





Please cite the Published Version

Wong, Kevin , Morris, Stephen , Wallace, Stephanie , Roberts, Anton, Gray, Paul  and Burchell, Emily (2023) Empire Fighting Chance: boxing based mentoring: feasibility and pilot trial report. Project Report. Youth Endowment Fund.

Publisher: Youth Endowment Fund

Version: Published Version

Downloaded from: <https://e-space.mmu.ac.uk/632355/>

Enquiries:

If you have questions about this document, contact openresearch@mmu.ac.uk. Please include the URL of the record in e-space. If you believe that your, or a third party's rights have been compromised through this document please see our Take Down policy (available from <https://www.mmu.ac.uk/library/using-the-library/policies-and-guidelines>)

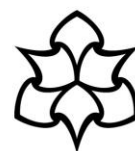
EVALUATION REPORT

Empire Fighting Chance: Boxing-based mentoring

Feasibility and pilot trial report

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

July 2023



**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 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, agree what works and then build a movement to make sure that young people get the very best support possible. Our strategy sets out how we'll do this. 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

Contents

About the Youth Endowment Fund.....	2
About the evaluator.....	5
1. Introduction.....	8
1.1 Background.....	8
1.2 Research literature.....	8
1.3 Intervention.....	10
1.4 Ethical review	13
1.5 Data protection	14
1.6 Project team/stakeholders.....	14
2. Feasibility study	16
2.1 Overview	16
3. Methods – feasibility study	18
3.1 Theory of change/logic model development.....	18
3.2 Data collection – feasibility study.....	20
3.3 Interpreting the findings and limitations.....	21
3.4 Analysis – feasibility study	22
3.5 Timeline – feasibility study.....	23
4. Findings – feasibility study.....	23
4.1 Participants	24
4.2 Intervention feasibility.....	24
5. Conclusion – feasibility study.....	35
5.1 Implications for pilot study.....	37
6. Pilot trial	38
6.1 Research aims and objectives.....	38
6.2 Trial implementation questions	39
6.3 Statistical design questions	40
6.4 Evidence of promise questions.....	40
6.5 Intervention implementation questions	41
6.6 Success criteria and/or targets	41
7. Method – pilot trial.....	42
7.1 Trial design.....	43

7.2 Recruitment of schools and randomisation	43
7.3 Pupils.....	44
7.4 Data collection/outcomes	44
7.5 Interpreting the findings and limitations.....	46
7.6 Approach to data analysis.....	47
7.7 Timeline of pilot trial.....	48
8. Findings – pilot trial	48
8.1 Participants	48
8.2 Trial implementation.....	50
8.3 Sample size determination	55
8.4 Intervention implementation	58
8.5 Evidence of promise.....	64
8.6 Readiness for trial	65
9. Conclusion – pilot trial	67
10. Final summary	68
References	70

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 anti-social/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 datasets both independently and within the Office for National Statistics Secure Research Service. We also offer expertise and experience in the use of validated tools and police national computer data 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

Empire Fighting Chance (EFC) aim to use non-contact boxing programmes accompanied with personal development support to reduce anti-social and criminal behaviour among at-risk young people. Based in Southwest England and South Wales, EFC deliver several programmes including:

- Training with the Champions, a 20-week programme that pairs a young person with a coach and integrates non-contact boxing with psychological education and mentoring
- Therapeutic Boxing, a 12-week initiative that supports traumatised young people with complex needs, where boxing is combined with a long-term, intensive one-to-one relationship with a mental health specialist
- Hello Future, a career-focused intervention that supports young people to explore career goals in between boxing-related physical activities.

YEF funded a feasibility and pilot evaluation of EFC's programmes. The feasibility study examined all three aforementioned interventions. It aimed to ascertain whether these programmes achieved their intended outputs for their intended target groups; explore the barriers and facilitators to delivery; detail how much of the interventions young people received; and assess quality, responsiveness and reach. To explore these questions, programme monitoring data on 831 participants and an online satisfaction survey undertaken by 204 young people were analysed. Interviews were also conducted with 10 project staff and six participants and their parents. Young people aged 10–14 who were at risk of involvement in crime and anti-social behaviour were targeted by the programmes, and the feasibility study ran from November 2019–June 2021.

The pilot study then evaluated a new, school-based, boxing mentoring programme, which was an adapted version of Training with the Champions. The new programme aimed to deliver a 12-week mentoring intervention in schools, where weekly physical activities (including skipping, circuit training, punch pads and boxing techniques) were delivered by an EFC coach. While leading these sessions, the coach would discuss 'Personal Development Points' with children (such as the importance of regulating mood, eating well and taking responsibility for your actions). The programme targeted pupils in Years 8 and 9 who had demonstrated behavioural difficulties, poor attendance and an interest in sport. The pilot evaluation aimed to assess how feasible an efficacy randomised controlled trial of the programme may be, inform the design of a future evaluation and assess whether there is any preliminary evidence of promise. To explore these questions, the evaluator analysed quantitative project delivery data, administered questionnaires featuring validated measures (such as the Strengths and Difficulties Questionnaire [SDQ] and the Problem Behaviour Frequency Scale [PBFS]) and interviewed 17 pupils, five project staff and six teachers. The pilot commenced in September 2021 and concluded in June 2022. Both the feasibility and pilot studies took place during the COVID-19 pandemic, requiring both the delivery and evaluation teams to adapt to challenging circumstances.

Key conclusions

The feasibility study found that all three programmes were delivered to young people, with 1,050 young people receiving an intervention. No significant barriers to delivery were identified (although it was recognised that the mode of delivery was often adapted due to COVID-19). Fifty-nine per cent of young people received up to five sessions of a programme, 28% received up to 10, and 13% more than 10.

The feasibility study found that EFC coaches had the right experience and background to work with targeted children. The children interviewed and surveyed found the interventions engaging and perceived their own behaviour to improve as a result of the programme. The evaluator posited that the use of boxing to deliver a therapeutically informed intervention differed significantly from alternative services.

In the pilot study, EFC recruited eight schools against a target of 12 (67%) and 91 pupils, compared to a target of 144 (63%). EFC were able to effectively explain the trial to those schools involved, and the evaluation design (including randomisation) was deemed acceptable by EFC, schools and parents.

One hundred per cent of pupils involved in the pilot provided data at baseline; 62% then provided follow-up data five months after randomisation. However, as a result of a small overall sample size, there was insufficient data collected in the pilot study to assess whether the school-based boxing mentoring programme demonstrated evidence of promise.

The small number of pupils interviewed in the pilot had positive perceptions of the EFC sessions. Pupils reported that EFC staff listened to them and provided encouragement and engaging activities.

Interpretation

The feasibility study found that all three programmes were delivered to young people, with 1,050 young people receiving an intervention. Almost 75% of all sessions were delivered one-to-one, with the remainder delivered as group sessions. Seventy-five per cent of programme participants were referred from schools (with youth workers, parents and youth offending teams also referring children). No significant barriers to delivery were identified (although it was recognised that the mode of delivery was often adapted due to COVID-19). In some instances, the perception of boxing as an aggressive sport appeared to deter parents from EFC. However, these concerns were assuaged when it was explained that the boxing was non-contact. Fifty-nine per cent of young people received up to five sessions of a programme, 28% received up to 10, and 13% more than 10. Interviews with a small number of young people suggested that those referred to EFC projects had specific needs relating to anger; however, no data were available to assess the extent to which the young people were 'at risk'. The feasibility study found that EFC coaches had the right experience and background to work with targeted children. The children interviewed and surveyed found the interventions engaging and perceived their own behaviour to improve as a result of the intervention. The evaluator posited that the use of boxing to deliver a therapeutically informed intervention differed significantly from alternative services.

In the pilot study, EFC recruited eight schools against a target of 12 (67%) and 91 pupils, compared to a target of 144 (63%). The target was not reached for various reasons, including the evaluation's administration requirements (and short timeline to complete administrative tasks prior to randomisation), the restrictive nature of pupil selection criteria and challenges contacting schools during the pandemic. One hundred per cent of pupils involved in the pilot provided data at baseline; 62% then provided follow-up data five months after randomisation. However, as a result of a small overall sample size, there were insufficient data collected in the pilot study to assess whether the school-based boxing mentoring programme demonstrated promise.

Project staff interviewed in the pilot study explained that the intervention delivered in the pilot was similar to those delivered in the feasibility phase. The pilot's boxing-based mentoring programme offered a 'condensed' version of Training with the Champions but comprised the same activities and included weekly 60-minute sessions. Despite being only 12 weeks (compared to Training with the Champions' usual 20-week duration), project staff deemed the intervention to be of an appropriate duration. There was variation in how the programme was delivered in each school; interventions between schools included a focus on different Personal Development Points. This may confirm the uniqueness and bespoke nature of each programme rather than the non-completion of the intended intervention. The small number of pupils interviewed in the pilot study explained that EFC sessions offered the opportunity to reflect on how to deal with difficult situations (such as avoiding getting into fights), and some remarked that they had tried to use some of the techniques learnt.

Implementation challenges identified in the pilot included the initial apprehension from girls (who showed initial nervousness in participating before fully engaging) and the size of groups (with project staff noting that it was easier to deliver to eight children rather than 12 children). Seventy-six per cent of children in the pilot study intervention schools completed the programme, with 24% dropping out. Non-participation occurred when pupils forgot their PE kit or were ill or unwilling to participate. Participant interviews revealed a positive perception of the programme, with pupils reporting that EFC staff listened to them and provided encouragement and engaging activities. YEF recognises the evidence gap currently underpinning sports-based youth violence reduction programmes. Given many of the positive findings detailed in this report, YEF is therefore currently exploring whether an impact evaluation is possible.

1. Introduction

1.1 Background

This report presents the methodology and findings for the evaluation of programmes devised and delivered by EFC for young people aged 10–14 in Southwest England and South Wales.

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 apply to both studies.

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

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

For the feasibility study, all three of the programmes set out in the theory of change logic model (see Figure 3.1) were in scope, namely Training with the Champions, Therapeutic Boxing, and Hello Future.

During the feasibility study, it was agreed between EFC, the research team and the YEF that the boxing-based mentoring programme would be tested in the pilot RCT. This combined elements of Training with the Champions and Therapeutic Boxing and was designed to be delivered as a group-based mentoring programme in schools.

The purpose of the pilot RCT was to:

1. *Assess the extent to which an efficacy study evaluating the effectiveness of EFC's boxing-based mentoring programme 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 primary focus of this brief literature review is to help inform and provide literary context for the pilot study of the EFC's boxing-based mentoring programme and will draw on a range of evidence such as meta-analysis, systematic reviews and more conceptual pieces of work.

Youth mentoring is a concept that is poorly defined but widely used, as exactly what constitutes a mentoring relationship can be hard to define. Some programmes described as youth mentoring are really academic programmes. Some mentoring relationships are planned. Mentoring programmes might 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). Mentoring can be said to contain some common themes, however, that are fairly universal. Mentors usually identify and agree on appropriate goals with their mentees, such as with EFC who 'ask young people what their best hopes are from coming to Boxing Therapy and then help young people to discover and use their talents to achieve them' (Empire, 2021, p.6). Typically, mentoring involves the transference of knowledge or skills. This can be general e.g. life skills from the lived experience of the mentor, or specific information such as employability related skills (Stewart & Openshaw, 2014). The most critical aspect to mentoring is arguably the positive mentoring relationship itself, regardless of the context in which it is used (Fries-Bitt & Snider, 2015). Chiara, Gatti and Quaglino (2007) classify mentoring relationships into two categories, as either serving a psychosocial or career function. With the former, the respect, warmth, compassion and rapport of the mentors can provide a role model for the mentee to emulate, to transform the individual towards more pro-social behaviours. Conversely, with the latter, mentoring programmes with more of a career focus share closer similarity with activities such as coaching and tutoring (Jones & Smith, 2022).

Although informal mentoring has always taken place in the sporting context, the past few decades have seen a steady professionalisation of the field and an increased awareness of sport mentoring as a viable intervention to create change, 'granting technical, tactical and physical skills' (Jones, Harris & Miles, 2009, p.276). One of the most notable early pieces of work that captured the potential impact of sport was the influential Wolfenden Report (1960), which recommended the expansion of sport and argued for the value of sporting facilities in providing provision for young people in local communities. Recent governmental reports continue to recognise sports impact on promoting societal social cohesion (GOV.UK, 2022). The noteworthy Misspent Youth Report (1996) publicly posed the question as to what the cause and nature of youth offending was and what public measures could be taken to reduce youth crime, such as providing sporting schemes that had the potential to reduce offending.

Since the publication of the Misspent Youth Report, there has been sustained interest in using sports-based interventions (SBIs) as a method of behaviour change and, with it, an ongoing debate as to their ability to 'facilitate desistance' (Silva & Kennedy, 2022, p.104). SBIs have enjoyed widespread support from governmental institutions and independent organisations in the UK such as YEF, with the Big Brother/Sister mentoring schemes in the United States (DfE, 2022; Stewart & Openshaw, 2014). Eveline and Stams' (2018) study on the predictors of SBI success found three crucial factors: social-moral context (presence of prosocial models to emulate) of the club/intervention, level of coach or mentor motivation and the choice of sporting intervention. The choice of sporting intervention can also be salient, with some studies indicating that full-contact sports in some cases were associated with increased offending behaviours (Jenkins & Ellis, 2011). SBIs do enjoy some support in the literature base – a study by Spruit et al. (2018) on SBI's impact on rates of delinquency using police suspect data found small-to moderate effects for its SBI 'Only You Decide Who You Are' mentoring programme. Meta-analyses on the effectiveness of mentoring programmes, such as DuBois, Portillo, Rhodes, Silverthorne and Valentine (2011), have also been supportive for mentoring as a viable intervention strategy for young people at risk.

EFC is a mentoring programme that utilises boxing as its primary vehicle for change, in addition to other therapeutic components. Boxing interventions have been cited previously in the literature as a means for reducing delinquency and anti-social behaviour in young people (particularly young men). Boxing interventions, it is argued, provide a 'hook for change' (Giordano, Cernkovich & Rudolph, 2002), that these programmes provide a unique opportunity for individuals to challenge their criminogenic narratives and instead create a new pro-social identity (Maruna, 2007). Arguably, part of boxing's appeal as a mentoring intervention is that it allows for the performance of certain idealised forms of masculinity, i.e. displays of physical toughness and competition. In *Boxing Narratives as a Means of Forming Desistance*, Jump and

Smithson (2020) suggest that boxing interventions are unique in the sense that they allow the young people to learn how to lose, to acknowledge failure as a common feature of life while also providing positive social opportunities and a place of stability in an otherwise chaotic home environment. The literature does contain equivalent examples to EFC – Deuchar, Sjøgaard, Kolind, Thylstrup and Wells' (2016) ethnographic study of a boxing rehabilitation centre documents how a mentoring boxing intervention diverted youth from gang membership. They argue that part of the appeal of boxing is that it contains much of the 'traditional' hegemonic masculinity that is favoured and performed in various criminological contexts. As such, it can provide an avenue for some working-class men to express aggression/frustration in more socially acceptable ways and maintain status with their peers, while also building supportive social networks (Deuchar, R. & Weide, R. 2019).

It would be fair to say that the evidence base is a mixed picture for the efficacy of SBIs more generally to create significant and lasting changes. Some of the limitations around the efficacy of such programmes centre around measurement inconsistencies, e.g. poorly defined outcome data (Woods, Breslin & Hassan, 2017). Often, included measures are hard to determine, such as what implementation procedures were used and determining what the specific components of the mentoring interventions were, which makes identifying that magic ingredient difficult to grasp (Tolan, Henry, Schoeny, Lovegrove & Nichols, 2014). Many scholars have argued convincingly that the success of mentoring decreases over time, with crime increasing again after programme completion due to a lack of long-term provision in those areas (Chamberlain, 2013). Often, outcomes such as educational attainment are rarely recorded, and the SBI's impact can be hard to define. From a broader social and cultural perspective, 'at risk' can be synonymous with poverty itself, which SBIs do not challenge. The causes of that criminogenic reality are in part structural, which such programmes often ignore by focusing the 'problem' solely upon the individual (Schippers, 2008). Any sport-based mentoring intervention cannot by itself prevent juvenile delinquency and must take into account the wider contextual factors (DuBois, 2011).

1.3 Intervention

Feasibility study programmes

EFC is a charity that uses the power of non-contact boxing to engage young people and fight the impact of poverty on young people's lives.

EFC have developed a fusion of boxing and psychology to help enable young people to overcome the disadvantage that they face. Their programmes weave in psychologically informed support while young people box. EFC were originally commissioned by the YEF to deliver three programmes targeted at 10–14-year-olds at risk of committing crime and anti-social behaviour. The programme inclusion criteria during the feasibility study were less tightly specified than for the pilot trial (see Section 7.3).

- **Training with the Champions:** This 20-week programme pairs a young person with a coach and integrates non-contact boxing with psychological education and mentoring.
- **Therapeutic Boxing:** This 12-week programme supports traumatised young people with complex needs, helping them to manage emotional distress and change negative ways of behaving. NAOS (a mental health specialist) offers young people a long-term intensive one-to-one relationship with a therapist, with boxing being utilised as an enjoyable way to explore emotions.

- **Hello Future:** This careers programme supports young people to explore their talents and career goals in between boxing-related physical activities, the aim being for young people to progress into stable, fulfilling employment.

Referrals to these programmes were to be made by schools, youth providers, and self-referrals from young people and/or their parents.

These programmes were examined through the feasibility study. Details about how these programmes are intended to work are presented within the theory of change logic model at Figure 3.1. They were designed around Personal Development Points, which are explained further in the section below.

Pilot trial programme

The boxing-based group mentoring programme was tested during the pilot study. Delivered in schools, it is intended to run for 12 weekly sessions, combining non-contact boxing physical activities with personal development. This programme is an amalgam of two of the programmes initially commissioned by the YEF: Training with the Champions and Therapeutic Boxing. It was devised by EFC following discussions with the research team to fulfil the requirement for a boxing-based programme that could be tested through a schools-based pilot trial. None of the three existing programmes lent themselves to this.

The physical activities are delivered by EFC coaches and include skipping, circuit training, punch pads and boxing techniques. The activities are intended to engage the young people and to be used as opportunities for the coaches to speak with them in relation to Personal Development Points.

The most common Personal Development Points that make up the 12-week programme are described by EFC as follows:

Week	Personal Development Point	Focus of the session
1	The magic of moods	When you're in an extreme mood, it's best not to trust your thinking or make any decisions.
2	Awesome exercise	Exercise provides the opportunity to develop communication and social skills and helps to build confidence.
3	Positive reactions	You can't control what happens around you, but you can control your reaction to it.
4	Going with the flow	You'll experience more stability, ease and flow in your life if you learn not to fight your thoughts and feelings.
5	Remove the victim	Take accountability for actions you can control rather than blaming the things you cannot.
6	You are what you eat	Without providing your body with the right fuel, it becomes hard to perform and function.
7	Relaxed excellence	We are more effective when relaxed; awareness of when we are trying too hard relieves stress and tension.

8	Focus on action not outcome	Thinking about winning doesn't help you to win, but thinking about what actions it takes to succeed will increase your chances of winning.
9	The magic of mini goals	Achieving small and regular goals helps us to build momentum and progress in life.
10	Feel the fear	When you feel scared or unsettled, hold and experience the feelings instead of moving away from them.
11	The growth mindset	There is always an opportunity to improve and develop new skills; putting your energy here encourages positive development.
12	The happiness myth	Searching for a happy state in the future limits our ability to enjoy the present moment.

Further information provided by EFC about the intended content of these sessions is provided in Appendix 1.

The boxing-based mentoring programme is not intended to be a prescriptive programme. The coaches have been trained on how to weave the Personal Development Points into their sessions with the young people.

All coaches have lived experience, an ability to build relationships with young people and a belief that sport can help change lives. EFC currently have more female deliverers than male, and all come from working class backgrounds. EFC believe that class is an important aspect that allows an immediate instinctive understanding of circumstance and how institutions affect the young people they work with.

Coach training includes:

- Initial and then weekly on-going sessions with EFC's retained elite sports psychologist
- Scheduled and ad-hoc training from the Head of Therapy around issues including suicide awareness, self-harm, etc.
- Boxing qualifications and on-going boxing training
- Safeguarding – full training from a retained consultant annually plus ongoing (minimum of six week), contextual training
- Specific training around gang culture and violence from a retained consultant, previously a gang member in Birmingham.

