning discussions for such a trial.

Meeting success criteria

Below, we set out whether or not the trial met the success criteria set out in 6.5.

RFL can recruit 14 schools to the pilot, and at least 12 of these schools remain in the study until the follow-up data are collected from pupils.

The RFL and foundations were not able to recruit the target number of schools for the pilot. Ten schools were recruited to the trial based on two paired schools from five RFL foundations and remained in the study until follow-up data were collected from pupils.

A sixth RFL area had recruited two schools to the trial but was unable to participate. One school was able to recruit the target number of pupils and had completed all the required paperwork and obtained consent within the short set-up time frame. The other school was unable to meet the deadline for completing all the administrative arrangements due to the short set-up time frame. A longer lead-in time would have facilitated their involvement. Had these schools managed to complete the arrangements, the target number of 12 schools would have been reached. And given the retention rate of the schools in the five areas which participated, it is likely that these two additional schools would have remained in the study till follow-up data collection from pupils.

The role of the RFL central team should be noted in relation to RFL area recruitment. As reported above, when it became likely that one of the original RFL areas selected for the pilot trial would not be in a position to recruit schools to the trial due to staff capacity, a substitute RFL foundation was secured and recruited two schools as required. Of course, it should also be noted that this substitute RFL area was able to act quickly and draw on its existing relationships with local schools to recruit the required schools and complete the administrative arrangements within a very short time frame.

The RFLs and schools were not held back from meeting the school recruitment target by lack of enthusiasm/interest in the pilot but by:

- the short time frame for completing the administrative requirements for the trial;
- school staff who had been the contacts for the trial being unavailable due to COVID-19 and other school staff not having the capacity to step in to cover their duties; and
- staff shortages and absences, meaning that collating the pupil data required from different school staff prior to randomisation was challenging and took longer than anticipated.

Schools can recruit a minimum of 12 pupils per school.

Not all schools were able to recruit the target numbers. Schools recruited 116 pupils to the trial, which averaged 11.6 pupils per school. However, between recruitment and randomisation, five pupils were excluded from school and, therefore, were removed from the trial. At the point of randomisation, 111 pupils were included in the trial, which averages 11.1 pupils per school, recruiting 92.5% of the target.

That a baseline response rate to the questionnaire reaches at least 80% and that loss to follow-up does not exceed 70%.

The baseline response rate was 100%, which exceeded the 80% target, and the follow-up rate was 78% which exceeded the 70% target.

9. Conclusion – Pilot Trial

Figure 9.1 Summary of pilot findings

Research question	Finding
1. Can RFL identify and gain the agreement of schools to participate in the trial in the numbers required?	<p>.</p> <p>The developers recruited 10 schools to the trial which had not previously received the mentoring programme. They did not meet the target of 14 schools, in part because of the requirement that schools had not previously received the intervention; and principally because of the short time frame for schools to complete the administrative tasks and recruitment prior to randomisation. This was exacerbated by COVID-19, with teachers leading the trial for the school being absent. Additionally, due to schools being short-staffed (because of COVID-19), collating the pupil information required for the trial was challenging and took longer than usual to complete.</p> <p>A longer lead-in time would address this.</p>
2. Do the developers feel confident explaining the trial to the schools? Are they sufficiently clear in their description of randomisation and its consequences? Do schools	Generally, the developers were able to explain the trial to the schools, although some RFL Foundations staff who were working directly with the schools were unclear about

understand the messages about randomisation that they receive?	<p>the purpose of the baseline and follow-up survey for both intervention and control schools.</p> <p>This could be addressed by the research team directly briefing the RFL Foundations staff on the rationale and methodology for the study.</p> <p>School staff understood the process of randomisation.</p>
3. How acceptable is the experimental design to the various stakeholders (the developer and to schools)? Does it lead to difficulties in recruitment?	The design was acceptable to the developer and schools and did not appear to hinder recruitment.
4. What reasons are given for schools not wanting to participate?	Schools were willing to participate. The primary factor which hindered their involvement was the short time frame for schools to complete the administrative tasks and recruitment prior to randomisation.
5. Can schools recruit students to the programme in advance of randomisation in sufficient numbers and consistent with the inclusion criteria?	Schools recruited 116 pupils to the pilot prior to randomisation, which equated to 11.6 pupils per school. This was just under the minimum number of 12 pupils per school.
6. Can the research team successfully access baseline information from schools for those pupils deemed as meeting the inclusion criteria?	Yes.
7. Can the study meet the legal/GDPR requirements for linking trial data to the National Pupil Database via the ONS SRS?	Yes. Additionally, in accordance with MMU ethics requirements, parents gave consent for their child's data to be included in the YEF data archive, where this could be linked to the public management data such as the National Pupil Database.
8. How many parents withdrew their child from the study? What were the reasons given for withdrawing?	<p>No parents withdrew their child from the trial following randomisation.</p> <p>One parent withdrew their child (identified and recruited by the school) from the study at the point of obtaining consent. Their primary reason was concern about the YEF data archiving.</p>
9. Subsequent to recruitment of the target sample, can randomisation procedures be successfully initiated – what is the reaction of schools to the outcome of randomisation?	Yes. The schools were happy to accept the randomisation.
10. How many schools/pupils withdrew from the study post-randomisation, and what were the reasons given for withdrawal?	None.

