

EVALUATION PROTOCOL

Moves Different: Boxing to reduce youth offending. A two-armed pilot & efficacy randomised controlled trial

**Ending Youth Violence Lab (BIT); Centre
for Evidence and Implementation;
ClearView Research**

Principal investigator: Tom McBride

Moves Different: Boxing to reduce youth offending. A Two-armed Efficacy Trial with Internal Pilot

Evaluation protocol

Evaluating institution: Ending Youth Violence Lab (at the Behavioural Insights Team), Centre for Evidence and Implementation, ClearView Research.

Principal investigator: Tom McBride

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| Project title | Moves Different: Boxing to reduce youth offending. A two-armed pilot & efficacy randomised controlled trial. |
| Developer (Institution) | England Boxing and Welsh Boxing (& co-design group) |
| Evaluator (Institution) | Ending Youth Violence Lab (BIT); Centre for Evidence and Implementation; ClearView Research |
| Principal investigator(s) | Tom McBride |
| Protocol author(s) | Jack Martin, Tom McBride, Lilli Wagstaff, Faisa Abdi, Stephanie Smith, Alice Mills |
| Trial design | Two-armed randomised control trial |
| Trial type | Internal pilot and efficacy trial |
| Evaluation setting | Boxing clubs |
| Target group | Young people in (or eligible to be in) academic years 9-13, who are at risk of involvement in youth violence and crime |

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| Number of participants | 40 boxing clubs, 3606 young people (overall, across pilot and efficacy) |
| Primary outcome and data source | <ul style="list-style-type: none"> Offending (a binary indicator of whether a child or young person has been arrested for an offence in the 12 months following randomisation, using local police data). |
| Secondary outcome and data source | <ul style="list-style-type: none"> Self-reported offending (Self-reported Delinquency Scale). Behavioural difficulties (Self-report - Strengths and Difficulties Questionnaire). Self-esteem (Self-report - Rosenberg Self-Esteem Scale). Self-control and emotional regulation (Self-report - Difficulties in Emotion Regulation Scale). Community connectedness (Self-report - Community Index). |

Protocol version history

| Version | Date | Reason for revision |
|-----------------------|------------|--|
| 1.3 [latest] | 23/01/2026 | Revising small errors and clarifying randomisation approach. |
| 1.2 | 29/10/2025 | Response to YEF and peer reviewer feedback. |
| 1.1 | 21/07/2025 | Response to YEF and GECo feedback. |
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Study rationale and background

Study overview

Boxing is often cited as a promising approach to support young people and to achieve a range of societal benefits, including reducing or preventing crime. However, there is very little robust, quantitative impact evaluation investigating and demonstrating these benefits (Jump & Hills, 2024).

To fill this gap in the evidence, the Youth Endowment Fund (YEF) has funded a multi-stage and multi-site evaluation of a new, co-designed boxing intervention ('Moves Different' Boxing). This multi-site randomized controlled trial will involve implementing a single central delivery and evaluation protocol across a number of boxing clubs, where each site is intended to follow the same recruitment, randomisation, intervention delivery, and data collection procedures, coordinated by the central research and delivery teams.

The evaluation will begin with a smaller-scale and shorter internal **pilot randomised control trial and integrated implementation and process evaluation (IPE)**, to test the evaluability of the programme, potentially followed by a longer **hybrid type 2 efficacy-implementation trial** to establish the impact of the programme.

Both phases of the evaluation will be conducted as a collaboration with England Boxing and Welsh Boxing and individual boxing clubs. Their responsibilities are outlined below:

- **England Boxing and Welsh Boxing** (referred to as the 'umbrella organisation' or the **UO** throughout) will be responsible for recruiting boxing clubs to participate in the project, supporting them to deliver the co-designed boxing programme, and will be responsible for recruiting children and young people into the project/study.
- **Boxing clubs** (referred to as delivery partner organisations or **DPOs** throughout) will be responsible for delivering the co-designed boxing programme to children and young people randomised to it.

This study forms part of YEF's commitment to being a racially equitable funder and their programme of Race Equity Multi-Site Trials (MSTs) — a model designed to generate robust evidence about what works to prevent youth violence while promoting racial equity in evaluation and funding. The MST approach enables smaller delivery organisations, often led by leaders from minority ethnic backgrounds, to participate in rigorous impact evaluation, addressing an imbalance whereby such organisations are often underrepresented in research despite their deep roots in the communities most affected by violence.