It is anticipated that the coaches work with the young people in response to the needs identified at each session. Therefore, it is expected that no 12-week programme will look the same; however, the way in which this programme is intended to work is the same as for the programmes detailed in the theory of change logic model (Figure 3.1).

Intended social and psychological outcomes

EFC have stated that the boxing-based mentoring programme is intended to achieve the following outcomes:

OUTCOME 1» Young people will report experiencing positive changes in how they see and feel about themselves as a result of their participation in Empire’s programme. » Young people will report increased aspiration and desire to achieve and are not afraid to try, fail and try again. » Young people will report making new positive friendships and are unafraid to mix with different people.

OUTCOME 2» Young people will report they’re more likely to persist with and focus on achieving objectives, even in difficult circumstances, and are able to reject negative influences. » Young people will report remaining positive and optimistic despite suffering criticism and setbacks and make their own decisions. » Young people will report being able to regulate inappropriate behaviour and outbursts when under pressure.

OUTCOME 3» Young people, who we support, will report being more able to return to school, stay in school or start new education/training courses. » Young people will report they are more able to take advantage of the opportunities available to them. » Young people will report that they’re less afraid of failing.

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 12/12/2019. Due to COVID-19, an amendment to the original application and approval was made to extending the time frame of the study. Ethical approval for the extension was granted on the 17/6/2020.

The ethical approval for the pilot RCT was registered on the University’s Ethos Ethics application and received approval on 21/06/2021.

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 archiving of the results of the pre and post survey with the YEF.

This requirement for consent impacted on the level of data that the research team were able to obtain for the pilot RCT, which is detailed in Section 7.4.

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 2/12/2021. The trial registration DOI is <https://doi.org/10.17605/OSF.IO/DR9T6>.

1.5 Data protection

A data sharing agreement was established between MMU and the EFC relating to the sharing of data for the feasibility study and pilot trial.

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 EFC. 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 EFC 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 EFC; and
- determining the wording and finalisation of the MoU between MMU and schools that participated in the pilot RCT.

The MMU evaluation team and their roles are detailed below:

- Kevin Wong – project director
- Paul Gray – project manager/key liaison with EFC, validated survey tool lead
- Stephen Morris – pilot RCT and quantitative data lead
- Stephanie Wallace – pilot RCT researcher
- Deborah Jump – 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 Section 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 focused on these dimensions as a framework for understanding and examining the implementation of the three programmes delivered during the period of the feasibility study.

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 programmes 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 for this evaluation.

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 the boxing-based mentoring) would be extended by an additional six months to account for the programme delay and disruption arising from COVID-19.

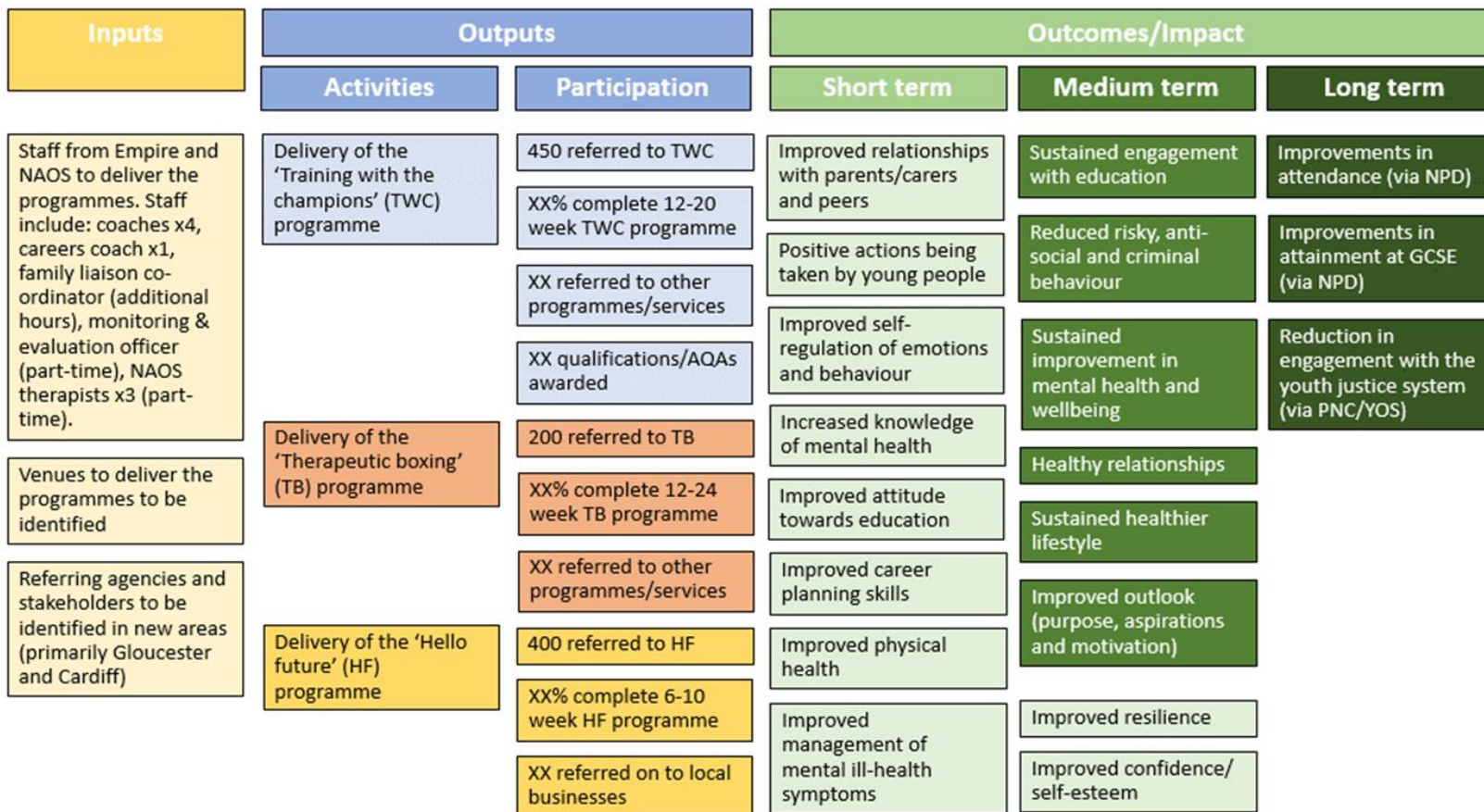
3. Methods – feasibility study

3.1 Theory of change/logic model development

The theory of change logic model in Figure 3.1 was developed by the research team and EFC staff shortly after funding for the project and the evaluation was confirmed. It covers the three programmes that EFC were originally commissioned by the YEF to deliver: Training with the Champions, Therapeutic Boxing, and Hello Future. The version presented below was the result of several iterations and was finalised in January 2020. It should be noted that the project team were invited to provide the missing detail from the participation section of the model. In subsequent discussions with the project team 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 team concluded that the theory of change still applied.

In Figure 3.1 below, PNC refers to police national computer and YOS refers to youth offending service. NAOS is the name of the organisation providing therapeutic support.

Figure 3.1: Empire Fighting Chance programmes – 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 boxing-based 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; interviews with programme participants	Project staff and partners n=10 Programme participants and their parents n=6	Thematic analysis related to the intervention implementation questions	Intervention implementation evaluation questions
Quantitative monitoring data on intervention take-up	Data on 831 programme participants who commenced with EFC between June 2020 and July 2021 Data were recorded by the EFC using a tool developed by the evaluation team in conjunction with developers.	Descriptive analysis	Intervention implementation evaluation questions
Online satisfaction survey to be undertaken following completion of the programme	204 participants completed the survey tool.	Descriptive analysis reporting response rates	Intervention implementation evaluation questions

Interviews

All interviews were undertaken virtually between April and June 2021. These comprised:

- Interviews with 10 agency stakeholders, including EFC project staff and partners (managers and frontline staff from youth providers and schools)¹ – all of these interviewees had experience of one of the three programmes, overseeing delivery, delivering the programmes or referring into the programmes

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

- Interviews with three young people and their parents with experience of one of the three programmes (n=6).

The partner agency interviewees (including schools and providers of youth services) were drawn from Bristol and South Gloucestershire, where delivery of the programmes was more established.

The young people and parent interviewees were drawn solely from Bristol. This was due to the challenges of EFC engaging with Welsh schools due to different lockdown conditions to that imposed in England.

It should be noted that delivery of programmes also occurred in South Wales, with interviewee recruitment facilitated by EFC. Due to the challenges they were experiencing in recruiting individuals, it was agreed between EFC and the research team that EFC would focus their efforts in the areas where their programmes were more established.

The interviews were recorded and transcribed, and data were analysed thematically in relation to the seven dimensions of the IPE framework detailed in Section 2.1.

The original intention was to interview 16 agency stakeholders (project and partner staff) and undertake four focus groups with young people. This was not possible due to the COVID-19 pandemic, which affected the delivery of the programmes and the availability and access to individuals for the evaluation.

Monitoring data

Descriptive analysis was undertaken of monitoring data for 831 young people collected by the project (using a template provided by the research team). Details of the data variables requested are provided in Appendix 4.

According to the records, 330 young people commenced with the project between June and December 2020, and 501 commenced with the project between January and July 2021.

Survey data

Descriptive analysis was undertaken of satisfaction survey data completed using an online survey tool (developed by the research team) by 204 young people between 10/3/21 and 6/6/21.

The surveys were completed by young people 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 programme delivery by EFC occurred during the 2020 COVID-19 pandemic and during 2021 following the lockdown periods. These events prevented face-to-face delivery of the programme and reduced the number of young people who could be referred to the programme via schools and other agencies, which were operating virtually and providing limited

provision. This therefore affected the access and delivery of the programme, with a subsequent knock-on impact on the data collected through the evaluation.

Interview data

The agency staff (project and partners) who were interviewed may not have represented the whole range of views among all these stakeholders. The partner interviewees were sampled from two local authority areas (Bristol and South Gloucestershire), and the extent to which the partner interviewees had experience of all three EFC interventions (see Figure 3.1) was unclear from the interview data. Access to these interviewees was via EFC, who found it challenging recruiting individuals for interview. Therefore, the interviewees were based on convenience sampling.

The young people and their parents who participated in the interviews were drawn solely from Bristol and may not have represented the range of views of all the young people and their parents who EFC worked with.

In addition, one young person and their parent were commenting on the experience of Therapeutic Boxing, another young person and their parent commenting solely on the experience of Training with the Champions, and the final young person and parent commenting on Training with the Champions and Hello Future.

The data from the young people and parents were limited. Consequently, findings from this have been included in the report where possible but were limited.

Monitoring data and survey data

These datasets represented some, but not all, of the young people that 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, 204 young people completed the end of project survey. This is just under a quarter of the 831 young people for whom EFC provided monitoring data. Data on response rates were not available.

It should be noted that there were gaps in some of the monitoring data records for the 831 young people, as detailed in the findings in Section 4 below. Data on response rates were not available.

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 were 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 2.1.

Quantitative data

The monitoring data collected by EFC across the three programmes that they delivered were 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 to the implementation evaluation questions.

The survey data provided by participants across all three programmes 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?

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–January 2020	Theory of change development
Collected for individuals who started with EFC across the three YEF funded interventions between June 2020 and July 2021	Monitoring data collection
April–June 2021	Qualitative interviews with agency stakeholders and interviews with young people participants and their parents
Completed by young people at the end of their time with the project between 10/3/21 and 6/6/21.	Satisfaction survey

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

Section 2.1): fidelity, dosage, quality, responsiveness, reach, service differentiation and adaptation. Where appropriate, these themes have been combined.

4.1 Participants

The intended age range of young people for the EFC programmes was 10–14-year-olds. Based on the monitoring data records where age was provided, (n=749) the overwhelming majority of young people (94%) were within this age range.

Neither gender nor ethnicity were set out by the project as selection criteria for the programme but are provided here for background.

Analysis of the monitoring data shows that exactly three quarters (n=625) of the 831 participants were male, with the remainder (n=206) female.

In terms of ethnicity, as shown in Table 4.1, nearly three quarters (73%, n=604) of young people were recorded as white, with 13% (n=112) recorded as black.

Table 4.1: Ethnicity of young people (n=830)

Ethnicity	Numbers	Percentage
White	604	72.77
Black	112	13.49
Mixed-race	65	7.83
Asian	45	5.42
Other ethnic group	4	0.48
Total	830	100.00

4.2 Intervention feasibility

Fidelity – how far is the programme delivery consistent with design, identifying facilitators and barriers?

Programme structure and delivery

The interview data from project staff highlighted that the EFC programmes were structured around Personal Development Points (see Section 1.3) but tailored to the needs of the individual young person and their level of engagement.

Individual sessions were structured around a boxing activity and, during breaks in the physical activity, EFC coaches initiated conversations with young people in relation to the Personal Development Points. These

conversations were developed through asking young people how they were feeling and how their lives were. Participants generally reported being comfortable in disclosing their feelings.

The monitoring data show that almost three quarters of all sessions (3,561 out of 4,758) were delivered one-to-one, with the remainder delivered as group sessions.

In relation to the purpose/content of sessions delivered, a total of 3,786 records were provided. However, not all of these records were usable for the analysis. For example, entries included case note type descriptions that did not relate to the Personal Development Points that the programmes were designed around. The research team sifted through each of these records and focused the descriptive analysis on those records that were linked to Personal Development Points (as recorded within the entry itself).

This reduced the number of records to 1,640, and the analysis of these records is presented in Table 4.2. Rows that have been shaded show a match between the recorded purpose and content of sessions and the Personal Development Points that are intended to be covered by the programmes. As shown in Table 4.2, the seven most frequently recorded purpose/content of sessions equate with seven out of the 12 Personal Development Points outlined in Section 1.3. These same records suggest that 67% of the sessions included in this analysis relate to these seven development points, with 11 of the 12 Personal Development Points represented across the dataset. The only Personal Development Point that forms part of the hybrid boxing-based mentoring programme that was not recorded in this dataset was 'Remove the victim'.

This provides some evidence that all but one of the Personal Development Points detailed in Section 1.3 have been implemented in some form during the period covered by the monitoring data records.

Table 4.2: Purpose/content of mentoring sessions delivered (n=1,640)

Purpose/content	Number of sessions	Percentage of sessions
Mini goals	363	22.13
Positive reactions	234	14.27
Focus on action over outcome	97	9.02
Growth mindset	119	7.26
Relaxed excellence	87	5.30
Awesome exercise	84	5.12
Feel the fear	70	4.27

Thoughts on their own	69	4.21
Healthy body	58	3.54
Magic of mistakes	58	3.54
Present moment	45	2.74
Building rapport	44	2.68
You are what you eat	44	2.68
Teamwork	35	2.13
Going with the flow	33	2.01
Rise to challenge	29	1.77
Magic of moods	28	1.71
Brain chemicals	19	1.16
Master your mood	19	1.16
No wrong feelings	18	1.10
Kindness cure	13	0.79
Happiness myth	8	0.49
Gratitude	8	0.49
Be kind	7	0.43
Total	1,640	100.00

Referral sources

Referral sources were recorded in 749 of the 831 records provided for young people in the monitoring data. The breakdown of these referral sources is provided in Table 4.3 below. This shows that exactly three

quarters of referrals (n=562) were from schools, 14% (n=107) from youth workers and just under a tenth (n=65) from parents.

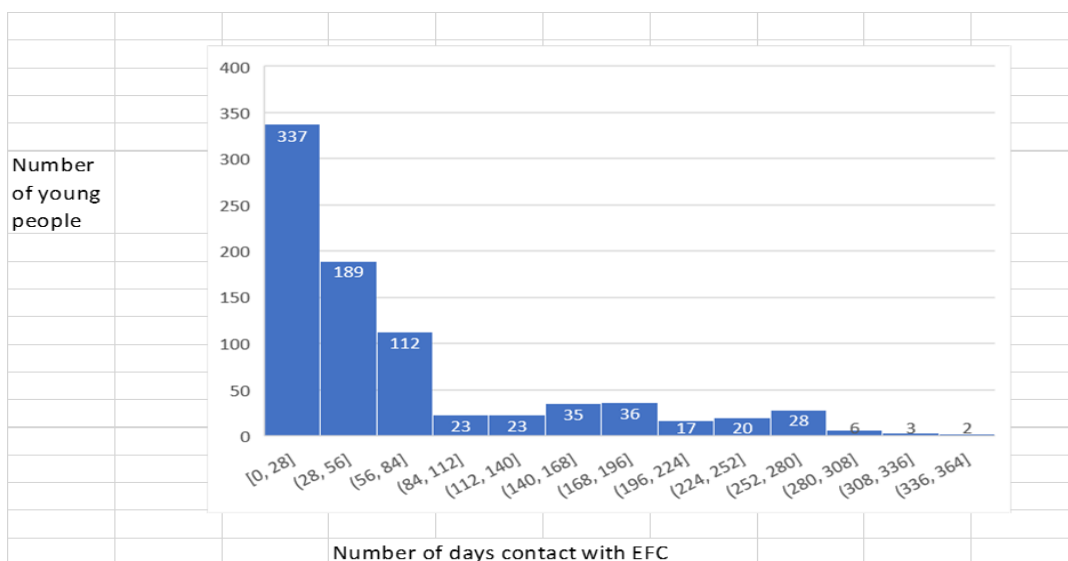
Table 4.3: Referral Sources (n=749)

Referral source	Number of referrals	Percentage
School professional	562	75.03
Youth worker	107	14.29
Parent	65	8.68
YOT	15	2.00
Total	749	100.00

Programme duration

The average duration of the involvement of young people across the three programmes was 68 days, which equates to just under 10 weeks. As shown in Figure 4.1, the duration of young people’s involvement with the project ranged from 0–355 days. These are shown as ranges 0–28 days, 28–56 days, etc. Two fifths of young people (41%, n=337) were involved in EFC interventions for up to 28 days; 23% (n=189) between 28 and 56 days; and 14% (n=112) between 56 and 84 days. These data were not disaggregated by programme.

Figure 4.1 Duration of young people’s involvement with EFC by days of contact



Perceptions of interventions as barriers to participation

The interview data suggested that in some instances, the perception of the interventions offered by EFC posed a barrier to participation – boxing was equated with anger and aggression, as illustrated by the following observation:

“A real problem that we’re facing ... is this kind of misconception that boxing is about anger, boxing’s about aggression. Whereas actually what we’ve been saying is boxing is about structure, it’s about discipline in the positive sense of the word, of grounding, of agility, of staying calm and thinking straight. That’s a real challenge.” (Project staff)

This was confirmed by a partner agency interviewee who reported that because EFC interventions were focused around boxing-based activities, parents were reluctant to allow their children to participate in case this exacerbated their behaviour:

“The most resistance I have is sometimes from parents, particularly when the young people are struggling with quite a lot of aggression and emotional regulation issues, where the parents think that going to Empire is going to make them more violent.” (Partner staff)

In these instances, this interviewee commented that after they had explained that the intervention was intended to help the young people think about their aggression and channel it in positive ways, the parents (in almost all cases) had agreed to the young people participating.

Other concerns from parents centred around the young people being injured, as reported by another partner agency interviewee.

These concerns were assuaged when it was explained that the boxing was non-contact.

Other partners acknowledged that among schools who had referred some of their pupils to EFC, there had been an attitudinal change to the use of boxing as an intervention for their young people.

“I think years ago people used to think boxing was not a thing that they want people to do, but I think a lot of schools now are starting to recognise that boxing can help.” (Partner staff)

In relation to Therapeutic Boxing, project staff reported that young people joined the intervention but were reluctant to engage with the therapeutic elements of the sessions, citing their interest was solely in boxing.

“What we’re struggling with at the moment, and this may be part of it being a new programme, is young people turning up and saying, ‘No, I don’t need therapy, I’m fine. I just want to do some boxing’.” (Project staff)

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

Project staff reported that the Therapeutic Boxing intervention lasted 12 weeks while the Training with the Champions intervention lasted 20 weeks. It was acknowledged that the latter intervention was being delivered over 12 weeks in some instances to fit in with the duration of school terms.

Project staff reported that most young people completed the 12- or 20-week programme. However, they recognised that some were unable to maintain their commitment for the full duration.