11. Can baseline data in the form of questionnaires be successfully collected from identified eligible pupils in all participating schools prior to randomisation? What response rate is achieved? Can any barriers to successful completion of questionnaires be identified?	Yes. The response rate was 100% for pupils included in the randomisation process.
12. Can follow-up data at five months post-randomisation, in the form of questionnaires, be collected successfully from all pupils in both schools randomised to intervention and to control? What is the overall response rate? And the response rates in intervention and control schools? What factors act as barriers to completion of questionnaires, and do these differ in intervention and control schools?	Yes. Follow-up data were collected from intervention and control schools. The overall response rate was 78% of pupils recruited and randomised – 73% for intervention schools and 84% for control schools.
Evidence of promise?	Due to a smaller sample size than anticipated, we were not able to undertake the proposed evidence of promise analysis. The estimates we have of the difference in scores on the outcome measures for pupils in intervention and controls are very uncertain, but in our sample intervention group, pupils reported lower difficulties on average and a lower problem frequency than pupils in the control group. There is a high chance that these results would not replicate in another trial.

9.1 Evaluator judgement of evaluation feasibility and interpretation

A critical question for a future efficacy trial is: Can the RFL and local foundations scale up from this pilot trial and recruit a sufficient number of schools for an efficacy trial? As set out in the estimated sample sizes (see 8.3 and Table 8.6), assuming a school response rate of 90% and a minimum detectable effect size of 0.25 (standard deviations), the RFL and foundations would need to recruit approximately 90 schools. If a lower school response rate of 80% was assumed, then RFL would need to recruit around 100 schools.

As suggested above, the optimum conditions for school recruitment in the RFL areas are:

- the centrality of the RFL club in the cultural life and allegiance of the town;
- socio-economic context – focussing recruitment on schools in areas with high levels of socio-economic deprivation – something which RFL Foundations provision, such as the mentoring programme, can make some contribution to addressing;
- the necessary staff resource, commitment and enthusiasm of the RFL foundation in the local area to the provision of services to their local communities and the opportunity to secure funding to further this; and
- the necessary staff resource, commitment and enthusiasm of the RFL centrally to co-ordinate, support and troubleshoot.

Are there sufficient numbers of towns across Northern England where this applies? Previous discussions with the RFL suggest that there may be sufficient towns and associated professional RFL clubs and foundations where the schools could be recruited from. There are currently 11 clubs in the RFL Super-League located across 10 towns in Northern England and 11 clubs in the RFL Championships League located across 11 towns in Northern England, i.e. a total of 22 clubs across 21 towns.

This would require the recruitment of 4–6 schools on average in each of these towns.

This would need further examination and confirmation with the RFL prior to embarking on planning an efficacy trial. Notwithstanding this, based on learning from the pilot trial, the following would facilitate the effective implementation of a future efficacy trial.

RFL foundation participation

RFL foundation participation could be encouraged through direct engagement between the research team and RFL Foundations, in conjunction with the RFL, at the following stages:

- Recruiting foundations to join an efficacy trial – through presenting the findings from the pilot trial, the learning from the pilot trial and explaining how the trial would work.
- Briefing foundations that agree to participate in the efficacy trial – on the detailed processes of running the trial in their local areas and how to troubleshoot and report issues to the RFL and research team.

Additionally, new foundations recruited to the efficacy trial could learn from foundations that participated in the pilot trial. This could occur at the two stages proposed above and through an informal buddying scheme through the efficacy trial itself.

School recruitment participation

Key to school recruitment and participation were the pre-existing relationships that the RFL Foundations/clubs had with schools. The extent to which the same pattern of pre-existing relationships operates across a wider number of RFL areas/towns than those included in the pilot trial would need to be tested. Assuming this pattern held across a sufficient number of RFL areas, then an efficacy trial would be feasible.

To further encourage school participation, testimony of teachers from schools involved in the pilot trial may help to encourage new schools to be involved.