A meaningful commitment to identifying what works in reducing youth violence requires that we engage and learn from the communities and young people disproportionately impacted by it. Evidence from YEF's 2025 Beyond the Headlines report highlights that in 2023/24, 34% of homicide victims aged 16-24 were Black, over six times their population share (YEF, 2025). Boxing is therefore an important platform for this work, with a strong tradition of engagement in diverse and disadvantaged communities. This trial will aim to recruit at least 30% of participants from minority ethnic backgrounds, and at least 60% of delivery partner organisations (DPOs) led by racially minoritised leaders. By focusing on racially equitable participation and leadership, this MST aims not only to test whether community-based boxing can reduce youth violence, but also to explore how racially minoritised CYP engage with and benefit from such programmes.

Study context and co-design

Since 2020, England Boxing has delivered its Clink to Club programme. The programme is for individuals who are serving time in prisons. Its first phase occurs inside the prison setting and involves workshops (including guest speakers) and circuit training. The second phase occurs after release and involves boxing training sessions at their local club.

In April 2023, England Boxing and Welsh Boxing (E&W Boxing) approached YEF around funding delivery and evaluation of its Clink to Club programme. Together, YEF and E&W Boxing developed a plan to deliver a boxing programme that demonstrated a better fit with YEF's strategic objectives, i.e. one that would be aimed at younger people, and delivered upstream of entering into the criminal justice system. In December 2024, the Ending Youth Violence Lab (at the Behavioural Insights Team, referred to as 'the Lab' in this document) along with the Centre for Evidence and Implementation, ClearView and UKYouth were appointed to facilitate the co-design process of this new programme in partnership with England Boxing and Welsh Boxing, and to plan for and conduct a multi-site RCT evaluating its effectiveness (see Appendix A for more details on organisational roles and responsibilities and personnel).

Between January and May 2025, the partnership has:

- **Recruited 13 clubs** to participate in co-design (and where a subset will proceed to the evaluation). Please see Appendix B for more detail.
- Conducted a **literature review** of existing evidence on the effectiveness of boxing, the outcomes it is believed to improve, and the mechanisms by which it is hypothesised to do so.
- Conducted a series of **interviews** with boxing club leadership, coaches, and young boxers to build a strong understanding of how boxing programmes are currently delivered. We conducted 12 interviews with club staff (a mix of coaches and head coaches), and 4 interviews with young boxers.

- Conducted a **survey** to gather information on boxing delivery to young people in boxing clubs in England and Wales. The survey asked questions about young people that boxing clubs support, referral routes into the clubs, format of activities, and staff involved in the delivery. We received 460 survey responses from a convenience sample of boxing clubs in England.
- Conducted a series of **6 co-design workshops** (facilitated by the Lab, and attended by England Boxing, Welsh Boxing, and the recruited clubs).
 - Each of the 6 workshops took between 2 and 3 hours, and occurred on a weekly basis between w/c 10th February and w/c 17th March '25.
 - Each workshop focused on specifying a different part of the programme and its Theory of Change/Logic Model:
 - **Workshop 1: Objective-setting** - What are we trying to achieve with the intervention?
 - **Workshop 2: Referral, eligibility and target population** - Who are we trying to achieve these outcomes for, and how do we reach them?
 - **Workshop 3: Programme delivery** - How will we achieve these outcomes for this population? What will be delivered, for how long and in what format?
 - **Workshop 4: Supporting programme delivery** - What resources do we need to deliver the programme? How should we support staff?
 - **Workshop 5: Evaluation** - How are we going to evaluate the programme we've designed?
 - **Workshop 6: Review and wrap-up** - How do we feel about the intervention, looking back at all of the decisions from the previous workshops in the round? Is there anything important we haven't addressed?
- Conducted 2 **youth participatory panels** in March 2025 (facilitated by ClearView Research) to support the early-stage discovery phase for this project. These were each 2 hours in duration and conducted with the group of 12 CYP. The purpose of these two panel sessions were to i) understand young people's attitudes, motivations, and preferences around boxing-based programmes (first panel session) and ii) understand young people's attitudes, motivations, and preferences around taking part in the evaluation (second panel session). The group included a mix of boys and girls. A majority of the group identified as Black African or of mixed heritage.

Overall, our aim was to develop a boxing programme that is:

- i) **Evidence-informed** - supported by the best available evidence.
- ii) **Deliverable** - realistic and possible to deliver well and as intended.
- iii) **Acceptable** - seen as acceptable and valuable by clubs, coaches and young people.

- iv) **Evaluable** - amenable to high-quality evaluation.
- v) **Representative** - largely reflective of introductory-level boxing sessions already run for young people in clubs (although aiming for consistency across sites on important components of identified best practices)
- vi) **Inclusive** - prioritising inclusivity and addressing the need for equitable representation and support for minorities communities.