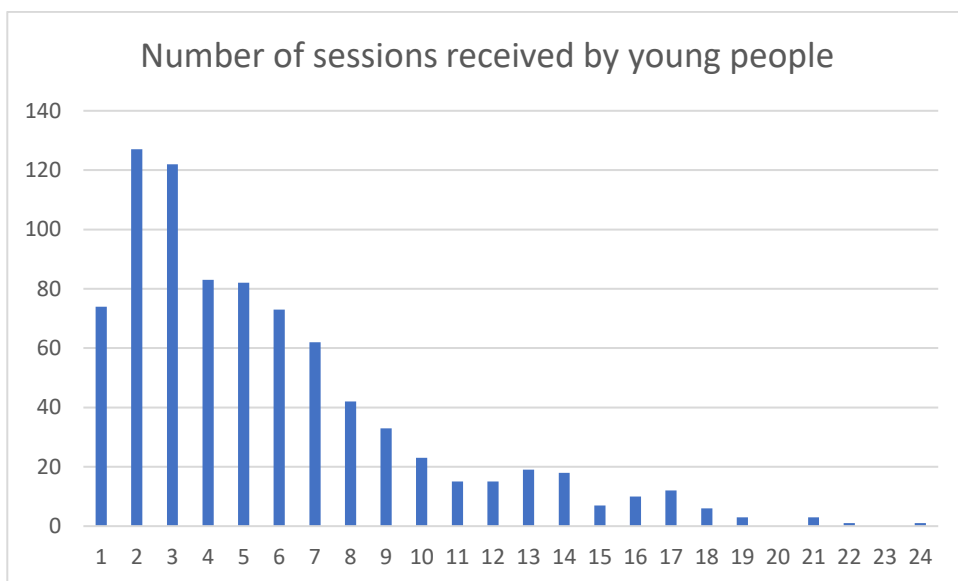
“We do get dropouts. ... Some of the young people, the nature of the young people, find just the commitment just too much. They can’t do it.” (Project staff)

As shown in Figure 4.2, across the three programmes, there was considerable variation in the number of sessions received by individual young people (n=831). The number of sessions attended ranged from a single session to 24 sessions, with the average (mean) being six sessions.

Nearly three fifths of young people (59%, n=488) received up to five sessions, while 28% (n=233) received up to 10 sessions and 13% (n=110) received more than 10 sessions.

At first glance, the monitoring data appear to contradict the perceptions of project staff regarding completions. Thirteen per cent of young people received more than 10 sessions, which suggests that few young people completed the 12-week or 20-week EFC interventions. Due to the limitations of the monitoring data, it is not possible to determine which young people undertook which EFC intervention. For example, the Hello Future intervention is intended to be delivered over 6–10 sessions, and this may account for a relatively large proportion of young people who received up to five sessions. However, based on discussions with EFC, this is unlikely given that a larger number of Training with the Champions and Therapeutic Boxing programmes were delivered. Unfortunately, it was not possible to determine how many young people completed their programmes because these data were missing.

Figure 4.2: Number of sessions undertaken by each young person (n=831)



Each session was designed to be 45 minutes to one hour in duration. Based on the monitoring data available for the duration of sessions (4,758 records), the average (mean) duration of each session was 73 minutes, with sessions ranging from 15 minutes to four hours.

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?

Addressing the specific needs of young people

The interview data from project and partner staff indicated that EFC interventions were tailored to the needs of young people, for example, addressing mental health issues or anger management issues as they arose.

As an indicator of the responsiveness of the EFC interventions, agency interviewees observed that some young people who they expected might disengage from the intervention due to the chaotic and challenging nature of their lives maintained their attendance:

“Some young people ... have real difficulties, ... their lives are chaotic. But actually, when you send them to Empire, they want to go, and they enjoy it. It’s amazed me that they turn up in the first place and, that they go to the second one and the third session and the fourth session. They keep wanting to go back.” (Partner staff)

Although it should be noted that this is not wholly reflected in the monitoring data on dosage.

Survey feedback

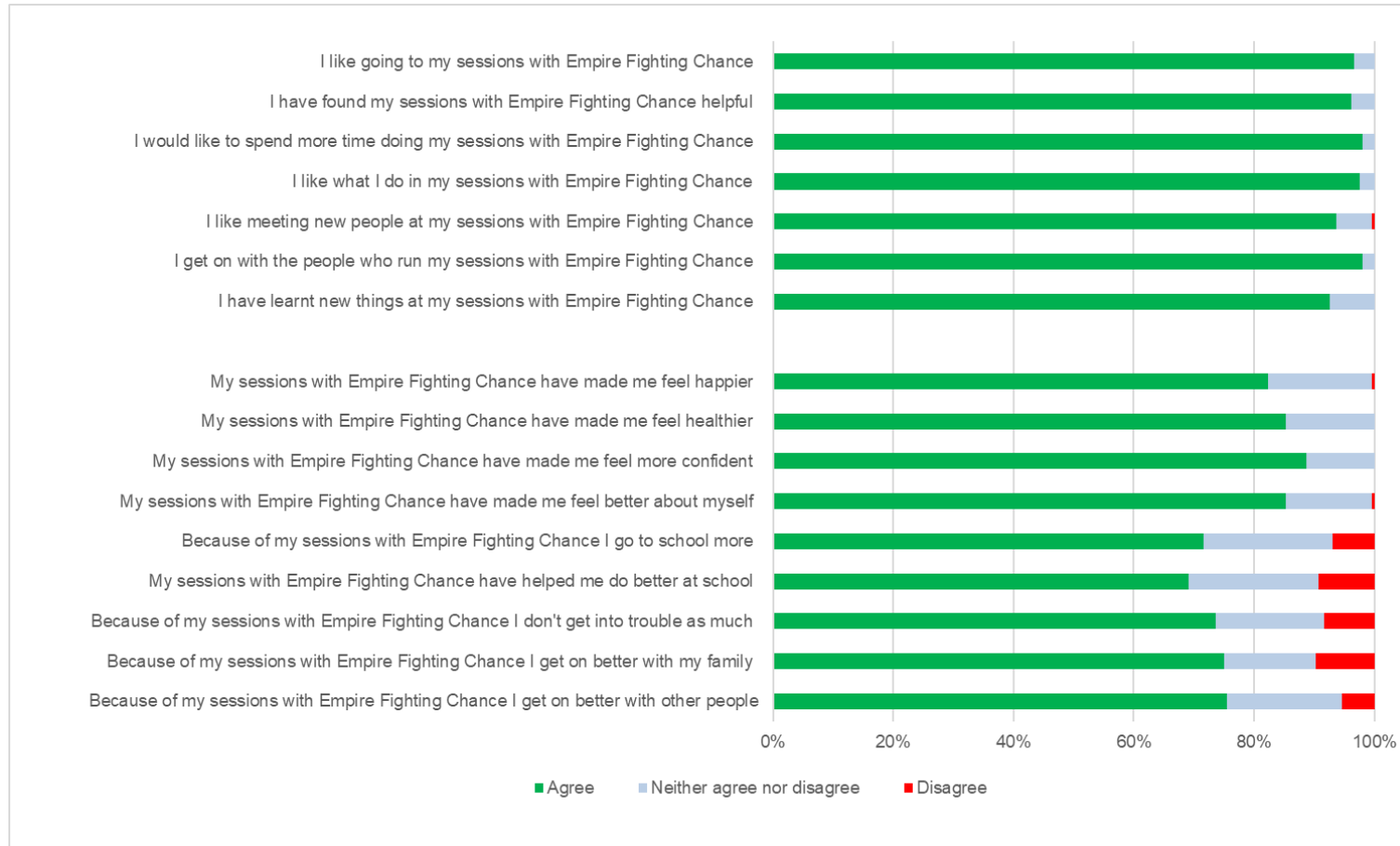
Figure 4.3 provides feedback from a satisfaction survey completed by some of the young people (n=204) at the end of their time with the project. As reported above, not all young people who completed the project undertook the survey. As such, it should be emphasised that these results should be treated 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 EFC programmes were positive experiences for them.

The overwhelming majority of respondents (over 90%) 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 90%) agreed that they got on with the people who ran the project, enjoyed meeting new people and confirmed that they had learnt new things. The survey asked the respondents to rate any change that had occurred as result of being involved with the project:

- Around eight out of 10 respondents agreed that the project had made them more confident, happier, healthier and more confident about themselves.
- Around seven out of 10 respondents agreed that as a consequence of the project, they got into trouble less and they got on better with their families and other people.
- Just over six out of 10 respondents agreed that because of the project, they attended school more often and that it had helped them do better at school.

These findings tentatively suggest that for the young people surveyed, the EFC appears to be meeting the short- and medium-term outcomes set out in the project’s theory of change (see Figure 3.1).

Figure 4.3: 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 by EFC were 'at risk'. None of the monitoring data variables intended to assess risk/protective factors, such as school exclusion or living with parents or carers, were provided. Further details of the variables are presented in Appendix 4.

The interview data from project staff and partner agencies provide some assessment of the needs of the young people that were referred to EFC. This indicates that young people were referred to EFC to address two key areas of concern – first, to enable young people to address their anger:

“The referrals for the one-to-ones that have come in from schools, it's usually anger. It's usually sort of anger, temper, hitting it at school. Not being able to control their anger really.” (Project staff)

Second, to address concerns around self-esteem and anxiety arising in some instances from adverse childhood experiences (ACEs):

“We've got 23 children currently engaging with Empire, and I would say 20 of those the engagement is to do with anxiety and self-esteem, rather than behaviour which we would describe as challenging. ... I suppose, we are engaging more with those children who are suffering issues of self-esteem, as a result usually of multiple ACEs and recent trauma.” (Project staff)

Additionally, EFC was regarded by one partner as providing an alternative intervention to young people with mental health concerns where the conventional approach would be talking therapies, which young people were less likely to engage with. The combination of physical activity combined with talking to the young people about how they were feeling was regarded as more appealing to young people and they had responded well to it.

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?

Boxing as a point of service differentiation

The interview data indicated that boxing differentiated the EFC programmes from other youth interventions.

Therapeutic Boxing, which combined physical activity with support provided by therapists, was viewed by project and partner staff as providing an unconventional approach to addressing unmet mental health needs among young people, such as background experiences of trauma. It was regarded as being particularly attractive to young boys who were less likely to engage in conventional talking therapies:

“There's definitely a gender thing in the sense there are lots of particularly young boys... that really aren't going to respond very well to a lot of talking therapies.” (Partner staff)

Boxing more generally across all the interventions was regarded by project staff as a hook to engage young people. This was confirmed by the participants as the motivating factor to be involved in the programme.

The distinct element that boxing provided was described by an EFC staff member as being 'cool' and that it had the potential to elevate the status of the young person, i.e. that the young person may achieve some status among their peers by being perceived as tough through doing boxing. Other interviewees viewed the tradition of boxing as a perceived vehicle for working class self-empowerment and advancement – an important factor in attracting the targeted young people.

Allied to this was the perception of boxing as a “*blue collar sport that anyone can do*” (Project staff), which lowered the perceived entry/access for the targeted young people who were generally viewed as being from deprived backgrounds.

The perceived fundamental ethos of boxing, i.e. one achieves through effort, being mirrored in the aims of the interventions themselves was reported as being important by project staff:

“The novel environment – the location of a gym where a therapeutic programme was delivered – was viewed by project and partners as significant, i.e. that it wasn’t an NHS clinic.”

More generally, project and partner staff viewed the gym as being a safe neutral space for young people. Historically, they were regarded as community institutions, safe spaces where individuals were not judged. Additionally for the young people who had experience of adverse childhood experiences, they offered a contrast to the chaotic nature of the young people’s home lives.

Organisational reputation

The reputation of EFC itself was regarded by some partner interviewees as adding to the credibility of the interventions they delivered:

“*They’ve obviously got a very good reputation as a gym. They’ve created world champions, so from a boxing perspective, they’re very well respected in that regard.*” (Project staff)

Therapeutic provision

Partner agencies identified the therapeutic element of EFC programmes as a significant differentiation compared to other sports interventions with young people, such as football coaching.

Where interventions were delivered on a one-to-one basis, the interview data indicated that this intensity of the intervention was important to its perceived efficacy:

“*Doing something very physical whilst having a coach completely engaging in that 45 minutes with you. ... They [young people] almost lose themselves whilst they’re engaged with their coach, and they’re doing what the coach is telling them to do, they’re in a different place. They go into completely different headspace.*” (Project staff)

Additionally, one partner commented that the regularity of weekly sessions that EFC were able to offer was beneficial to the young people – in contrast to their own service, which was not able to provide this.

Other partners regarded the one-to-one nature of the delivery as being important to facilitate the engagement with the young people.

Qualities of the EFC coaches

Partners reported that the coaches employed by EFC were important to the engagement of young people with EFC interventions, in particular their youth (in some instances) and their ability to understand the young people they were working with:

“*It’s the people who they’ve employed as coaches...they’re really good at what they do, they understand young people. A lot of the coaches are young themselves, they’re from diverse backgrounds and they get what’s going on.*” (Partner staff)

Other partners emphasised the importance of the lived experience that coaches brought to their engagement with young people, facilitating empathy and understanding:

“A lot of the coaches are definitely from the community. They try and work within the community, they’re all young people who have probably gone through that journey themselves. They actually understand what little Johnny or little Sarah is going through, because, you know what, five years ago, ... I was probably exactly like you now. They’re able to communicate with the students at a level where some people or some services don’t have that relationship.” (Partner 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 partner staff confirmed that EFC had responded proactively to the restrictions arising from the COVID-19 pandemic and had maintained their delivery during the lockdowns. This comprised of moving the delivery of sessions online during periods of lockdown, replicating the same combination of physical activities and talking, with young people doing this in their homes. Operating virtually, coaches demonstrated movements for the young people and then instructed them on how to replicate them. Where restrictions on meeting in person were relaxed but individuals were allowed to meet in limited numbers, EFC adapted their in-person activities to comply with these requirements.

Adaptation over time

A more general observation about EFC adaptation was identified in the interview data, which reflected an organisational culture of adaptation over time focused on refining EFC’s interventions in particular through the incorporation of learning from psychology, education and personal development. They utilised the expertise of a sports psychologist, with coaches adopting a test-and-see approach to identify which elements worked and which worked less well.

5. Conclusion – feasibility study

This feasibility study part of the report has focused on the three programmes delivered by EFC between June 2020 and July 2021, namely:

- Training with the Champions
- Boxing-based therapy
- Hello Future

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 Section 3.3, principally that the findings are derived from: a limited sample of monitoring data records; small interview samples of agency stakeholders, young people participants and their parents, and the range of experiences captured; and a limited sample of participant survey respondents. Additionally, the partner agency, young people and parent interviewees may only have had experience of one or more of the three programmes, i.e. not all three. Their observations were generalised across the programmes they had experienced and were not tied to specific programmes. Therefore, there are limitations to the generalisability of the findings.

The three EFC programmes appear to have been generally implemented as intended, adapting to the lockdown periods of the COVID-19 pandemic and following the phased relaxation of social distancing rules.

Based on the satisfaction survey findings, the suite of EFC interventions has been well received by the young people that the project has engaged with.

In relation to the overarching research question:

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 total number of young people to be recruited across the three interventions was estimated to be 1,050. The monitoring data show that 831 young people were engaged by EFC over the period June 2020–July 2021. This may not have tallied with the intended outputs, but the numbers of young people engaged by EFC (based on these records) suggested that it was feasible to run the pilot RCT set out in Section 6, where the intended sample size was 144 young people.

The extent to which the programme as delivered addressed the dimensions of the IPE framework adapted from Humphrey et al. (2016)² is summarised in Table 5.1.

Figure 5.1: Summary of feasibility study findings

Can the programme achieve its intended outputs for the intended target groups?	The total number of young people to be recruited across the three programme was estimated to be 1,050. The monitoring data show that 831 young people were engaged by EFC over the period June 2020–July 2021. This

² 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.

	<p>number of young people recorded as engaged by EFC suggests that it was feasible to run the pilot RCT set out in Section 6, where the intended sample size was 144 young people.</p>
<p>Fidelity – to what extent was programme delivery consistent with design – identifying facilitators and barriers?</p>	<p>The findings suggest that all three programmes – ‘Training with the Champions’, ‘Therapeutic Boxing’ and ‘Hello Future’ – were delivered during the period.</p> <p>From the limited data available, they appeared to be delivered as intended, although it was recognised that mode of delivery had been adapted to address issues arising from the COVID-19 pandemic.</p> <p>No significant barriers to the delivery of the interventions were identified, although there were variations in the number of sessions that young people engaged with, as summarised below.</p>
<p>Dosage – how much of the service was received by the target young people?</p>	<p>Nearly three fifths of young people (59%, n=488) received up to five sessions, while 28% (n=233) received up to 10 sessions and 13% (n=110) received more than 10 sessions.</p> <p>This suggests that few of the 12-week or 20-week interventions (i.e. Therapeutic Boxing and Training with the Champions) ran for their intended number of sessions. This may have been adaptation to COVID-19 during the periods when delivery occurred online rather than in-person.</p>
<p>Quality – how well was the service delivered, including how far did it conform to regulatory or professional service standards/guidance?</p>	<p>In relation to conforming to professional service standards/guidance, the qualitative findings suggest EFC deployed coaches with the right experience and background to work with the young people they engaged with.</p>
<p>Responsiveness – how well did the programme engage with the young people, and did they see it as addressing their needs?</p>	<p>Findings from the feedback survey suggest that young people found the programme engaging, and they felt that their behaviour had improved positively as a result of engagement with the project.</p>
<p>Reach – the extent to which the targeted young people came into contact with the programme</p>	<p>The qualitative data suggest that the young people who were referred to the project had specific needs around anger and therapeutic intervention, which the EFC interventions appeared to address. However, no data were available to assess the extent to which the young people were ‘at risk’.</p>
<p>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?</p>	<p>Boxing as the basis for EFC programmes featured significantly as point of service differentiation compared to other services for young people. This appeared to be specifically the case where boxing was coupled with therapeutic provision, providing a more engaging alternative to traditional talking therapy.</p>
<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>	<p>Generally, the EFC interventions appear to have been adapted when needed to address the challenges of COVID-19 by going online during periods of lockdown.</p>

5.1 Implications for pilot study

Boxing-based mentoring

During the feasibility study stage of this evaluation, it was agreed between the YEF, EFC and the evaluation team that a pilot RCT should be run and delivered through schools. The intervention that was offered by EFC for the pilot RCT was a 12-week group mentoring programme 'boxing-based mentoring', based on the Training with the Champions programme. This was designed to meet the pilot study requirement for the tested programme to be school based. The 12 Personal Development Points to be addressed by the programme over the 12 weeks are set out in Appendix 1. The 12-week duration of the programme was intended to fit within a school term.

Referral criteria

The findings indicate that a clearer articulation and specificity for the referral/inclusion criteria into the boxing-based mentoring programme is required for the pilot RCT and to enable scalability of the intervention.

This has been addressed through consultation and discussion between EFC 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 will provide feedback to the EFC on the nature and prevalence of the data gaps across the foundation areas to ensure that a more comprehensive dataset is 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 EFC's *boxing-based mentoring programme* might be feasible
- Acquire detailed information to inform the design of such an efficacy study
- Assess the programme for preliminary evidence of promise.

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

- 1) Trial implementation questions
- 2) Trial statistical design questions
- 3) Evidence of promise
- 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' and the statistical modelling of the trial sample described in the protocol has not been undertaken. On seeing the data, the achieved sample size was felt insufficient to provide reliable results. Furthermore, the sample size was also considered too small to perform the 'evidence of promise analysis' in that confidence intervals could not be reliably estimated and were likely to be too wide to provide a useful assessment.

Before outlining these questions in detail, we first discuss the assumptions that form the basis for this pilot study and which underpinned the choice of questions. These assumptions drew on findings from the earlier feasibility assessment of the intervention. These starting assumptions were as follows:

- The intervention will be delivered through schools.
- It will target pupils that meet specified inclusion criteria discussed further below.
- EFC will work with schools to recruit 12 students per school from Years 8 and 9 who meet the referral criteria (For further details, see Section 7.3).
- The trial 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 will have a nested or multi-level structure consisting of students grouped or clustered within schools

The justification for a group or cluster randomised controlled trial design (cRCT) is that during discussions with the developer and YEF during the feasibility stage, it was agreed that schools formed a promising channel through which to recruit and work with children, particularly in the case of SBIs, such as that studied in this pilot.