Longer lead-in time prior to randomisation

During the pilot trial, schools were initially recruited to the pilot by RFL Foundations during June/July 2021. However, discussion about pupil recruitment and further engagement between RFL Foundations staff and schools about pilot set-up at this time was not possible due to schools making preparations for the end of the school year.

The intention was to commence pupil recruitment in September 2021 at the start of the school year. In practice, this was not possible due to school staff being busy at this critical time of the year and, therefore, being unable to attend to anything other than their core teaching duties. Arranging the pilot trial was a secondary priority. Additionally, there were delays in finalising the school and research team MoU and research protocol, which required sign-off by the YEF. The administrative arrangements undertaken by school staff, and supported where possible by RFL Foundations staff, did not commence in earnest until October 2021, with the deadline for randomisation – the beginning of December 2021 – being the cut-off

point for schools to participate in the pilot trial. In order to allow more time for the administrative arrangements to be completed, including obtaining parental consent, provision of pupil data from school records and completion of the baseline survey by pupils, the deadline for randomisation was delayed as far as possible into December 2021.

Accounting for the rhythm of the school year and the level of competing core school activity will, therefore, need to be factored into a future efficacy trial. Additionally, allowing a longer lead-in time prior to randomisation would be required to allow school staff sufficient time to complete the necessary administration of the pilot.

Avoid reliance on single-school contacts

One of the challenges for the RFL Foundations staff was the reliance on generally a single point of contact at schools. During the pilot trial, staff absences due to COVID-19 hindered the completion of the pre-randomisation processes. In a future efficacy trial, while COVID-19 may be less of an issue, staff absence due to other reasons could also affect the running of the pilot; therefore, having both a primary and secondary contact (willing to deputise for the primary) at each school would mitigate such risks.

Revised theory of change logic model

A revised theory of change logic model focussed solely on the Educate Mentoring Programme is presented in Appendix 6. This logic model was devised by the RFL in conjunction with the research team following the completion of the data collection for the pilot trial. The design of a future efficacy trial will need to be informed by this.

10. Final Summary

As noted in 1.2, sport-based programmes, such as the RFL's Educate Mentoring Programme, are relatively under-researched. This feasibility study and pilot trial contribute to this limited evidence base. Our findings suggest that there is some very limited evidence to support the theorising that a combination of rugby and other fitness activities provided within a structured group mentoring programme – with room for flexing to accommodate participant needs – offers opportunities to engage positively with school pupils who may be disengaged from school and exhibiting some problem behaviour. Though, as we have stressed throughout, our results are accompanied by a high degree of uncertainty.

Adapting Giordano et al.'s (2002) notion of 'hooks for change', the association of the programme with the RFL club and delivered by RFL Foundations staff appears to provide a 'hook for programme engagement' for pupils and their parents.

The programme, as delivered, appears to address Lipsey's (2009) requirements of maximising its potential for impact by focussing on skill building, having a consistent programme and targeting the appropriate level of support to the needs of participants.

In relation to the feasibility of undertaking an efficacy trial based on learning from the pilot trial – an efficacy trial would be feasible – with attention paid to addressing some of the challenges which arose during the trial. Prior to committing to this, further consideration would need to be given to establishing the scalability of delivery to ensure an appropriate sample size of schools and pupils is achieved. Initial examination of this issue suggests that this is possible.

Given the proliferation of sports-based programmes intended to divert at-risk young people from criminal activity and facilitate their engagement in education and school attendance, it is recommended that the YEF give consideration to the commissioning of an efficacy trial of the Educate Mentoring Programme to advance the evidence base in this under-researched area.