Where interventions are delivered to pupils in school settings, concerns emerge around the potential for interference between experimental units, in this case between pupils. Pupils within schools cannot be considered independent of one another. To address the problem of a lack of independence between pupils in the same school settings, it is common practice to randomise whole schools to intervention or control groups. In the case of this pilot, the randomisation of whole schools was chosen as the most useful approach. In this way, the pilot trial was designed to provide crucial information that can be used to design an efficacy cRCT of EFC's boxing-based mentoring. Although such a cRCT helps address the problem of statistical dependence between units both in terms of maintaining an experimental contrast free of spillover effects and enabling inferences that can take account of this lack of independence, this solution comes at a price, i.e. larger sample sizes are required than would be the case for an individual pupil level RCT.

6.2 Trial implementation questions

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

Recruitment and eligibility questions

1. Can EFC 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 to 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 be consistent with the inclusion criteria?
6. Can the team successfully access baseline information from schools for those pupils deemed as meeting the inclusion criteria? (e.g. full name, date of birth (DoB), unique pupil reference number (UPN), Uniform Reference Number (URN), gender, exclusions in last school year, absences, ever-Free School Meals (FSM)/Pupil Premium (PP) – discussed in greater detail below)
7. Can the study meet the legal/GDPR requirements for linking trial data to the National Pupil Database via the Office for National Statistics (ONS) Secure Research Service (SRS)?
8. How many parents withdraw their child from the study? What were the reasons given for withdrawing?

Randomisation

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?

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 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?

6.3 Statistical design questions

The statistical data collected through the pilot trial, as well as information from other sources, are 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):

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

Where J is the number of schools, $MDES$ is the effect size the main trial is powered to detect, r_2 and r_1 are the response rates at the school and pupil levels (these response rates assume attrition is broadly random and does not differ across intervention and control groups), ' n ' the average number of pupils per school recruited to the trial, ' ρ ' the intra class 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 variances explained at the school and pupil levels obtained through the inclusion of a covariate in the statistical model, which captures pupil scores on SDQ or PFBS at the baseline. Note that this equation differs very slightly to that set out in the protocol.

From the data we have collected during this pilot, statistical estimates of ρ , r_1 , r_2 and R^2 could in theory be obtained, though in practice the smaller-than-anticipated sample size led to problems establishing reliable estimates. Further, we assume that an efficacy study will involve randomisation of schools one-to-one to intervention and control and thus $P = 0.5$, that approximately 12 pupils from each school will participate in the proposed efficacy study, so $n = 12$, that the $MDES = 0.25$, and that for the proposed efficacy study Type I and II error rates will be set at 5 and 20% respectively.

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/89cnu>).

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 scale 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 problem behaviour scale between intervention and control group pupils at follow-up with 75%, 85%, 90% and 95% confidence intervals?

Due to the smaller-than-anticipated achieved sample, we have not reported the evidence of promise analysis as described above. We have also not reported results from the statistical models described in the protocol on which these results would have been based. As mentioned previously, the achieved sample was deemed too small to yield reliable estimates.

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 is also addressed through analysis of the monitoring data collected by EFC):

1. To what extent has the intervention as described in the feasibility study been adapted?
2. Were there any challenges in delivery? What were 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 that carried a feasibility test of EFC's boxing-based mentoring programme:

- EFC can recruit 12 schools to the pilot and at least 10 of these schools remain in the study until the follow-up data are collected from pupils.
- Schools can recruit at a minimum 80 % of the target for pupil recruitment – that is, around 10 pupils per school at a minimum.
- A baseline response rate to the questionnaire reaches at least 80% and loss to follow-up does not exceed 70%.

7. Method – 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	Achieved: Data on 91 pupils including: demographics, school attendance free school meals, pupil premium, educational attainment in intervention and control schools Target: 144 pupils	Simple descriptive summary statistics and comparisons between intervention and control groups	Trial implementation questions
Quantitative – questionnaire data using validated tools	Achieved: Pre-and follow-up surveys administered to 56 pupils in intervention and control schools Target: 144 pupils	Descriptive analysis reporting response rates at baseline and follow-up	Trial implementation questions
Quantitative – monitoring data on intervention take-up	Data on 26 pupils in intervention schools recorded by EFC Target: 72 pupils	Descriptive analysis	Intervention implementation questions
Qualitative interviews with project staff, teachers and focus groups with pupils	Pupil focus groups (n=3) Pupils in focus groups (n=17) Project staff (n=5) Teachers (n=6) Target: 10 pupils: five project staff and three teachers	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. A cluster randomised trial is one in which higher-level groups containing lower-level units are randomised to intervention and control conditions, rather than randomising the lower-level units directly to intervention and control conditions. For example, pupils can be considered lower-level units and schools higher-level units. In a cluster trial, schools are randomised to intervention and control rather than individual pupils, but we still calculate effects at the lower level, in this case at the pupil level. Schools recruited to this trial were allocated at random to intervention and control groups on a one-to-one basis. Pupils identified in the range of the trial 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 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.

7.2 Recruitment of schools and randomisation

Participating schools were enrolled in the study by EFC and divided into pairs based on the comparable school characteristics and, where possible, on their geographical proximity (not which local authority they are sited in). These broadly related to the demographic characteristics of the children in terms of ethnicity and socio-economic conditions and whether or not they were in urban or more rural locations.

The original intention set out in the protocol was to recruit 12 schools. During the early implementation of the pilot trial, a number of schools withdrew. In some cases, communication with the schools and EFC ceased, while for others, schools were unable to meet the requirements of the study, i.e. the capacity and capability to undertake the selection and recruitment processes for pupils, provision of pupil data and completion of surveys. The reasons for this were reported by EFC as resulting from COVID-19: schools were short-staffed due to illness and therefore had insufficient capacity to engage in the pilot; the key persons at the school that EFC had links with were not available due to illness, and no-one else was able to take over the responsibility. As a result, only eight schools were able to obtain parent/pupil consents and signed off the MoU (between the school and the research team) within the specified deadline for the trial.

To facilitate the trial and particularly the implementation of the intervention, randomisation was performed in pairs. The decision to undertake randomisation within pairs was driven by pragmatic considerations rather than analytical ones. The delivery organisation has limited capacity to recruit schools and was restricted in the areas in which it could work. It was also desirable for intervention and control schools to be distributed fairly evenly across the areas in which they could deliver the trial. Once pairs were 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 allocated to control. Schools were only informed of the outcome of randomisation once this process was completed for each pair. 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 5).

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

7.3 Pupils

Within each participating school, school representatives identified a maximum 20 pupils who they considered would be suitable given the criteria set by EFC (see below). EFC sought to over-sample where possible to ensure they would have a minimum of 12 pupils to include in the trial. 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. For those pupils that gave assent and where parental consent was received, the pupils were asked to complete a baseline questionnaire, and the school was asked to provide pre-agreed data items from their systems for each pupil (see below).

Pupils invited to take part in the study were in Years 8 and 9 in participating schools in September 2021 and met the following criteria:

- Behaviour is an area for concern. Incidences of the young person's behaviour were recorded within the SIMS log (or alternative systems): at least one incident but no more than five incidences recorded prior to the point in November 2021 when they were recruited to the pilot RCT.
- Attendance becoming an area for concern: at least one unauthorised absence but no more than five unauthorised absences prior to point in November 2021 when they were recruited to the pilot RCT.
- Interest in sport: The young person should exhibit some level of interest in sport/movement – a subjective assessment made by a PE teacher.

If more than 12 pupils from the group of identified potential participants remained after the selection criteria had been applied, then all pupils were included.

7.4 Data collection/outcomes

This was 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 the Autumn of 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, schools provided the following information from their data systems for each pupil:

- UPN
- URN
- School postcode (back-up in case of URN change)
- Full name of pupil
- Date of birth
- Sex
- Racial or ethnic group
- Year group
- FSM status
- PP status

- Special Educational Needs and Disability (SEND)
- Educational Health Care Plan (EHCP 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 Maths³

These records were appended to the pupil level records within the trial database held as a STATA v17 data file.

Second, prior to randomisation, each pupil was asked to complete a baseline questionnaire. Administration of the survey was overseen by EFC and implemented by the schools. The baseline questionnaire included items from the SDQ and PBFS, details of which are provided in the study protocol [<https://osf.io/89cnu>]. Other data collected included:

- Informed assent of the pupil to complete the questionnaire
- Questionnaire completion date.

Records from the baseline survey questionnaires were appended to 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 that described above, pupils in the trial sample were surveyed again five months post randomisation, and the follow-up survey questionnaire data were appended to the pupil records held in the trial database. 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 it has not been used for this report.

In addition to these data sources, for the intervention group only, EFC 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

³ 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>

- 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 EFC project staff (n=3) and teachers (n=6) involved in the process of overseeing the administration of the pilot. Three focus groups were undertaken – one at each intervention school during one of the programme sessions with the young people who were in attendance (n=total of 17).

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 interviews with project staff and teachers were undertaken virtually. Focus groups with young people were undertaken face to face.

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 EFC, due to the challenges of accessing the young people for interviews, it was agreed that the research team would undertake focus groups instead and that 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, there are also 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 dealing with the effects of COVID-19 and experiencing high levels of staff and pupil absence, which had some impact on the process of collecting of data and, to some extent, the completeness of the data.

Quantitative data

Baseline data were collected prior to randomisation 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. However, there was some missing pupil monitoring data, particularly relating to SATS, as pupils did not take them due to the COVID-19 pandemic.

As has been mentioned previously, the achieved sample size was much smaller than anticipated. As described in the study protocol, EFC were asked to attempt to recruit 12 schools to the trial and 144 pupils, with the aspiration that they would get as close to these numbers as possible, bearing in mind the study was run as a pilot. Once data collection was complete at follow-up, we acquired the necessary observations from seven schools and 56 pupils. Given concerns about whether the statistical models specified in the protocol would be reliable and their assumptions hold in such a small sample (Hayes & Moulton, 2022), we have chosen not to present findings from their estimation. Instead, we report simple mean differences in outcomes between intervention and group pupils. The challenge is to provide with such estimates some indication of the uncertainty associated with them. Confidence intervals and standard errors obtained from regression models that take into account the clustering of the data are unlikely to be valid. Instead, we provide p-values associated with these mean comparisons derived using randomisation inference (Gerber & Green, 2012; Hess, 2017), which we discuss in greater detail in the following section. It is, however, important to keep in mind that this was a pilot study, the intention of which was always to curtail costs by

recruiting a small sample and the main purpose of which was not to provide a precise estimate of the effect of the intervention.

Qualitative data

Interviews were conducted with EFC project staff and teachers from both the intervention and control schools from three out of the four school clusters. The cluster areas were selected at random. It should be noted that those interviewed may not have represented the whole range of views among all project staff and teachers.

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

7.6 Approach to data analysis

Quantitative data analysis

As has already been made clear, due to the size of the achieved sample, we are not reporting results in the form we had originally intended. Instead of running a series of multiple regression models, upon which we had hoped to carry out an assessment of 'evidence of promise', we present results from simple difference in means comparisons reported along with permuted p-values derived using randomisation inference (Gerber & Green, 2012; Hess, 2017). Put simply, permuted p-values provide a measure of how far our results are compatible with the hypothesis that the intervention had no effect on any pupil (known as the sharp null hypothesis). The p-value is a probability and can range in value from one to zero. The smaller the p-value or probability (closer to zero), the more *incompatible* our findings with the sharp null hypothesis (the more likely we are to reject this hypothesis in favour of concluding that a 'real' effect has been observed). Where p-values are large (closer to one), the results we have obtained (or more extreme results) are quite likely under the sharp null (thus we do not reject the possibility that the intervention has no effect). The approach is often used in situations where the standard assumptions required for hypothesis testing do not hold, often due to small sample sizes.

The fact that we have been unable to perform the analysis originally intended does frustrate our sample size calculations, in that we have not been able to glean all the information we had hoped from the sample. Instead, to complete sample size calculations, we have drawn on information presented in a companion study to this one, which involved collecting both SDQ and PFBS data from a very similar sample of pupils but where a slightly larger sample was achieved (Wong et al., 2023).

Qualitative data analysis

The interviews were recorded and transcribed to ensure an accurate record. We adopted a thematic approach to the analysis. We worked through a series of interconnected phases, familiarising ourselves with each interview, identifying a thematic framework (initially shaped by the interview schedule) and systematically worked through each of the interviews to identify key themes that emerge from the data related to the trial implementation questions and intervention implementation questions (Ritchie et al., 2014; Braun & Clarke, 2006). Adopting this approach allowed us to understand the experiences of young people, project and school staff, their perceptions of the processes undertaken and the 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 by the boxing-based mentoring programme are provided here for context. Neither sex nor ethnicity were 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 91 young people, of which the majority (80%) were male and the remaining 20% were female.

The majority of young people, 64%, were white, 13% were black, 9% Asian and 11% were mixed ethnicity.

Inclusion criteria

Tables 8.1–8.3 look at the basic characteristics of the sample. They also include comparisons between intervention and control groups in terms of their respective characteristics. It is usual practice to compare distributions between intervention and control groups at the baseline. Randomisation does not guarantee equivalence between groups. It is quite possible for randomisation to have been carried out correctly and differences between groups to be quite sizeable. Indeed, in the tables that follow, we do see some quite large differences. As this is a pilot, even if we had achieved the target sample size, we would expect to see differences between the groups and the possibility that some of these differences might be appreciable in magnitude.

Table 8.1 shows that all of the pupils met the inclusion criterion for being in Years 8 and 9 at September 2021. Across the intervention and control schools, 46% of pupils were in Year 8, and 54% were in Year 9.

Table 8.2 presents data on other inclusion criteria: incidences of problematic behaviour, school attendance and an interest in sport.

This shows that across the intervention and control schools:

- All of the pupils were assessed as having between one and five incidences of problematic behaviour logged on the schools' system. This ranged from 23% having just one behavioural incident logged to 18% having the five incidents, at the top end of the criterion specified by EFC.
- All pupils in the sample had at least one unauthorised attendance, among which 49% recorded one unauthorised absence, 24% two absences, 10% three absences, 9% four absences and 8% five unauthorised absences.

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.

Pupil needs

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

- Just under a third (32%) of pupils were in receipt of FSM.
- Thirty-six per cent of pupils were in receipt of PP.
- Just under a quarter (24%) of pupils were assessed as having SEND.
- Five per cent of pupils had an Education, Health and Care (EHC) plan.
- A small minority (11%) 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 (n=91)		Pupils' Year Group (n=91)		Pupils' Ethnicity (n=89)				
	Males	Females	Year 8	Year 9	White	Black	Asian	Mixed	Other
Intervention schools total	79% (n=33)	21% (n=9)	48% (n=20)	52% (n=22)	40% (n=17)	26% (n=11)	17% (n=7)	14% (n=6)	2% (n=1)
Control schools total	82% (n=40)	18% (n=9)	45% (n=22)	55% (n=27)	85% (n=40)	2% (n=1)	2% (n=1)	9% (n=4)	2% (n=1)
Grand total	80% (n=73)	20% (n=18)	46% (n=42)	54% (n=49)	64% (n=57)	13% (n=12)	9% (n=8)	11% (n=10)	2% (n=2)

Table 8.2: Inclusion criteria for pupils who completed a baseline survey

	Number of Behaviour Incidents (n=90)					Attendance – Number of Unauthorised Absences (n=91)					Interest in sport (n=91)
	1	2	3	4	5	1	2	3	4	5	Yes
Intervention schools total	33% (n=14)	29% (n=12)	17% (n=7)	5% (n=2)	17% (n=7)	45% (n=19)	26% (n=11)	10% (n=4)	14% (n=6)	5% (n=2)	100% (n=42)
Control schools total	15% (n=7)	25% (n=12)	13% (n=6)	29% (n=14)	19% (n=9)	54% (n=26)	22% (n=11)	10% (n=5)	4% (n=2)	10% (n=5)	100% (n=49)
Grand total	23% (n=21)	27% (n=24)	14% (n=13)	18% (n=16)	18% (n=16)	49% (n=45)	24% (n=22)	10% (n=9)	9% (n=8)	8% (n=7)	100% (n=91)

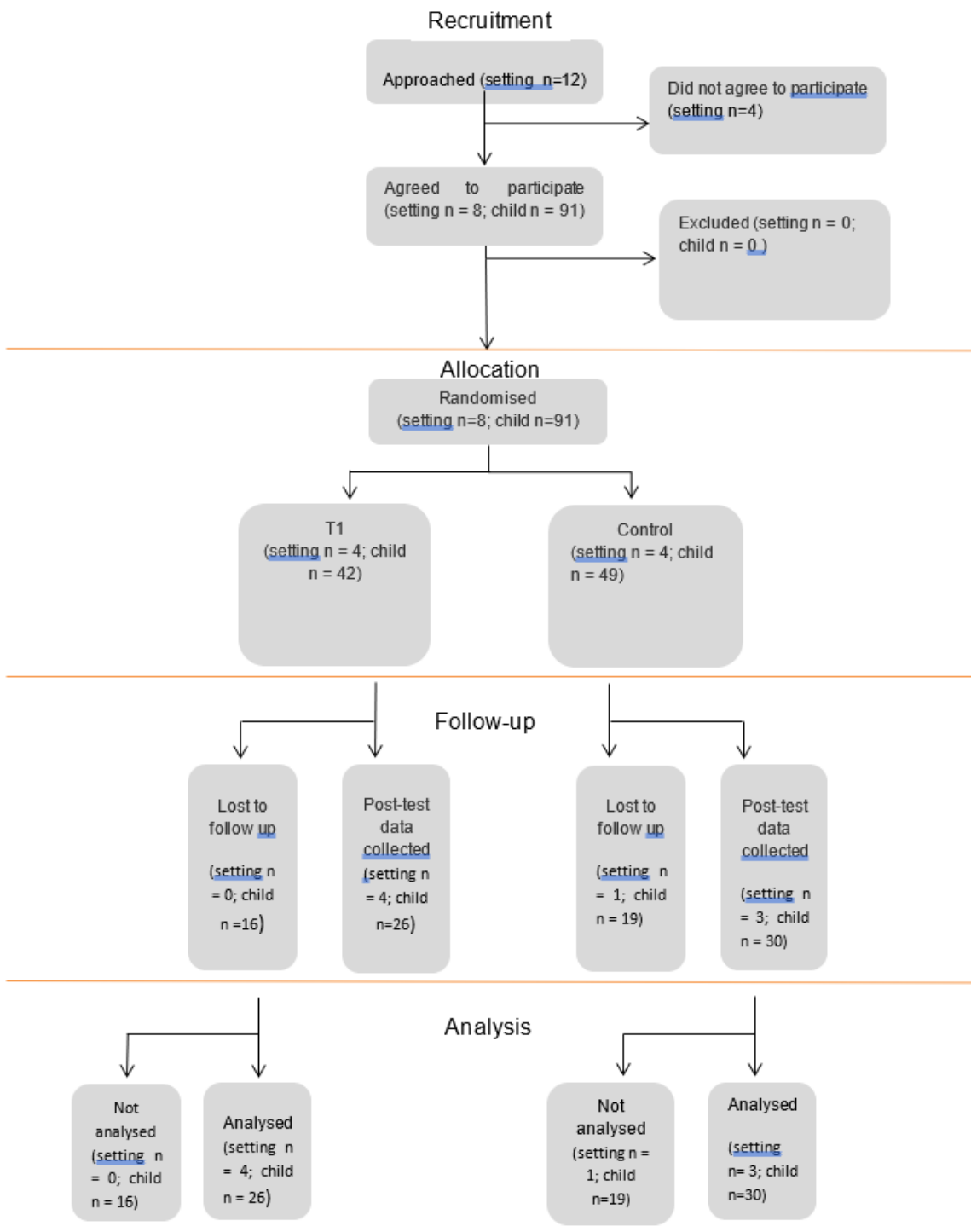
Table 8.3: Needs of pupils who completed a baseline survey

	FSM (n=91)		PP (n=84)		SEND (n=91)		EHC (n=84)		EAL (n=85)	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Intervention schools total	40% (n=17)	60% (n=25)	60% (n=21)	40% (n=14)	29% (n=12)	71% (n=30)	6% (n=2)	94% (n=33)	12% (n=5)	88% (n=37)
Control schools total	24% (n=12)	76% (n=37)	18% (n=9)	82% (n=40)	20% (n=10)	80% (n=39)	4% (n=2)	96% (n=47)	9% (n=4)	91% (n=39)
Grand total	32% (n=29)	68% (n=62)	36% (n=30)	64% (n=54)	24% (n=22)	76% (n=69)	5% (n=4)	95% (n=80)	11% (n=9)	89% (n=76)

8.2 Trial implementation

In this section, we present the findings in answer to the trial implementation questions set out in Section 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.

Figure 8.1: Consort diagram



Recruitment and eligibility

As the consort diagram in Figure 8.1 shows, 91 pupils within eight schools 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 12 schools. Furthermore, it was proposed that participating schools would recruit 12 pupils each to the trial. Thus, at protocol, the intended sample at randomisation was to comprise 144 pupils.

In summary, EFC recruited eight schools against a target of 12 (67%) and 91 pupils, compared to a target of 144 (63%). Table 8.4 shows that both the intervention and control schools were unable to recruit what we deem to be sufficient numbers. As detailed in Section 8.1, the pupils who were recruited to the trial met the inclusion criteria.

Parental consent was sought prior to pupil inclusion in the study. Following randomisation, no parents withdrew their child from the study.

Project and school staff interview data showed that for schools that were recruited to the trial, their participation was facilitated by the following factors:

- Prior relationships between the school and EFC
- EFC had delivered some programme(s) to pupils from the school and
- The programme being offered by EFC was viewed by school staff as providing an intervention that would be helpful for pupils who were disruptive in school and/or exhibiting problem behaviour.

The depth and longevity of the prior relationship between EFC and the school was also viewed as important by EFC staff. Schools where EFC had longstanding relationships appeared to respond more quickly and effectively to the pre-randomisation requirements of signing off the school and research team MoU; pupil selection and recruitment based on eligibility criteria; obtaining parent and pupil consents; collating pupil data and facilitating the completion of pupil baseline surveys. School staff interview data showed that they understood the randomisation process and that they had no concerns about this.

EFC found it challenging to recruit the required number of schools due to the following reasons:

- School staff who were responsible for liaising with EFC (in some instances) working part time and therefore being unavailable for much of the week, which slowed down the speed of communication and meant that the pre-randomisation processes took longer to organise and complete
- School staff who were responsible for liaising with EFC about the pilot trial being absent due to COVID-19, which delayed completion of the processes
- School 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 consents from parents who were less likely to sign the consents, even if they meant to, and additionally, as suggested by some school staff, some signed consents were lost on the way back to school. School staff commented that the lives of some of the parents were chaotic. While they may have wanted their children to take up the programme, they may have had insufficient capacity to engage with the consent process.
- Completing the number of processes that school staff were unfamiliar with required for the pilot trial
- Obtaining the pupil data specified for the trial required school staff having to obtain information from different systems and in some instances, different colleagues, which was exacerbated by competing core school priorities and school absences due to COVID-19.

Managing the administration and co-ordination of the pilot was challenging for EFC. For example, one recruited school had to be excluded from the pilot as delivery of the programme occurred prior to randomisation and completion of the necessary administrative arrangements required pre-randomisation. While EFC were aware of the requirement to recruit 12 pupils per school to the trial prior to commencing the recruitment of schools (hence the over-recruitment approach reported above), it was not until the point of randomisation that EFC recognised the need to deliver two programmes (in parallel) at schools where pupil numbers exceeded six. Six pupils per programme was deemed by EFC to be the optimal number of

pupils, but this limit was revealed late in the pilot. Furthermore, refining and finalising the inclusion criteria took longer than anticipated due to EFC needing to engage with schools to ensure feasibility.

The relatively short lead-in time for school staff pre-randomisation made it challenging for EFC to recruit the required number of schools. EFC had approached schools in June/July 2021 and had secured, in principle, agreement to participate in the pilot trial prior to commencement of the summer holidays. When EFC then approached schools in September 2021 to commence the pre-randomisation trial requirements, school staff were busy with the start of the school year, and therefore the trial processes were not commenced until October 2021. Additionally, there were delays in ensuring that schools received the final version of the MoU between the schools and research team due to required sign-off by the YEF. This generated understandable concern for EFC, which was keen to maintain good relations with the schools.

It should be noted that interviews with school staff undertaken several months after the randomisation process had been completed suggested that relationships between the schools and EFC were positive and appear not to have been affected by study requirements and trial processes. There appeared to be no differences in the way in which schools recruited pupils to the pilot.

While EFC staff were generally able to communicate the requirements for the trial to school staff, the time and effort required of school staff to facilitate the trial was not fully appreciated at the outset by the school and EFC. To ensure collection of the pre-survey data, EFC staff made arrangements to visit schools to implement the surveys with pupils using paper copies and then entered the pupils' responses onto the online survey. This added an additional step/process, which delayed the point at which randomisation could be undertaken. Also, an error could have occurred in entering pupil responses. However, it was not possible to test this given the budget constraints. The same process of survey collection and data entry also applied to the post surveys in control schools. Post surveys in intervention schools were collected as part of one of the latter programme sessions by EFC staff.

EFC staff reported that the pupils who were recruited to the programme through schools applying the inclusion criteria were similar in terms of the behaviour and needs to young people that EFC worked with on other similar programmes.

"I think they picked the kids perfectly for the trial. They fit in with the normal young people that we work with so that was really good. They hit those criteria of what we were trying to work with and trying to achieve." (Project staff)

Aside from the administrative challenges set out above, school staff were generally able to apply the inclusion criteria to identify suitable pupils for the programme, as reflected in the following account:

"I saw the criteria, and then I emailed the heads of year, the inclusion managers and key workers for that year group and essentially just said, 'Here's the Google Doc; let's just put the names we can think of down and we can check they're definite match later,' and that worked pretty well." (School staff)

Responses from the pupil focus groups as to why they thought they had been offered the programme suggested that a) these pupils had been involved in problematic behaviour at school and/or b) were disruptive and/or inattentive in class.

"Fight, get sent out for like talking, chucking glue sticks at the class, stuff like that." (Pupil)

“I’m pretty childish in class at times, and when the teacher says something, I tend to just speak my mind there and then.” (Pupil)

Randomisation

Once pupils were identified as meeting the inclusion criteria, baseline information (for example, *full name, DoB, UPN, URN, gender, exclusions in last school year, absences, ever-FSM/PP*) was collected by the schools on behalf of EFC for all pupils. Schools were only randomised once this information and baseline questionnaires had been collected. As Table 8.4 reveals, four schools containing 42 pupils were randomised to the intervention arm and went on to receive the mentoring intervention, and the remaining four schools containing 49 pupils were randomised to the control (intervention pupils = 42; control pupils = 49).

As before, appreciable differences in the distributions of sample characteristics in intervention and control groups can be seen. This variation is not unexpected due to the small sample size.

Table 8.4: Sample of schools and pupils recruited and randomised

	<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>Intervention schools</i>										
A	12	7	71%	29%	0	0%	7	100%	4	57%
B	12	11	100%	0%	0	0%	11	100%	7	64%
C	12	10	100%	0%	0	0%	10	100%	5	50%
D	12	14	50%	50%	0	0%	14	100%	10	71%
<i>Total (N=)</i>	48	42	79%	21%	0	0%	42	100%	26	62%
<i>Control schools</i>										
A	12	16	81%	19%	0	0%	16	100%	14	88%
B	12	8	75%	25%	0	0%	8	100%	0	0%
C	12	7	43%	57%	0	0%	7	100%	7	100%
D	12	18	100%	0%	0	0%	18	100%	9	50%
<i>Total (N=)</i>	48	49	82%	18%	0	0%	49	100%	30	61%
<i>Grand total (N=)</i>	96	91	80%	20%	0	0%	91	100%	56	62%

Post randomisation, one (control) school left the study, and pupils from this school did not complete the follow-up survey. There were also some additional pupil losses at follow-up for both intervention and control schools. This is discussed further below.

Data collection – primary and secondary data

As Table 8.4 reveals, at baseline, the sample at randomisation was fully enumerated, though it is worth remembering that it comprised fewer schools than planned. We received the administrative records from school information systems for all pupils (n=91). We also received complete SDQ and PFBS assessment data for each pupil.

Five months after randomisation, follow-up post-test surveys were collected from 26 pupils in the four intervention schools and from 30 pupils across three control schools. EFC were unable to engage with one control school (school B) and therefore were unable to get access to the school and pupils to deliver the post-survey. Staff were absent through COVID-19, and they had over 20% school staff absent through illness. This means that in the intervention arm of the trial, 16 pupils were lost to follow-up and a response rate of

62% was achieved. In the control arm, 19 pupils were lost to follow-up, and the response rate was 61%. This gave an overall response rate at the pupil level of 62%.

8.3 Sample size determination

In this section, we use the information collected from the pilot sample, moderated by researcher judgement, evidence from other similar studies and stated assumptions to provide some tentative sample size calculations for a possible efficacy study. The equation at Section 6.3 above is used to determine the sample sizes required. Table 8.5 summarises the information we have obtained from the pilot sample, explaining where we have adjusted or moderated the results to make them more plausible.

Given that we have been unable to fit regression models to our data, we have drawn on evidence from a parallel trial in which data from the SDQ and PFBS were collected from a very similar sample over a similar period (Wong et al., 2023). In this companion study, we arrived at an estimate for rho or the intraclass correlation coefficient of 0.10 (see Wong et al., forthcoming 2023; Table 8.5). Given the uncertainties, we vary the intraclass correlation coefficients or rho used in our calculations from 0.10 and 0.15 to 0.20 (see Table 8.6).

Further, the point estimate of r_1 , the response rate to the SDQ, was calculated as the number of questionnaires completed at follow-up divided by the sample of pupils at randomisation. As a result, r_1 was equal to 0.62, with the lower limit of the 80% confidence interval of 0.54. The point estimate of r_2 (the school level response rate) obtained from the pilot sample was 0.88 due to only seven out of the eight schools completing the follow-up data collection. We use the central response rate estimates in our sample size calculations assuming that attrition occurs at random across the intervention and control groups (see Tables 8.5 and 8.6).

Table 8.6 provides the results of our calculations. A range of sample size estimates are provided. We provide a range of estimates due to the uncertainty associated with the inputs into the calculations. The estimates represent the number of schools that will need to be randomised, considering that both schools and some pupils will leave the study thereby reducing the sample. Calculations are particularly sensitive to the intraclass correlation coefficient assumption. This measures how far average outcomes (the average for all pupils in each school) vary from school to school. The greater the variation over schools and thus the larger the value of the intraclass correlation used in the calculations, the larger the sample required. For example, if it is determined that an efficacy study is required to detect a difference of 0.25 standard deviations difference between intervention and control groups and the intraclass correlation coefficient is 0.10, a sample size of 100 schools will be required at analysis. However, if the intraclass correlation coefficient was 0.15 or even 0.20, then samples at analysis of 118 and 134 schools would be required.

These are quite large numbers of schools, and there must be doubts as to whether this number of schools could be recruited to an efficacy study. Calculations are based on the sample loss that we observed in this pilot. If an efficacy study were to be contemplated, substantial investment would be required in the field work effort to ensure sample size targets were achieved. Our estimates for the number of schools required are not, however, inconsistent with the size of trials typically seen in schools.

Table 8.5: Assumptions for sample size calculations for an efficacy study

Input	Sample point estimate	80% confidence interval	Remarks
<i>Intra class correlation coefficient</i>			
1) SDQ	<i>n/a</i>	<i>n/a</i>	<i>Drawing on evidence from Wong et al. (2023), we use estimates of the intraclass correlation coefficient of 0.10, 0.15 and 0.20</i>
2) PBFS	<i>n/a</i>	<i>n/a</i>	<i>See above</i>
<i>Average response rate at pupil level (1)</i>			
1) SDQ	0.62	[0.54-0.68]	<i>We use the point estimate in our calculations</i>
2) PBFS			<i>See above</i>
<i>Average response rate at school level</i>			
1) SDQ	0.88	[0.59-0.99]	<i>We use the point estimate in our calculations</i>
2) PBFS			<i>See above</i>
<i>r-squared post-test on pre-test</i>			
1) SDQ	<i>n/a</i>	<i>n/a</i>	<i>Value for r-squared of 0.27 obtained from Wong et al. (2023) and apportioned equally over the levels</i>
2) PBFS	<i>n/a</i>	<i>n/a</i>	<i>See above</i>
<i>Average cluster size at recruitment</i>			
	11	<i>n/a</i>	
Notes:			
(1) <i>This is the proportion of pupils completing an SDQ or PBFS of those recruited and randomised for the whole sample</i>			

Table 8.6: Required sample sizes at randomisation with varying levels of intraclass correlation coefficient and minimum detectable effect sizes

	Approximate number of schools at analysis		
<i>Intra class correlation coefficients</i>	<i>0.10</i>	<i>0.15</i>	<i>0.20</i>
<i>MDE=0.20</i>	<i>154</i>	<i>182</i>	<i>208</i>
<i>MDE=0.25</i>	<i>100</i>	<i>118</i>	<i>134</i>
<i>MDE=0.30</i>	<i>70</i>	<i>82</i>	<i>94</i>
<p>Notes:</p> <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 are drawn solely from the four 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 EFC project staff.

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

Programme duration and content

As detailed in Sections 1.1 and 1.3 and Section 5, the boxing-based mentoring programme was tested during this pilot study and based on the Training with the Champions programme.

Project staff interviews suggest that the programme was viewed as being similar (if not the same) as the programmes they had previously delivered, as illustrated by the following report:

“It’s the same as what we normally deliver, so the Training with Champions programme, delivering Personal Development Points in with the sessions, so asking the same as what I would normally deliver in our normal sessions.” (Project staff)

The duration of the programme (12 weekly sessions), as noted earlier, was designed to be delivered within a school term. As described by one project staff member, the boxing-based mentoring programme was a ‘condensed version’ of Training with the Champions, which typically ran for 20 weeks but comprised the same activities.

“Essentially what we do in that programme is we use boxing as a means to get the kids active, get the kids involved, and get them in an environment where they feel comfortable perhaps opening up a little bit. As well, we encourage discussion around things such as how our moods can affect our behaviours and our responses to things, how we can react more positively in different situations. There’s a lot of different PD points, we call them, Personal Development Points, that we then discuss with the young people we work with.” (Project staff)

Despite being shorter, typically 12 weeks was regarded by project staff as an appropriate duration, offering time for the staff to develop relationships with the participants.

“Twelve weeks is a good time for it; we’ve been able to build up relationships, that rapport with the students. They enjoy coming to sessions, they trust us, as the weeks have gone on, they’ve been able to talk to us more and more about what’s going on in their school or day to day lives. If that was shorter, I just don’t think they would trust enough to be able to speak to any of the coaches about what’s going on.” (Project staff)

Adapting to running programmes over different durations was not uncommon for EFC staff. Staff had delivered programmes over six, eight and 10 weeks.

As described by one project staff member, the 12 Personal Development Points (detailed in Appendix 1) comprised the core of the programme. These 12 points (for the boxing-based mentoring programme) were adapted from the 20 development points covered by the Training with the Champions programme. The ones that were chosen were reported by project staff to be more generic and could be more easily applied and discussed with small groups.

Table 8.7 provides an overview of the sessions undertaken at the four intervention schools. This shows the extent to which the 12 Personal Development Points were covered by each of the programmes and how this varied between the schools. Personal Development Points were revisited more than once across the 12 weeks; for example at school A, the 'growth mindset' personal development point was focused on in weeks one to three and then again in week 11 alongside 'feel the fear'. At school C, seven of the 12 sessions focused on 'remove the victim'. Based on the interview data with project staff, the revisiting of Personal Development Points was intentional as individual points interrelated with other points. Not all of the 12 Personal Development Points were covered during the programmes at all of the schools, as shown in the row in Table 8.7 titled 'Total prescribed weeks completed based on the 12 Personal Development Points'. For example, at school C, five of the prescribed weeks (based on the Personal Development Points) were completed, with one personal development point ('removing the victim') being repeated across seven of the 12 weeks. The extent to which this mattered is unclear. As described in Section 1.3, there was an expectation by EFC that not all programmes were likely to be the same, given that the programme was intended to be responsive to the differing needs of the participants. The variation across the programmes (in relation to Personal Development Points) could be confirmation of the uniqueness of each programme rather than non-completion of the intended programme.

Pupil data from the focus groups suggest that discussion of Personal Development Points formed part of the activities that they undertook alongside boxing and other physical activities.

Additionally, the focus group data suggest that the EFC sessions gave opportunities for pupils to reflect on how to deal with difficult situations, such as ways of avoiding getting into fights, as illustrated by the following report:

"...after my exclusion on Monday, they told me to try not to get into fights or like starting them myself because if you get into the fight, it doesn't start for no reason. Like I did something which annoyed him, which caused the fight, so I need to stop doing that." (Pupil)

When pupils were asked whether the programme would help them to stay out of trouble, some pupils suggested that after being on the programme, they had learnt to act differently:

"Like if a teacher shouts at me, I'd rather just not chat back. I just ignore it." (Pupil)

Other pupils were more reflective and recognised that this would not happen immediately, as this pupil explained:

"Because it takes time. That's like playing a sport once and then you think you're the best but it takes time. It takes practice." (Pupil)

Asked about what activities they undertook during the programme, the combination of physical activities and time to reflect on pupil attitudes and behaviour were both identified by pupils.

"Well, we do skipping. We do things on the ladder, two foot, two steps, three steps, four steps. We just practise punches. I don't know anything else." (Pupil)

"So, like we have little motivational talks as well." (Pupil)

Some pupils also reported applying techniques they had learnt during the EFC sessions in school, for example to motivate themselves when they found lessons challenging:

“I use it if I can’t get something in class; I use it to motivate myself to say, ‘I can do this question’ or ‘I can do this drawing’ or something like that.” (Pupil)

Pupils recognised the benefits of the programme as being both physical and emotional:

“It like helps you a lot mentally and it’s good for physicality as well.” (Pupil)

These activities and benefits align with those identified during the feasibility study and suggest that from the perspective of participants, the boxing-based mentoring programme was adapted successfully for the pilot trial.

Session duration

As reported by project staff, typically, each session lasted around 60 minutes, which was the same duration as their delivery of Training with the Champions sessions. This is confirmed by the monitoring data on session duration recorded by EFC staff set out in Table 8.7. In some instances, sessions ran for 45–50 minutes, depending on the duration of school periods, which the programme sessions needed to fit into. The 45–60-minute duration of each session was regarded by project staff as being an optimum duration as it allowed them to cover what they needed to while maintaining the pupils’ interest.

Where project staff had delivered sessions that lasted longer (in some cases up to three hours), this was felt to be too long for pupils, whose interest tended to wane over that time period.

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

Table 8.7 provides an overview of the sessions undertaken at the four intervention schools. This shows that almost all (43 of the 48) planned sessions were undertaken. Of the five that did not take place, these were outside the control of EFC: two were due to COVID-19, one because this planned session was scheduled for half term, one due to a school inspection and one because the school was closed due to extreme weather.

Initial apprehension from girls

Project staff reported that in some instances, girls were initially more apprehensive about taking part in the activities because of the perceptions of boxing being a male-orientated sport. However, as presented in the following account, when they realised they could engage in the activities as well as boys, they appeared to fully participate:

“Some of the females that I work with in [name of school], they were a little less eager to get involved than the boys were. I think again, the connotation that boxing is a typically male-dominated sport or that it’s a violent fighting sport. But after the first session, the girls really got stuck in and really enjoyed themselves and realised that it was something that they could really throw themselves at.” (Project staff)

Size of groups

Project staff reported that it was easier to deliver the programme to smaller groups of pupils, allowing the EFC staff member to engage more readily with individuals. One staff member suggested that eight was the ideal number for a group as it allowed them to deliver the mentoring element of the programme.

“In an ideal world, we’d like to have about eight in our group. That’s manageable for us to get our point across and speak to each young person individually, but we have to adapt when we go into schools, they

might throw extra students in. I feel in those sessions the point gets lost a little bit, it turns more into a PE lesson rather than what we're trying to do and deliver the mentoring as well, so I think smaller groups work a lot better." (Project staff)

It should be noted that one of the trial conditions was that 12 pupils were to be recruited at each school and would receive the programme. In some schools where more than eight pupils were recruited, two programmes were run; for example, in one school, 16 pupils were originally recruited and two programmes (comprising eight pupils each) were arranged. Over time, as the programme progressed, pupil numbers decreased to four per group, which project staff felt made it easier to deliver the programme as there were fewer distractions and more opportunity to focus on individual pupils.