References

- Andrews, J., & Andrew, G. (2003). Life in a secure unit: The rehabilitation of young people through the use of sport. *Social Science and Medicine*, 56, pp. 531–550.
- Antonakis, J., Bastardo, N., & Rönkkö, M. (2021). On ignoring the random effects assumption in multilevel models: Review, critique, and recommendations. *Organizational Research Methods*, 24(2), pp. 443–483.
- Armitage, H., Heyes, K., & O’Leary, C. (2020). What Makes for Effective Youth Mentoring Programmes A rapid evidence summary. Nesta. Manchester Metropolitan University. Retrieved from: https://e-space.mmu.ac.uk/626106/1/What_Makes_for_Effective_Youth_Mentoring_Programmes.pdf
- Armour, K., Sandford, R., & Duncombe, R. (2013). Positive youth development and physical activity/sport interventions: Mechanisms leading to sustained impact. *Physical Education and Sport Pedagogy*, 18(3), pp. 256–281.
- Audit Commission. (1996). Misspent Youth: Young people and crime. London: Audit Commission.
- Chamberlain, J. M. (2013). Sports-based intervention and the problem of youth offending: A diverse enough tool for a diverse society? *Sport in Society*, 16(10), pp. 1279–1292.
- Collins, T. (2009). *A social history of English rugby union*. Routledge.
- Crowther, J. (2022). Kicking crime into touch: An ethnographic exploration of rugby union as a vehicle for supporting positive youth development in the youth justice system. (Doctoral thesis). Manchester Metropolitan University.
- Deighton, J., Lereya, S. T., Casey, P., Patalay, P., Humphrey, N., & Wolpert, M. (2019). Prevalence of mental health problems in schools: Poverty and other risk factors among 28 000 adolescents in England. *The British Journal of Psychiatry*, 215(3), pp. 565–566.
- Dong, N., & Maynard, R. A. (2013). PowerUp!: A tool for calculating minimum detectable effect sizes and minimum required sample sizes for experimental and quasi-experimental design studies. *Journal of Research on Educational Effectiveness*, 6(1), pp. 24–67. <https://doi.org/10.1080/19345747.2012.673143>
- Gensheimer, L. K., Mayer, J. P., Gottschalk, R., & Davidson, W. S. (1986). Diverting youth from the juvenile justice system: A meta-analysis of intervention efficacy. In S. Apter & A. Goldstein (Eds.), *Youth violence: Programs and prospects* (pp. 39–57). Elmsford, NY: Pergamon Press.
- Gerber, A. S., & Green, D. P. (2012). *Field Experiments: Design, Analysis, and Interpretation*. New York, NY: W. W. Norton & Company.
- Giordano, P. C., Cernkovich, S. A., & Rudolph, J. L. (2002). Gender, crime, and desistance: Toward a theory of cognitive transformation. *American Journal of Sociology*, 107(4), pp. 990–1064.
- Hayes, R. J., & Moulton, L. H. (2022). *Cluster randomised trials* (2nd ed.). Chapman and Hall/CRC.
- Herrin, J. (2022). *CLTEST: Stata modules for performing cluster-adjusted chi-square and t-tests*.
- Heß, S. (2017). Randomization inference with Stata: A guide and software. *Stata Journal*, 17(3), pp. 630–651.
- Holt, R. (1990). *Sport and the British: A modern history*. Oxford University Press.
- Jump, D. (2020). *The criminology of boxing, violence and desistance*. Bristol University Press.

- Lerner, R. M. (2004). Diversity in individual-context relations as the basis for positive development across the lifespan: A developmental systems perspective for theory, research, and application. *Research in Human Development, 1*(4) pp. 327–346.
- Lipsey, M. (2009). The primary factors that characterize effective interventions with juvenile offenders: A meta-analytic overview. *Victims & Offenders, 4*, pp. 124–147. doi:10.1080/15564880802612573
- McArthur, K., Wilson, A., & Hunter, K. (2017). Mentor suitability and mentoring relationship quality: Lessons from the Glasgow Intergenerational Mentoring Network. *Journal of Community Psychology, 45*(5), pp. 646–657. <https://doi.org/10.1002/jcop.21884>
- Meek, R., & Lewis, G. (2014). The impact of a sports Initiative for young men in prison: Staff and participant perspectives. *Journal of Sport and Social Issues, 38*(2) pp. 95–123.
- Newburn, T., & Shiner, M. (2006). Young people, mentoring and social inclusion. *Youth Justice, 6*(1), pp. 23–41.
- Pollock, A. (2014). Tackling rugby: What every parent should know. 1st ed. New York: Verso Books.
- RugbyWorks, D. (2017). *Social Impact Report 2017*. [online] [Accessed 3rd November 2021] <https://www.dallagliocycleslam.com/images/downloads/social-impact-report-2017.pdf>
- Schaffer, M. E., & Stillman, S. (2010). *xtoverid: Stata module to calculate tests of overidentifying restrictions after xtreg, xtivreg, xtivreg2 and xtaylor*. <http://ideas.repec.org/c/boc/bocode/s456779.html>
- Vallis, D., Singh, A., Uwimpuhwe, G., Higgins, S., Xiao, Z., De Troyer, E., & Kasim, A. (2021). *EEFANALYTICS: Stata module for Evaluating Educational Interventions using Randomised Controlled Trial Designs*.
- Wilson, H. A., & Hoge, R. D. (2013). The effect of youth diversion programs on recidivism: A meta-analytic review. *Criminal Justice and Behavior, 40*(5), pp. 497–497. <https://doi.org/10.1177/0093854812451089>