"Originally, I was expecting 16 at [name of school] (two groups of eight), and then once the sessions were going, I think we had four in each group, so it was good still because it just makes it a lot easier to try and target those young people. When you've got them in a big group, it can be really difficult. They get a lot more distractions in there, especially with boxing gloves on. The small groups have made it a lot easier to try and get our point across basically." (Project staff)

3. 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 at the intervention schools. This shows that across the schools, 76% (28 of 37) of pupils completed the programme and 24% (9 of 37) of pupils dropped out.

Project staff commented that non-participation by pupils at sessions occurred due to: pupils forgetting to bring their PE kit and therefore not being able to participate, illness on the day of the session and an unwillingness on the day of the session to take part.

In one school, there was an expectation from the EFC staff member that the school staff member responsible for the trial and programme would ensure whenever possible that pupils attended the programme sessions. However, this did not occur, primarily because the school staff member was only working part time.

One project staff member suggested that they had expected a higher drop-out rate than occurred, given the cohort of young people who were recruited to the programme, i.e. that due to challenging behaviour, they were likely to be suspended from school or prevented from participating in the sessions.

Where pupils were reluctant to engage in the session on the day, EFC staff reported taking time out to understand the pupil's concerns and help them work through their feelings.

The project staff interview data indicated that sessions were responsive to the different needs of participants. For example, in some cases, staff members spoke about responding differently based on gender. For boys, their issues coalesced around anger and aggression as well as trying to understand their emotions. For girls, anxiety, self-confidence and body issues were common issues.

Pupil motivation for participating in the programme varied. Some pupils said they were attracted by the focus on boxing.

One pupil was also encouraged to join the programme by their father because of the father's interest in boxing and his perception that it offered their child a new experience. Other pupils were encouraged by their parents to participate because they thought it would help their child do better at school.

The experience of participants was positive, with pupils reporting that the EFC staff listened to them and provided encouragement and help. They found the EFC activities engaging and provided them with opportunities to release their anger.

Participants viewed the EFC staff differently to school staff, regarding them as friends and as someone they felt could relate to them and their experiences.

"[They] just seems like more of a mate." (Pupil)

"Say like you're talking to [them], [they] knows what you're going through." (Pupil)

Table 8.7: Overview of the weekly sessions run by intervention schools

	A	B	C	D
Week 1	Growth Mindset	Mini Goals	Mini Goals	Magic of Moods
Week 2	Growth Mindset	Remove the Victim	Awesome Exercise	Awesome Exercise
Week 3	Growth Mindset	Positive Reactions	Positive Reactions	Relaxed Excellence
Week 4	Positive Reactions You Are What You Eat	Action Not Outcome	Remove the Victim	Action not Outcome
Week 5	Going With the Flow Mini Goals	Growth Mindset	Relaxed Exercise	Mini Goals
Week 6	- (Cancelled due to COVID-19)	- (Cancelled for Half Term)	Remove the Victim	Remove the Victim
Week 7	Action Not Outcome Awesome Exercise	Mini Goals	Relaxed Excellence	You Are What You Eat
Week 8	Relaxed Excellence (MMU)	Remove the Victim	Remove the Victim	Feel the Fear
Week 9	- (Cancelled for School Inspection)	Going With the Flow	Remove the Victim	Going With the Flow
Week 10	Magic of Moods Feel the Fear	Going With the Flow	Remove the Victim	Happiness Myth
Week 11	Feel the Fear Growth Mindset	Awesome Exercise	Remove the Victim	Positive Reactions
Week 12	- (Cancelled due to COVID-19)	Positive Reactions	Remove the Victim	- (School Closure)
Total weeks completed	9	11	12	11
Total prescribed weeks completed based on the 12 Personal Development Points	10	7	5	11
% of prescribed weeks completed	83%	58%	42%	92%
Content not covered	Remove the Victim Happiness Myth	Magic of Moods You Are What You Eat Relaxed Excellence Feel the Fear Happiness Myth	Magic of Moods Going With the Flow You Are What You Eat Action not Outcome Feel the Fear Growth Mindset Happiness Myth	Growth Mindset
Average length of sessions	60 mins	60 mins	60 mins	60 mins

Table 8.8: Overview of pupil attendance for intervention schools

	A	B	C	D	Total across the schools
Number of students who started course	7	9	8	13	37
Number of students who classified as completing course	4	9	5	10	28
% of students who completed	57%	100%	63%	77%	76%
Number of sessions run by the school	9	11	12	11	43
Of those that completed, average number of sessions completed	7.5	7.9	8.4	9.5	8.3
Of those that completed, the average proportion of sessions completed	83%	72%	70%	86%	78%

8.5 Evidence of promise

Our assessment of the sample sizes that might be required for an efficacy trial (Section 8.3) has shown that, based on the trial sample data and other relevant information, such a trial will require many schools to be recruited and retained in the study, so much so that questions around how far EFC could recruit and engage such a large number of schools are difficult to avoid. On assessing the achieved sample, we have also judged that the regression models we had initially hoped to estimate cannot be estimated. This has meant that the ‘evidence of promise’ analysis cannot be undertaken.

Instead, we report results from a simple comparison of average outcome scores among intervention and control pupils, first on the SDQ and then on the PFBS outcomes (Table 8.9). The results are very uncertain and should not be interpreted as demonstrating the effectiveness or otherwise of the intervention.

As explained above, due to the small size of the achieved sample, confidence intervals for the difference in means displayed in Table 8.9 cannot be reported. Instead, as mentioned before, we report permuted p-values derived using randomisation inference (Gerber & Green, 2012; Hess, 2017).⁴ These p-values are a probability and provide an assessment of how far our results might be compatible with the sharp null hypothesis (explained above). The larger the p-value, the more likely our observed results (or more extreme) under the hypothesis that the intervention has no effect for any pupil. However, it is important to keep in mind that as this was a pilot sample, it was never designed to provide a definitive test of the null hypothesis. These results are simply presented for the sake of completeness and are limited in terms of what can be inferred from them. We urge readers to exercise caution in drawing conclusions from these results beyond the sample itself.

Looking first at column 1 in Table 8.9, we see that pupils in intervention schools scored one and a quarter point lower on the SDQ total difficulties scale than their counterparts in the control group ($D=-1.25$; $p=0.560$). The total difficulties score ranges from a possible score of zero to one of 40. However, the probability that we would observe this difference or one greater, were the effect of the intervention on all pupils to be zero, is 0.56 and quite large. This means that our result *is compatible* with a situation in which the intervention has no effect (usually, we would want to see p-values below 0.05 before we would act as if our result were incompatible with a zero effect). To reiterate, it is important to keep in mind that this trial does not represent a definitive test of the intervention – it is statistically under-powered in this regard. Equally important, however, is that our results elsewhere in this report raise questions as to whether such a definitive test would be practically attainable.

Column 2 of Table 8.9 reports the difference in average score of intervention and control group pupils on the problem frequency scale. This scale can vary between a score of 8 and 34. Our result shows that intervention group pupils scored about a third of one point lower on this scale than control group ($D=-0.37$, $p=0.884$). The probability of observing this result or one larger, were there to be a zero effect of the

⁴ 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 t-statistic result 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 to hold.

intervention for all pupils, is 0.884 and very large. Again, this means that our results are generally deemed quite compatible with the null hypothesis of a zero effect.

What can we conclude based on this evidence? In this sample, intervention group pupils reported, on average, fewer difficulties and slightly reduced problem frequency when compared to their control group counterparts at follow-up. Our results are, however, highly uncertain and quite compatible with a situation in which the intervention has no effect. Given the uncertainties, it is very possible that if we were to replicate this study, we would find the opposite – that intervention group pupils reported more problems and higher levels of problem frequency than those in the control group. As a pilot study, the sample was never powered to provide a definitive picture; even if we had achieved our sample size targets, only an ‘evidence of promise’ assessment could have been made. In summary, we would recommend that these results **are not** taken into consideration when deciding whether to move to an efficacy trial. The sample is too small and results too uncertain.

Table 8.9: Results from mean comparison tests

	SDQ total difficulties	PBFS
	Mean [permuted p value]	Mean [permuted p value]
Intervention group	11.55	10.52
Control group	12.79	10.88
Difference	-1.25 [0.560]	-0.37 [0.884]
Sample size		
Schools	7	7
Pupils	65	65
Notes: Difference in means and t-test obtained in STATA v17 using the user written command ‘cltest’ (Herrin, 2022) 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

In summary, given the criteria set out at the protocol stage and prior to seeing the trial data, we conclude that EFC programme as tested here is not ready for trial.

Importantly, for a variety of reasons, some of which were beyond their control, EFC were not able to recruit enough schools to the study, nor maintain pupils within those schools that did participate in the sample. This suggests that, without substantial support and investment, EFC would not be able to deliver an efficacy study that would provide a more definitive test of the programme.

EFC faced administrative and coordination challenges during the trial, which were compounded by competing school priorities and exacerbated by COVID-19. The relatively short time frame for schools to complete all of the administrative tasks required prior to randomisation also made this challenging. EFC took steps where they could to address some of these challenges, such as attending schools to administer the survey using paper copies and EFC staff entering these onto the online survey. Scaling up to manage the processes and challenges required for a trial involving the numbers of schools, as set out in Section 8.3, would require a significant step change in the capacity of EFC to deliver this successfully.

As a result of the difficulties experienced in recruiting and retaining schools and the challenges encountered in obtaining data from pupils, our estimates of the required sample for an efficacy study are very large. Another way of putting this is to say that if we were to proceed to an efficacy study, given what we have observed in this pilot, a very large sample would be required to anticipate subsequent loss and failure to recruit. Such large initial samples would be required to obtain sample power at anywhere near the level to adequately control Type 2 statistical error rates over the long run and at a level typically seen in studies of this nature. To summarise this point, based on our judgement, it is not viable to attempt to recruit a sample of the size indicated, and such a sample size would be disproportionately costly to the point of being difficult to justify, particularly where there are so many other uncertainties associated with practical requirements of any future trial.

As detailed in Section 8.5, we did not undertake an 'evidence of promise' and the associated regression analysis. Instead, we reported results from a simple comparison of average outcome scores among intervention and control pupils, first on the SDQ and then on the PFBS outcomes. The results are very uncertain and should not be considered in deciding what to do next. Our view is that EFC is not ready for trial, and this conclusion is based on the failure to recruit and retain schools and pupils in the sample. If investment is available, a second pilot with a longer lead-in time to allow for school recruitment and further refinement and theory of change understanding of the programme might be considered, but we do not recommend moving to an efficacy study at this time.

9. Conclusion – pilot trial

Figure 9.1: Summary of pilot findings

Research question	Finding
1. Can EFC identify and gain the agreement of schools to participate in the trial in the numbers required?	The developers recruited eight schools to the trial. The target of 12 schools was not met because: three schools withdrew due to the administration expectation and one because of the restrictive nature of selection criteria; challenges in managing the coordination and administration of the pilot; the short time frame for schools to complete the administrative tasks and recruitment prior to randomisation; challenges in contacting schools due to COVID-19, school staff working part time; and school staff finding it challenging to complete all the pre-randomisation tasks due to competing school priorities and being short-staffed because of COVID-19.
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 understand the messages about randomisation that they receive.	Generally, the developers were able to explain the trial to the schools. School staff understood the process of randomisation.
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 that 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?	No. The only way to test if this is feasible would be to undertake a second pilot that allowed for school, pupil recruitment and completion of administrative tasks over a longer time frame. However, this is not altogether straightforward. If the recruitment period is advanced, at the point when the administrative data are collected and randomisation occurs, recruited pupils may no longer be able to participate in the programme because they may be excluded from school and/or not allowed to participate in the programme because of poor behaviour.
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 Office for National Statistics (ONS) Secure Research Service (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?	No parents withdrew their child from the trial following randomisation.
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 had no concerns about the randomisation process.
10. How many schools/pupils withdrew from the study post randomisation, and what were the reasons given for withdrawal?	One school disengaged from the study at the point when follow-up surveys were to be collected. No follow-up surveys were obtained from this school.
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%.
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?	<p>Follow-up data were collected from four intervention and three of four control schools.</p> <p>The overall response rate was 62% of pupils recruited and randomised – 62% for intervention schools and 61% for control schools.</p> <p>The main challenge to the completion of questionnaires was the capacity of schools to support this. EFC staff overcame this by attending the control schools, implementing paper copies of the questionnaires with pupils, and then entering the data electronically. Post surveys were implemented in the intervention schools as part of the delivery of the programme.</p>
Evidence of promise?	A small achieved sample size meant there was insufficient data to assess evidence of promise.

10. Final summary

The EFC programmes examined by the feasibility study (Training with the Champions, Therapeutic Boxing and Hello Future) were generally well received by participants and were viewed positively by partner agencies.

The boxing-based mentoring programme, based on the Training with the Champions programme, was delivered in schools over a 12-week period. It was adapted for delivery and testing for the pilot trial. No significant problems occurred in delivering this adapted programme, in part because EFC were used to

delivering their programmes over differing time frames from six weeks to 20 weeks, depending on the programme, funding and requirements of schools and other commissioning bodies. A theory of change programme focusing explicitly on the boxing-based mentoring programme is included at Appendix 6. This was produced by the developer after the pilot study was completed.

The boxing-based mentoring programme was well received by participants and was viewed positively by the school staff who set up the trial and programme in their schools. Participant feedback suggested that the programme provided a 'hook for change' (Giordano, Cernkovich & Rudolph, 2002), encouraging participants to respond in more constructive ways to conflict and school. The EFC staff were perceived by participants to be more relatable than school staff, which facilitated participation in the programme.

EFC experienced challenges in meeting the sample size requirements for the trial due to administrative coordination capacity, the relatively short time frame for schools to complete the pre-randomisation administrative tasks and the capacity of school staff to complete the administrative tasks exacerbated by COVID-19.

A small achieved sample size meant there were insufficient data to assess evidence of promise.

Further research building on the pilot trial is therefore required before an efficacy trial can be considered. One approach might be a second pilot trial.

References

- 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
- 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), 1279–1292. <https://doi.org/10.1080/17430437.2013.821251>
- Deuchar, R. & Weide, R. (2019). Journeys in gang masculinity: Insights from international case studies of interventions. *Deviant Behavior*, 40(7), 851–865, DOI: 10.1080/01639625.2018.1443761
- Deuchar, R., Sjøgaard, T. F., Kolind, T., Thylstrup, B. & Wells, L. (2016). 'When you're boxing you don't think so much': Pugilism, transitional masculinities and criminal desistance among young Danish gang members. *Journal of Youth Studies*, 19(6), 725–742. <https://doi.org/10.1080/13676261.2015.1098770>
- 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), 24–67. <https://doi.org/10.1080/19345747.2012.673143>
- DuBois, D. L., Portillo, N., Rhodes, J. E., Silverthorne, N. & Valentine, J. C. (2011). How effective are mentoring programs for youth? A systematic assessment of the evidence. *Psychological Science in the Public Interest*, 12, 57–91. <http://dx.doi.org/10.1177/1529100611414806>
- Eveline, van V. & Stams, G. J. (2018). Predictors of intervention success in a sports-based program for adolescents at risk of juvenile delinquency. *International Journal of Offender Therapy and Comparative Criminology*, 62(6), 1535–1555. <https://doi.org/10.1177/0306624X17698055>
- Empire Fighting Chance. (2021). Our impact 2021. Retrieved from: <http://www.empirefightingchance.org/wp-content/uploads/2022/02/EFC-IMPACT-REPORT-2021.pdf>
- Fries-Britt, S. & Snider, J. (2015). Mentoring outside the line: The importance of authenticity, transparency, and vulnerability in effective mentoring relationships. *New Directions for Higher Education*, 171(171), 3–11.
- Gerber, Alan, S. & P. Green, Donald. (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), 990–1064.
- GOV.UK. (2022). Government response to the House of Lords National Plan for Sport and Recreation Committee report: 'A national plan for sport, health and wellbeing'. Department for Digital, Culture, Media & Sport. Retrieved from: <https://www.gov.uk/government/publications/government-response-to-the-house-of-lords-national-plan-for-sport-and-recreation-committee-report/government-response-to-the-house-of-lords-national-plan-for-sport-and-recreation-committee-report-a-national-plan-for-sport-health-and-wellbeing#chapter-2-a-national-plan-for-sport-health-and-wellbeing>

- GOV.UK. (2022). Early years experts and mentor programmes. Department of Education Retrieved from: <https://www.gov.uk/guidance/early-years-experts-and-mentors-programme>
- Hayes, Richard J. & Moulton, Lawrence 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), 630–51.
- Jones, R., Harris, R. & Miles, A. (2009). Mentoring in sports coaching: A review of the literature. *Physical Education and Sport Pedagogy*, 14(3), 267–284, DOI: 10.1080/17408980801976569
- Jones, J. & Smith, H.A. (2022). A comparative study of formal coaching and mentoring programmes in higher education. *International Journal of Mentoring and Coaching in Education* 11, 213–231. doi:10.1108/ijmce-03-2021-0054
- Jump, D. & Smithson, H. (2020). Dropping your guard: The use of boxing as a means of forming desistance narratives amongst young people in the criminal justice system. *The International Journal of Sport and Society*. Retrieved from: https://e-space.mmu.ac.uk/625012/1/watermarked_dropping-your-guard_jul-09-2020-07-18-36.pdf
- Maruna, S. (2007). Making good: How ex-convicts reform and rebuild their lives. American Psychological Association.
- Schippers, M. (2008). Doing difference/doing power: Negotiations of race and gender in a mentoring program. *Symbolic Interaction*, 31(1), 77–98. <https://doi.org/10.1525/si.2008.31.1.77>
- Silva, D. M. D. & Kennedy, L. (Eds.). (2022). Power played: A critical criminology of sport (Ser. Law and society). UBC Press. Retrieved February 27, 2023, from: <https://ebookcentral.proquest.com/lib/mmu/detail.action?docID=7101581>
- Spruit, A., Hoffenaar, P., van der Put, C., van Vugt, E. & Stams, G. J. (2018). The effect of a sport-based intervention to prevent juvenile delinquency in at-risk adolescents. *Children and Youth Services Review*, 94, 689–698. <https://doi.org/10.1016/j.childyouth.2018.09.013>
- Stewart, C. & Openshaw, L. (2014). Youth mentoring: What is it and what do we know? *Journal of Evidence-Based Social Work*, 11(4), 328–336. <https://doi.org/10.1080/10911359.2014.897102>
- Tolan, P. H., Henry, D. B., Schoeny, M. S., Lovegrove, P. & Nichols, E. (2014). Mentoring programs to affect delinquency and associated outcomes of youth at risk: A comprehensive meta-analytic review. *Journal of Experimental Criminology*, 10(2), 179–206. <https://doi.org/10.1007/s11292-013-9181-4>
- Vallis, D., Singh, A., Uwimpuhwe, G., Higgins, S., Xiao, Z., De Troyer, E. & Kasim, A. (2021). EEANALYTICS: Stata module for evaluating educational interventions using randomised controlled trial designs.
- Wolfenden Report. (1960). Sport and the community. London: The Central Council for Physical Education.
- Wong, K., Morris, S, Wallace, S., Roberts, A., Gray, P. & Burchell, E. (2023). Rugby Football League – Inspiring future educate mentoring programme. London: Youth Endowment Fund.

Woods, D., Breslin, G. & Hassan, D. (2017). A systematic review of the impact of sport-based interventions on the psychological well-being of people in prison. *Mental Health and Physical Activity*, 12, 50–61. <https://doi.org/10.1016/j.mhpa.2017.02.003>

Appendix 1 – Boxing based mentoring

Personal Development Points for the Boxing based mentoring Programme

Below are the most commonly used Personal Development Points which make up the 12-week programme.

- WK 1 The Magic of Moods

Your mood has an impact on the way you see the world. Moods change naturally and no mood is ever constant. Trying to hold onto the feelings we like, whilst avoiding the moods we don't like, adds a level of management to our experience and interrupts our life-flow. When you're in an extreme mood, it's best not to trust your thinking, or make any decisions. Let the noise pass and then work out what to do.

Reinforced learning:

Do you think constantly trying to manage your mood will help you to perform better at your sport? Do you think constantly battling with your mood will help you to make better life decisions? Can you remember how a bad mood effects your actions and behaviour? What are some of the dangers of getting carried away when in a positive mood?

- WK2 Awesome Exercise

Exercise is good for the body and releases feel-good chemicals in the brain which create a greater sense of wellbeing. However, try not to look to exercise as a means of achieving wellbeing, as this puts unwanted pressure on the activity. The best reason to exercise is because you enjoy it. If your motivation lies here, you are more likely to stick to your exercise goals. Exercise also provides the opportunity to develop communication and social skills and helps to build confidence.

Reinforced learning:

Are you more likely to keep exercising if you enjoy it? Will you have a healthier body if you exercise regularly? Will you develop new skills if you exercise regularly? What kind of physical activity can you do in your own time?

- WK3 Positive Reactions

There are lots of things in life we cannot control. However, what we can control is our reaction to them. The boxers who react in a healthy and controlled way to taking a hard punch in the ring are the ones who become world-class. When our minds dwell on scenarios which are out of our control, we're more likely to experience stress. When something troubling happens in life, move your focus to your reaction rather than the event. This removes victim mentality and encourages positive action. Remember, it's the boxers who are able to react well and feel in control who make better decisions and win fights, the same with life.

Reinforced learning:

If you focus on things you cannot control, are you going to feel more or less stressed? If you react well to difficult situations, are you going to grow and learn? If you see life success in terms of how you react to events, are you going to feel more or less confident?

- WK4 Going with the Flow

Battling negative emotions can make you feel even more unstable. Thoughts, feelings, and emotions are unpredictable. We can't control the thoughts and feelings that pop into our heads. Learn not to fight your thoughts and feelings and you'll experience more stability, ease, and flow in your life. Remember that thoughts move on by themselves when they are left alone.

Reinforced learning:

What happens to negative thoughts when we leave them alone? Will they hang around or will they move on? Will getting annoyed at ourselves when we're upset make us feel better or worse? Will leaving angry feelings alone and allowing them to pass through us help to clear our heads?

- WK5 Remove the Victim

It is easy to blame life events and those around us when things aren't going to plan. The most empowering way to get what we want from life is to bring our focus back to what is within our control. If we believe we are helpless, then life will always feel like it is happening to us, and there will always be a tendency to blame circumstance. Put your energy into taking positive action in the things you can control, rather than blaming the things you can't.

Reinforced learning:

When things aren't going your way, will blaming life circumstances help your personal development? Will you feel more or less confident if you focus on what you can control instead of what you can't control? Are you more likely to feel confident if you are proactive instead of hoping for the best?

- WK6 You are what you eat

All successful athletes, especially boxers, have strict healthy eating and drinking routines. Without providing your body with the right fuel, it becomes hard to perform and function. Unhealthy food can also cause fatigue and mood swings. Therefore, how you look after your body has an impact on how you think about life, too.

Reinforced learning:

Does eating unhealthy food have an impact on your mood? Will we experience life in a healthier way if we eat and drink nutritious food? If boxers look after their bodies, do you think they will find it easier to approach boxing in a healthier way?

- WK7 Relaxed Excellence

A relaxed and calm boxer is more effective in the ring—they make better decisions and react well to challenges. In boxing, as in life, trying too hard creates stress, and being too unfocused breeds laziness. Finding the balance between the two will help you find relaxed excellence

Reinforced learning:

Do boxers perform better or worse when they're desperate to win, or when they are calm and collected? Will trying too hard to get what you want damage or support your efforts? Will being too relaxed damage or support your efforts in achieving your goals?

- WK8 Focus on Action, not Outcome

Focus on the actions within your control and you will increase the chances of success in all walks of life. Thinking about winning doesn't help you to win but thinking about what actions you need to take in order to succeed will increase your chances of winning. Often getting too focused on the outcomes of what you want to achieve can create unwanted stress and lower confidence. Keep your mind on actions and the outcomes will look after themselves

Reinforced learning:

Will measuring success in terms of actions and not outcomes help to bring you confidence? Are you more in control of actions or outcomes? Which statement is more helpful: go out and do your best, or go out and keep your guard up?

- WK9 The Magic of Mini Goals

When we complete goals, we feel a sense of achievement and progress. Achieving small and regular goals helps us to build momentum and progress in life. The size of the goal doesn't matter. Completing regular mini goals is more important. It is helpful to make a list of the small goals you wish to accomplish during the day and tick them off as you work through your list.

Reinforced learning:

Do you think your confidence will improve if each day you set and complete some small, achievable goals? Do you think completing small goals each day will help you to feel positive?

- WK10 Feel the Fear

When we get angry and feel negative, we look for quick fixes that can often get us into trouble. Smoking and taking drugs are two examples of ways to escape unwanted feelings. Learning not to be afraid of your experience, especially when you feel fear, creates stability. When you feel scared or unsettled, hold and experience the feelings instead of moving away from them. For example, when you feel anxious, you may play a computer game in order to escape from the feeling. Next time, try to hang out with the feelings without distracting yourself for as long as possible. If you face up to your fears, they lose their power to influence you

Reinforced learning:

If you are able to experience uncomfortable feelings without distracting yourself, will you become more or less stable? Overtime, if we keep distracting ourselves from our feelings, will we become more or less fearful of them? If we don't mind what we are experiencing, will we be more or less stable?

- WK11 The Growth Mindset

We can always improve and develop new skills. Just because we're not currently very good at something, it doesn't mean we can't become good. There is always opportunity for growth and betterment. Change is always possible. Your feelings and behaviour is not set in stone. You can choose how you write your own future.

Reinforced learning:

If you're aware that you have a choice in the way you act in the future, will this increase or lower your confidence? Do you think boxers who think they can't get better or develop new skills become world-

champions? Do you think it will help boxers if they have a mindset of continuous improvement? Do you think you will feel more or less motivated if you believe it is possible to improve in all areas of life?

- WK12 The Happiness Myth

Society makes us believe that our happiness lies in what we achieve in life. Money, fame and power are some of the main culprits. If money was a true source of happiness, why do the wealthy and the fortunate talk so often about their misery and their constant search for more? The relationship is not clear-cut. If you think your happiness is in what you earn, accomplish, and achieve, you will spend your whole life searching. Knowing that true happiness is not found in this way, is helpful. It will help you to enjoy what you're doing right now without any other agendas

Reinforced learning:

Will you enjoy life more or less if you believe you can only be happy once you've achieved certain things? Are you more likely to feel happy if you accept negative experiences? Is happiness something that can be acquired?

Data Sharing Agreement

between

NAME OF SCHOOL

and

Manchester Metropolitan University

Dated: dd/mm/yyyy

(1) NAME OF SCHOOL, SCHOOL ADDRESS (Data Discloser)

(2) Manchester Metropolitan University, an exempt charity under Schedule 2 of the Charities Act 1993 (amended by the Charities Act 2011). Principal place of business and address for correspondence: All Saints Building, All Saints, Manchester, M15 6BH (Data Receiver or MMU)

BACKGROUND

(A) The Data Receiver has been awarded a grant from the Youth Endowment Fund (the “Funder”) to evaluate an intervention provided by Empire Fighting Chance (**EFC**) (the “Project”). The Principal investigator(s) at MMU is Kevin Wong. The role of MMU as the data receiver is to evaluate the Project. In order to evaluate the project it is necessary to share personal data.

(B) The Data Discloser agrees to share the Personal Data with the Data Receiver in the United Kingdom (UK) on terms set out in the Agreement.

(C) The Data Receiver agrees to use the Personal Data within the UK on the terms set out in this Agreement.

AGREED TERMS

1. INTERPRETATION

The following definitions and rules of interpretation apply in this agreement.

1.1 Definitions:

Agreed Purpose: has the meaning given to it in Clause 2 of this Agreement.

Commencement: Date of last signature

Data Receiver: The term Data Receiver for the purposes of this agreement relate to the party listed in PARTIES (2), above, and also to any representatives of the Data Receiver, including specified sub processor Empire Fighting Chance (EFC). In particular, where stated, transfers to the Data Receiver also include transfers to EFC, who process the Shared Personal Data on behalf of the Data Receiver.

Data Sharing Code: the Information Commissioner’s Data Sharing Code of Practice of May 2011, as updated or amended from time to time.

Data Protection Legislation: all applicable data protection and privacy legislation in force from time to time in the UK including the UK GDPR; the Data Protection Act 2018 (DPA 2018) (and regulations made thereunder); the Privacy and Electronic Communications Regulations 2003 (SI 2003 No. 2426) as amended; all other legislation and regulatory requirements in force from time to time which apply to a party relating to the use of Personal Data (including, without limitation, the privacy of electronic communications); and the guidance and codes of practice issued by the Information Commissioner or other relevant data protection or supervisory authority and applicable to a party.

Personal Data Breach: a breach of security leading to the accidental or unlawful destruction, loss, alteration, unauthorised disclosure of, or access to the Shared Personal Data.

Shared Personal Data: the personal data and special category personal data to be shared between the parties under **Clause 4** of this Agreement.

Term: The length of the Project

1.2 Controller, Processor, Data Subject and Personal Data, Special Categories of Personal Data, Processing and “appropriate technical and organisational measures” shall have the meanings given to them in the Data Protection Legislation.

1.3 Clause, schedule and paragraph headings shall not affect the interpretation of this Agreement.

1.4 The schedules form part of this Agreement and shall have effect as if set out in full in the body of this Agreement. Any reference to this Agreement includes the schedules.

1.5 A reference to a statute or statutory provision shall include all subordinate legislation made from time to time under that statute or statutory provision.

2. PURPOSE

2.1 This agreement sets out the framework for the sharing of **Personal Data** when one **Controller** discloses personal data to another **Controller**. It defines the principles and procedures that the parties shall adhere to and the responsibilities the parties owe to each other.

2.2 This agreement is to be read alongside the Memorandum of Understanding for the YEF pilot study evaluation of Empire Fighting Chance programme (**MOU**), which further justifies the means and purpose of the Project.

2.2 The parties consider this data sharing initiative necessary to formalise the sharing that takes place between [NAME OF SCHOOL] and Manchester Metropolitan University as supported by the Youth Endowment Fund (YEF). The aim of the data sharing initiative is to allow Manchester Metropolitan to support and evaluate the delivery of an agreed programme by EFC. This programme has been developed in order to prevent high-risk children and young people from being involved in crime and violence. The evaluation led by Manchester Metropolitan University aims to generate and disseminate new knowledge and practice which will transform local and national responses to tackling cases of serious violence. It will serve to benefit the young people it targets directly as well as their families and the wider population. It is anticipated that the research facilitated through the sharing will inform more effective ways of reducing violence and increasing wellbeing.

2.3 The parties agree that the Shared Personal Data will only be processed by the Data Receiver , as described in Clause 4.1 and Clause 4.2 and the MOU for the following purposes:

- (a) The pilot study evaluation of the Empire Fighting Chance programme.
- (b) Transfer to the YEF data archive

The parties shall not process Shared Personal Data in a way that is incompatible with the purposes described in this clause (**Agreed Purpose**).

2.4 Each party shall appoint a single point of contact (**SPoC**) who will work together to reach an agreement with regards to any issues arising from the data sharing and to actively improve the effectiveness of the data sharing initiative. The points of contact for each of the parties are:

- (a) [POINT OF CONTACT AT THE SCHOOL]
- (b) Kevin Wong, Reader in Community Justice, Principal Investigator, Kevin.Wong@mmu.ac.uk

3. COMPLIANCE WITH NATIONAL DATA PROTECTION LAWS

3.1 Each Party must ensure compliance with applicable national data protection laws at all times during the Term of this agreement as set out in Clause 1.1.

3.2 The Parties agree not to send any of the Shared Personal Data outside the UK.

4. SHARED PERSONAL DATA

4.1 The following types of Personal Data will be shared between the parties during the Term of this agreement:

- Unique Pupil Number (UPN)
- Name of school
- School Unique Reference Number (URN)
- School postcode (back-up in case of URN change)
- Full name of pupil

- Date of birth
- Sex
- Year Group
- Free school meals (FSM) status
- Pupil premium status
- Special Educational Needs and Disability (SEND) status
- Education health and care plan (EHP or support) status
- English as an 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 Maths

4.2 The following types of special categories of Personal Data will be shared between the Parties during the Term of this agreement:

- Racial or ethnic origin;

4.3 Further details on the Shared Personal Data are described in SCHEDULE 1 MEMORANDUM OF UNDERSTANDING – EMPIRE FIGHTING CHANCE PILOT STUDY EVALUATION.

4.4 The Shared Personal Data must not be irrelevant or excessive with regard to the Agreed Purposes.

5. LAWFUL, FAIR AND TRANSPARENT PROCESSING

5.1 Each party shall ensure that it processes the Shared Personal Data fairly and lawfully in accordance with the Agreed Purpose and Schedule 1 MEMORANDUM OF UNDERSTANDING – EMPIRE FIGHTING CHANCE PILOT STUDY EVALUATION during the Term of this agreement.

5.2 Each party shall ensure that it has legitimate grounds under the Data Protection Legislation for the processing of Shared Personal Data.

5.3 The Data Discloser shall, in respect of Shared Personal Data, ensure that it provides clear and sufficient information to the data subjects, in accordance with the Data Protection Legislation, of the purposes for which it will process their personal data, the legal basis for such purposes and such other information as is required by Article 13 of the GDPR. The Data Receiver agrees to provide to the Data Discloser suitable and compliant privacy information relating to both parties, for the Data Discloser to provide to the data subjects. It is the responsibility of the Data Discloser to ensure that such privacy information is adequate for the Data Discloser's purposes, and intended processing of the personal data.

6. DATA QUALITY

6.2 The Data Discloser shall ensure that before the Commencement Date, Shared Personal Data are accurate and up-to-date.

6.3 Shared Personal Data must be limited to the Personal Data described in Clause 4.1 and 4.2 of this Agreement.

7. DATA SUBJECTS' RIGHTS

7.1 The parties each agree to provide such assistance as is reasonably required to enable the other party to comply with requests from Data Subjects to exercise their rights under the Data Protection Legislation within the time limits imposed by the Data Protection Legislation.

8. DATA RETENTION AND DELETION

8.1 The Data Receiver shall not retain or process Shared Personal Data for longer than is necessary to carry out the Agreed Purposes. The Data Receiver will retain the Shared Personal Data in line with its Retention and Disposal Schedule. The data will be anonymised within three months after the pilot study evaluation is completed. The completion of the evaluation is envisaged to be 31st October 2022 but may need to be extended as required.

8.2 The retention period from clause 8.1 applies to the Receiving Party and does not determine the retention period for any third parties with whom the Shared Personal Data are shared with under separate agreement. Such retention shall be determined by that third party where that third party are a Controller, under Agreement with the sharing party. Further details of these third parties and their intended retention is described within SCHEDULE 1 MEMORANDUM OF UNDERSTANDING – EMPIRE FIGHTING CHANCE PILOT STUDY EVALUATION.

8.3 Notwithstanding Clause 8.1, parties shall continue to retain Shared Personal Data in accordance with the statutory or professional retention periods applicable and in accordance with their respective policies and procedures.

8.4 If the Agreement should be terminated before the Term, the Data Receiver shall retain any Shared Personal Data already received in line with clause 8.1 subject to any Data Subject rights.

9. TRANSFERS

9.1 For the purposes of this clause, transfers of Personal Data shall mean any sharing of Personal Data by the Data Receiver with a third party, and shall include, but is not limited to, the following:

- (a) subcontracting the processing of Shared Personal Data;
- (b) granting a third party controller access to the Shared Personal Data.

9.2 If the Data Receiver appoints a third party processor to process the Shared Personal Data it shall comply with the relevant provisions of the Data Protection Legislation and shall remain liable to the Data Discloser for the acts and/or omissions of the processor. Information relating to intended sub processors is provided within SCHEDULE 1 MEMORANDUM OF UNDERSTANDING – EMPIRE FIGHTING CHANCE PILOT STUDY EVALUATION.

9.3 The Data Receiver shall not disclose or transfer Shared Personal Data outside the UK.

10. SECURITY AND TRAINING

10.1 The Data Discloser shall only provide the Shared Personal Data to the Data Receiver by using secure methods. The process is twofold and the following methods have been agreed; the Data Discloser will provide the Shared Personal Data in a password protected Excel Spreadsheet transferred to EFC [Data Processor] via secure email. The Shared Personal Data will then be collated and transferred to MMU [Data Receiver] via secure CJSM email.

10.2 The parties undertake to have in place throughout the Term appropriate technical and organisational security measures to:

- (a) prevent:
 - (i) unauthorised or unlawful processing of the Shared Personal Data; and
 - (ii) the accidental loss or destruction of, or damage to, the Shared Personal Data
- (b) ensure a level of security appropriate to:

(i) the harm that might result from such unauthorised or unlawful processing or accidental loss, destruction or damage; and

(ii) the nature of the Shared Personal Data to be protected.

10.3 It is the responsibility of each party to ensure that its staff members are appropriately trained to handle and process the Shared Personal Data in accordance with any relevant technical and organisational security measures together with any other applicable national data protection laws and guidance.

10.5 The level, content and regularity of training referred to in Clause 10.3. shall be proportionate to the staff members' role, responsibility and frequency with respect to their handling and processing of the Shared Personal Data.

11. PERSONAL DATA BREACHES AND REPORTING PROCEDURES

11.1 The parties shall each comply with its obligation to report a Personal Data Breach to the appropriate Supervisory Authority and (where applicable) data subjects under Article 33 of the GDPR and shall each inform the other party of any Personal Data Breach irrespective of whether there is a requirement to notify any Supervisory Authority or data subject(s).

11.2 The parties agree to provide reasonable assistance as is necessary to each other to facilitate the handling of any Personal Data Breach in an expeditious and compliant manner.

12. REVIEW AND TERMINATION OF AGREEMENT

12.1 The consent of each party is required in order for the additional party to be included into this Agreement.

12.2 In the event that a new Data Receiver joins the agreement an amended and updated version of this Agreement will be drafted as soon as practicable and circulated to all other parties.

12.3 Parties shall review the effectiveness of this data sharing initiative on a regular basis and on the addition and removal of a party. The parties shall continue, amend or terminate the Agreement depending on the outcome of this review.

12.5 Each party reserves its rights to inspect the other party's arrangements for the processing of Shared Personal Data and to terminate the Agreement where it considers that the other party is not processing the Shared Personal Data in accordance with this agreement.

13. RESOLUTION OF DISPUTES WITH DATA SUBJECTS OR THE SUPERVISORY AUTHORITY

13.1 In the event of a dispute or claim brought by a data subject or the Supervisory Authority concerning the processing of Shared Personal Data against either or both parties, the parties will inform each other about any such disputes or claims, and will cooperate with a view to settling them amicably in a timely fashion.

13.2 The parties agree to respond to any generally available non-binding mediation procedure initiated by a data subject or by the Supervisory Authority. If they do participate in the proceedings, the parties may elect to do so remotely (such as by telephone or other electronic means). The parties also agree to consider participating in any other arbitration, mediation or other dispute resolution proceedings developed for data protection disputes.

13.3 Each party shall abide by a decision of a competent court or of the Supervisory Authority.

14. WARRANTIES

14.1 Each party warrants and undertakes that it will:

- (a) Process the Shared Personal Data in compliance with all applicable laws, enactments, regulations, orders, standards and other similar instruments that apply to its personal data processing operations.
- (b) Make available on request to the data subjects who are third party beneficiaries a copy of this Agreement, unless the Agreement contains confidential information.
- (c) Respond within a reasonable time and as far as reasonably possible to enquiries from the relevant Supervisory Authority in relation to the Shared Personal Data.
- (d) Respond to Subject Access Requests and other relevant Data Subject Rights in accordance with the Data Protection Legislation.
- (e) Take all appropriate steps to ensure compliance with the security measures set out in Clause 10 above.

14.2 The Data Discloser warrants and undertakes that it is entitled to provide the Shared Personal Data to the Data Receiver and it will ensure that the Shared Personal Data are accurate.

14.3 Except as expressly stated in this Agreement, all warranties, conditions and terms, whether express or implied by statute, common law or otherwise are hereby excluded to the extent permitted by law.

15. INDEMNITY

15.1 The Data Discloser and Data Receiver undertake to indemnify each other and hold each other harmless from any cost, charge, damages, expense or loss which they cause each other as a result of their breach of any of the provisions of this Agreement, except to the extent that any such liability is excluded by law.

16. LIMITATION OF LIABILITY

16.1 Neither party excludes or limits liability to the other party for:

- (a) fraud or fraudulent misrepresentation;
- (b) death or personal injury caused by negligence;

16.2 , Neither party shall in any circumstances be liable whether in contract, tort (including for negligence and breach of statutory duty howsoever arising), misrepresentation (whether innocent or negligent), restitution or otherwise, for:

- (a) any loss (whether direct or indirect) of profits, business, business opportunities, revenue, turnover, reputation or goodwill;
- (b) loss (whether direct or indirect) of anticipated savings or wasted expenditure (including management time); or
- (c) any loss or liability (whether direct or indirect) under or in relation to any other contract.

17. THIRD PARTY RIGHTS

17.1 Except as expressly provided for elsewhere in this Agreement, a person who is not a party to this Agreement shall not have any rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this Agreement. This does not affect any right or remedy of a third party which exists, or is available, apart from that Act.

17.2 The rights of the parties to terminate, rescind or agree any variation, waiver or settlement under this Agreement are not subject to the consent of any other person.

18. VARIATION

No variation of this agreement shall be effective unless it is in writing and signed by the parties (or their authorised representatives).

19. WAIVER

No failure or delay by a party to exercise any right or remedy provided under this agreement or by law shall constitute a waiver of that or any other right or remedy, nor shall it prevent or restrict the further exercise of that or any other right or remedy. No single or partial exercise of such right or remedy shall prevent or restrict the further exercise of that or any other right or remedy.

20. CHANGES TO THE APPLICABLE LAW

If during the Term the Data Protection Legislation change in a way that the Agreement is no longer adequate for the purpose of governing lawful data sharing exercises, the Parties agree that the SPoCs will negotiate in good faith to review the Agreement in the light of the new legislation.

21. GOVERNING LAW

This Agreement and any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with it or its subject matter or formation shall be governed by and construed in accordance with the law of England and Wales.

22. JURISDICTION

Each party irrevocably agrees that the courts of England and Wales shall have exclusive jurisdiction to settle any dispute or claim (including non-contractual disputes or claims), arising out of or in connection with this Agreement or its subject matter or formation.

This agreement has been entered into on the date of last signature, below.

Signed by [NAME OF DIRECTOR]

.....

for and on behalf of [NAME OF **Data Discloser**]

Director

Signed by

.....

for and on behalf of Manchester Metropolitan University

Director

SCHEDULE 1 - MEMORANDUM OF UNDERSTANDING – EMPIRE FIGHTING CHANCE PILOT STUDY EVALUATION

THE PROJECT

The Youth Endowment Fund (YEF) is a charity that exists to prevent children and young people becoming involved in violence. The YEF was established in March 2019 by children's charity Impetus, with a £200m endowment and ten year mandate from the Home Office. The YEF funds promising work in England and Wales that aims to prevent children and young people from becoming involved in violence. The YEF evaluates every programme and activity they fund; the aim is to find out what works, for whom and why.

Empire Fighting Chance (EFC) 'Boxing based mentoring' is one of the YEF funded programmes being evaluated. It is a 12-week sports-based mentoring programme that combines non-contact boxing with intensive personal support to change the way young people think and behave. The YEF have commissioned Manchester Metropolitan University (MMU) to undertake a pilot study evaluation of this programme. As part of the study, MMU have designed a pilot Randomised Control Trial (RCT). This approach is strongly supported by the YEF and EFC. The pilot RCT will be supplemented with a small number of interviews with the young people, teachers and other professionals who engage with the programme.

The pilot RCT will involve the EFC programme identifying 12 schools within Bristol, and across Gloucestershire, Herefordshire, and South Wales and inviting them to take part in the trial. Once a school has agreed to take part, the school will sign the Data Sharing Agreement between the school and MMU. Once the DSA has been signed, each of the 12 schools, assisted by an EFC Monitoring and Evaluation Officer, will identify a minimum of 20 young people from Years 8 and 9 who meet the programme's referral criteria. As part of the evaluation, personal data and additional monitoring data will be collected on all the young people involved. The young people will initially complete a baseline online self-report survey, which includes a Strengths and Difficulties Questionnaire (SDQ) and Problem Behaviour Frequency Scale.

The schools will be randomly split into two groups: intervention schools, and control schools. The intervention schools will receive the 12-week EFC programme [the intervention] commencing in January 2022, while the other group serve as a control. When the 12-week programme is complete, both sets of young people (from the intervention schools and the control schools) will complete the online self-report survey for a second time. Once this stage of the pilot is complete, EFC can then engage with the young people from the six control schools. Thereby ensuring that all originally identified young people are offered the intervention. The control group will commence the programme in April 2022.

To qualitatively evaluate the impact of the EFC programme and the delivery of the pilot, a series of qualitative interviews will be undertaken with EFC project staff (n=5), a sample of the young people (n=10), and teachers and other professionals (n=3) involved in the process.

Ethical approval for this research was obtained on 21st June 2021 through the Arts & Humanities REG Committee at Manchester Metropolitan University.

Aims of the evaluation

The evaluation is not an assessment of individual pupils or schools but is about understanding the programme and whether there is preliminary evidence that the programme can achieve its intended outcomes. The results of the pilot will also make an important contribution to the potential design and roll-out of a larger-scale RCT study involving a larger number of schools and young people at a later date. Additionally, the aim of the interviews will be to examine the delivery of the pilot study - what barriers were confronted and how were these addressed, or how could they be addressed?

School and pupil eligibility criteria

A selection of schools within Bristol, and across Gloucestershire, Herefordshire, and South Wales will be approached to take part in the evaluation. Schools that agree to take part will be required to sign a Data Sharing Agreement. Participation is optional and schools can withdraw at any point without giving a reason.

As part of the evaluation, each school will be asked to identify 20 young people from years 8 and 9 in September 2021 that meet the following criteria;

- incidences of the young person's behaviour have been recorded within the SIMS log (or alternative systems). At least 1 incident but no more than 5 incidences recorded in the previous academic year.
- attendance is becoming an area for concern. At least 1 unauthorised absence but no more the 5 unauthorised absences in the previous academic year.
- the young person should exhibit some level of interest in sport/movement - to be assessed by PE teacher.

Parental/carer consent is required for inclusion in the evaluation, as with the sharing of personal data. Information sheets and consent forms will be distributed to parents/carers, and they will be required to return the signed consent form. The young people will also be asked to sign an assent form. Participation in the study is optional, and a young person can choose to withdraw at any point. If a child chooses to withdraw from the study, we will keep the information about them that we have already obtained, but no further data will be collected.

How does my school benefit?

All schools and young people will benefit from the EFC programme, whether as an intervention or control school. Furthermore, all participating schools have the opportunity to be part of a high-quality research trial, working with experienced researchers from MMU.

Why a randomised controlled trial?

The YEF regularly evaluates its projects through an established evaluation process called a Randomised Controlled Trial (RCT). In an RCT, participation in the intervention is determined by random selection from a group of schools that decide to participate in a study. Once the intervention has been completed, outcomes for pupils in the intervention group will be compared to those in the control group to find out whether the intervention has made a measurable difference. RCTs are now widely used in education research studies and are considered to be an important source of evidence in improving the life chances of pupils and young people. Indeed, your school may have already taken part in an RCT: a large number have been carried out separately by the Education Endowment Foundation.

In this study, schools in the control group will also have access to the programme. However, this will follow after completion by the intervention group. We recognise that schools allocated to the control group may be disappointed not to be able to start sooner but this is necessary for taking part in the pilot study. We hope that recognising every school has equal opportunity of being assigned to the intervention group and understanding the essential role played by control schools in helping to further understand the effectiveness of the programme, not to mention the future roll-out of a larger-scale study will coalesce to ensure equal commitment to the evaluation.

What will happen with the data that is collected?

As part of the evaluation, your school will provide personal data (such as name, date of birth, Unique Pupil Number) on behalf of the young people engaging with the programme. EFC will also collect monitoring data on the young people, and data relating to the 'dosage' of the trial, such as number and duration of sessions attended.

Data will be transferred and stored securely within a secure research area agreed with MMU's Head of Information Security. MMU is registered with the Information Commissioner's Office (ICO) and manages personal data in accordance with the General Data Protection Regulation (GDPR) and MMU's Data Protection Policy.

Once the evaluation is complete, MMU will share the data with the Youth Endowment Fund (YEF). This will be passed to the Department for Education (DfE) in order for the data to be pseudonymised before it is transferred to the YEF Archive. At this point, all directly identifiable personal data, such as name and date of birth will be deleted and replaced by an alternative identifier (in this case their Pupil Matching Reference number). The Office for National Statistics (ONS) will house the archive on behalf on the YEF within its Secure Research Service (SRS). The data held in the YEF Archive will then be used to conduct long-term follow-up of programme participants against records held on them in the education (for example, the National Pupil Database) and criminal justice system (for example, the Police National Computer), in order to evaluate the impact of YEF's activity against offending behaviour. Data in the YEF Archive will be retained indefinitely and for as long as necessary for the purpose of future research, analysis, and methodological exploration. The YEF will review the storage of data in the archive every 5 years following submission to assess whether there is a continued benefit to storing the data and its potential use in future research. For more information on the YEF Archive please see: <https://youthendowmentfund.org.uk/evaluation-data-archive/>.

MMU will only retain personal data for as long as is necessary to achieve the research purpose. Once the evaluation is complete and the personally identifiable data has been shared with the DfE, any personal identifiers will be removed, and the University will retain an anonymised version of the data for 10 years. This data will be stored securely on the University's Research Data Storage system. Access to the data will be restricted to the research team. It is the University's policy to only publish anonymised data. The University never sells personal data to third parties. After 10 years, the data will be permanently deleted.

The research team and evaluation

The evaluation is being independently carried out by a team at MMU, led by Kevin Wong (Reader in Community Justice) and Professor Stephen Morris, who have a considerable amount of experience of conducting studies similar to this in schools. The team also includes Dr Paul Gray, Reader in Youth Studies, with years of experience in conducting research with young people. Support will also be provided by Dr Stephanie Wallace.

Timetable of key evaluation activities throughout the trial

Date	Activity
September 2021	Commence pilot study
September 2021	Commence enumeration of young people
September 2021	Commence collection of quantitative monitoring data
October 2021	Implement pre-intervention survey
October 2021	Randomise schools
April 2022	Implement post-intervention survey
April 2022	Qualitative fieldwork commences
June 2022	All data collection (quantitative and qualitative) completed
October 2022	Final report

Data protection

MMU will process the personal data of pupils in your school for the purposes of this study and will act as evaluators. This processing is regulated by the General Data Protection Regulation (GDPR) and the Data Protection Act 2018 (DPA).

- **[Insert Name of school]** is a Data Controller in respect of any personal data of pupils which they process for the purposes of the project, up to the point where the data is shared with MMU;
- **Empire Fighting Chance (EFC)** are a Data Processor as they will collect the data specified by Manchester Met during recruitment, as well as at baseline and after the intervention has been delivered;
- **Manchester Metropolitan University (MMU)** are a Data Controller in respect of any personal data of pupils which they process for the purposes of the project;
- **Department for Education (DfE)** are a Data Processor. The YEF enlist the services of the DfE to pseudonymise the data prior to the data being archived;
- **Office for National Statistics (ONS)** are a Data Processor and have an agreement in place for YEF to use the ONS's Secure Research Service (SRS) to house the archive;
- **The Youth Endowment Fund (YEF)** becomes the Data Controller at the end of the project once the data is submitted to the YEF Data Archive housed within the ONS's SRS.

MMU will ensure that all personal data collected and processed by MMU, and EFC for this research project are:

- Processed in a manner that is fair, transparent and lawful;
- Adequate and relevant to the study, and are processed solely for the purposes set out in this document;
- Accurate, and where necessary, kept up to date;
- Kept in a form which permits identification of data subjects for no longer than is necessary and;
- Processed in a manner that ensures appropriate security of the personal data.

The evaluation of the EFC programme has been assessed for data protection and ethics as part of the embedded research ethics approval process in place at MMU. All personal data will be treated with strictest confidence by the evaluators in accordance with the requirements of the GDPR 2018.

MMU shall ensure that a data sharing agreement is in place as required by the GDPR and DPA. This document will clearly outline the data sharing and protection responsibilities of the four parties involved within this arrangement (the School, MMU, EFC and YEF).

Data will be processed by MMU. So that the processing of personal data relating to the pupils is fair, lawful and transparent we will use a parent information sheet, parental consent form, and young person assent form.

As a public authority conducting research and analysis in the public interest which has undergone ethical approval our lawful basis for the processing of:

- Personal data is 'Public Task' – GDPR Article 6(1)(e);
- Personal data defined as special category is 'Research purposes in the public interest' – GDPR Article 9(2)(j).

Responsibilities

Responsibilities of EFC

- Recruitment of schools to the trial.
- Communicating with schools about recruitment to the trial up to randomisation.
- Acting as a point of contact for queries about the delivery of the EFC programme.
- Acting as a point of contact for sending signed DSA's and permission forms.
- Informing schools of the randomisation result.
- Delivering the EFC programme
- Acting as point of contact for collection of all data.
- Collation of baseline student data during the recruitment process.
- Administration of online validated survey tools.
- Data relating the 'dosage' the young person receives will also be collected by the programme. This will include, for example: dates of sessions, session length, session delivery type, session content, session outcome, and attendance data.

Responsibilities of MMU

- Obtaining institutional ethical approval for the evaluation.
- Ensuring that data protection procedures meet the requirements of GDPR. This includes setting up data sharing agreements between Schools, MMU, EFC and YEF.
- Collating and storing securely all data collected by EFC.
- Acting as point of contact for any queries to do with the evaluation.
- Analysing all data.
- Writing the report.

Responsibilities of all schools recruited to the trial

- Initially, schools will need to provide to EFC:
 - Full name of the School;
 - Full address and postcode of the School;
 - Number of pupils on the roll in Years 8 and 9 at the beginning of September 2021;
 - School URN;
 - Named contact at the school for supplying data – telephone and email address.
- The following information will need to be supplied for all young people engaging with the programme to EFC who are collecting data on behalf of MMU:
 - Unique Pupil Number (UPN)
 - Name of school
 - School Unique Reference Number (URN)
 - School postcode (back-up in case of URN change)
 - Full name of pupil
 - Date of birth
 - Sex
 - Year Group
 - Free school meals (FSM) status

- Pupil premium status
- Special Educational Needs and Disability (SEND) status
- Education health and care plan (EHP or support) status
- English as an 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 Maths
- The following types of special categories of Personal Data will also be shared during the term of the pilot study evaluation.
 - Racial or ethnic group.
- Schools will be provided with a password protected Excel Spreadsheet template to recode this data. Once complete, this will be transferred to EFC via secure email.
- Cover pupil release time – approximately 1 hour per week.

Further information

If you have any queries relating to the delivery of EFC programme please contact Gemma Parry at gemma@empirefightingchance.org or telephone 07739017564.

If you have any queries relating to the evaluation please contact Kevin Wong at kevin.wong@mmu.ac.uk or telephone 0161 247 5251.

END OF DOCUMENT

Appendix 3 - MMU Data Protection

The MMU Data Protection Impact Assessment (DPIA) stipulates and relies on the following legislation.

GDPR art. 6 Lawful basis for processing personal data

MMU will process personal data under Article 6(1)(e) of the GDPR: processing necessary for the performance of a task carried out in the public interest or in the exercise of official authority vested in the controller.

Per Article 6(3) of the GDPR and section 8 of the Data Protection Act 2018 (DPA), MMU's study is in line with the university's powers under the Education Reform Act 1988, in particular section 123A and 123B:

123A higher education corporation in England has power—

(f) to carry out research and to publish the results of the research or any other material arising out of or connected with it in such manner as the corporation think fit.

123B Supplementary powers of a higher education corporation in England

(1) A higher education corporation in England has power to do anything which appears to the corporation to be necessary or expedient for the purpose of, or in connection with, the exercise of any of their principal powers.

GDPR art. 9 Lawful basis for processing 'special category' data

Any special categories of personal data used by MMU will be processed under Article 9(2)(j) of the GDPR: processing necessary for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes and Section 10 of the DPA, which provides that processing meets the requirement in Article 9(2)(j) of the GDPR if it meets a condition in Part 1 of Schedule 1 to the DPA. Specifically Paragraph 4 of Part 1 of Schedule 1 provides that this condition can be used for processing which is:

Schedule 1(1)(4) This condition is met if the processing—

- (a) is necessary for archiving purposes, scientific or historical research purposes or statistical purposes,
- (b) is carried out in accordance with Article 89(1) of the GDPR (as supplemented by section 19), and
- (c) is in the public interest

Appendix 4 – Monitoring data

The monitoring data variables which EFC were asked to provide are detailed below. It should be noted that these variables were used for all four of the YEF-funded projects which the MMU research team were commissioned to evaluate.

Due to the nature of the projects, it was recognised that some variables were going to be collected for all projects (such as name, date of birth, date of referral etc.). Other variables were likely to be depend on the access projects had to data held by other agencies (such as school data, offending data etc.).

Profile at referral

First Name (check spelling)
Family Name (check spelling)
Date of Birth (DD/MM/YYYY)
Date of Referral (DD/MM/YYYY)
Source of Referral
Date of First Contact (DD/MM/YYYY)
Consent Given to Share Data
Gender
Ethnic Group
Unique Pupil Number of YP
Does the YP Have a Statemented Special Educational Need (SEN)?
URN Number of School
Name of School
Has the YP Been Excluded From School in the last 12 Months?
Is the Child Currently Attending a PRU
Full Post Code of Current Home/Accommodation
Living With one or More Parent/Guardian
Is the Child LAC
Number of Siblings YP Currently Living With
Has the Child had any Previous Contact With the Police in the Last 12 Months

Nature of Disposal
Police National Computer Reference Number of the Child
Nature of Last Offence
Date of Last Offence (DD/M/YYYY)
Anxiety
Trauma
Abuse
Other non Listed Mental Health Concern (free text)
Violent Behaviour
Drug use
Self Harm
Depression
Autism
ADHD
Dyslexia
Other Developmental Difficulty (free text)
Risk of Exclusion
Excluded from School
Gang Membership
Anti-social Behaviour

Signs of Abuse

Session data

First Name (check spelling)

Family Name (check spelling)

Date of Birth (DD/MM/YYYY)

Session ID

Date of Session (DD/MM/YYYY)

Length of session (mins)

Type of Contact

Delivery Mode

Who Delivers the Session?

Is This Session a Final Session?

Purpose of the Session (key words please)

Type of Session

Outcome of the Session

Tool Used

Date of Tool Completion (DD/MM/YYYY)

Profile at exit

First Name (check spelling)

Family Name (check spelling)

Date of Birth (DD/MM/YYYY)
Date of Last Contact (DD/MM/YYYY)
Course Status/Reason for Leaving
Signposted to Other Agencies or Organisations
If Signposted, to where?

Appendix 5 – STATA Randomisation code

For each school cluster

```

version 17
sort SchoolUniqueReferenceNumber
set seed 136418

gen random_number = runiform()
egen ordering = rank(random_number)
sort ordering

gen Group = .
replace Group = 1 if ordering <= _N/2
replace Group = 0 if ordering > _N/2
label variable Group "TreatCont"
label define Assignment 1 "Intervention" 0 "Control"
label values Group Assignment
tabulate Group

```


Appendix 6 – Theory of change for the boxing based mentoring programme

Inputs	Outputs		Outcomes/Impact		
	Activities	Participation	Short term	Medium term	Long term
Staff from Empire and NAOS to deliver the programmes. Staff include: coaches x4,, family liaison co-ordinator (additional hours), monitoring & evaluation officer (part-time).	Delivery of the 'Training with the champions' (TWC) programme	450 referred to TWC XX% complete 12-20 week TWC programme XX referred to other programmes/services	Improved relationships with parents/carers and peers Positive actions being taken by young people Improved self-regulation of emotions and behaviour Increased knowledge of mental health Improved attitude towards education Improved career planning skills Improved physical health Improved management of mental ill-health symptoms	Sustained engagement with education Reduced risky, anti-social and criminal behaviour Sustained improvement in mental health and wellbeing Healthy relationships Sustained healthier lifestyle Improved outlook (purpose, aspirations and motivation) Improved resilience Improved confidence/self-esteem	Improvements in attendance (via NPD) Improvements in attainment at GCSE (via NPD) Reduction in engagement with the youth justice system (via PNC/YOS)
Venues to deliver the programmes to be identified					
Referring agencies and stakeholders to be identified in new areas (primarily Gloucester and Cardiff)					