The following section provides a summary of the outcome of this co-design work.

Intervention

Programme outcomes

In terms of specifying the **desired outcomes** of the co-designed boxing programme (Moves Different boxing), we started by interviewing clubs and exploring the literature, to identify people's perspectives on how boxing currently supports young people. We built on this starting point in co-design workshops, and put together a full set of intended outcomes for our boxing programme. We have organised our intended outcomes into 3 categories:

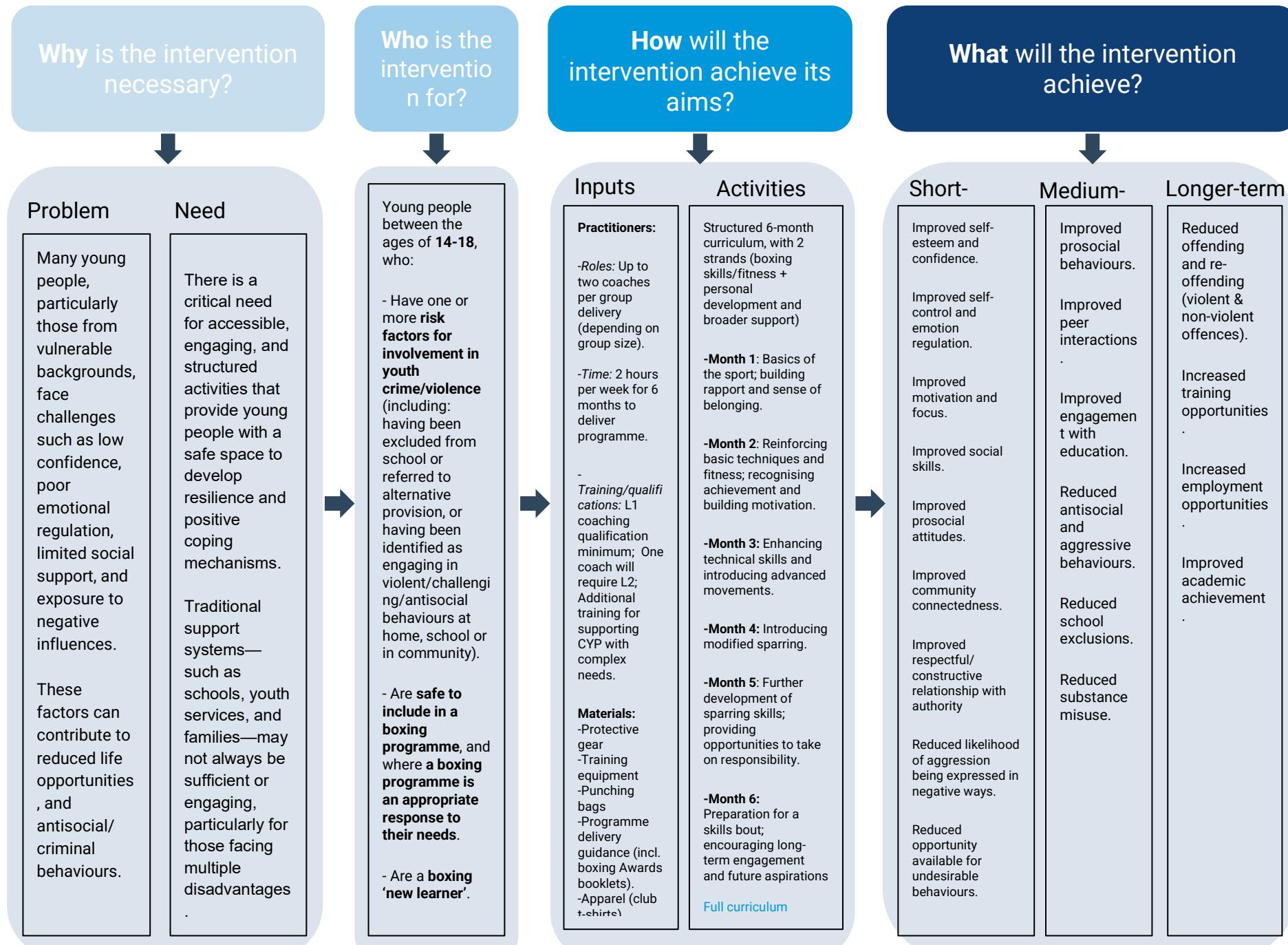
- *Short-term outcomes* - What we expect to change for young people first as they participate in boxing - i.e. attitudes, competencies and mindset. Our short-term outcomes further subdivide into 3 categories:
 - 1) *Improved socio-emotional development* - supporting personal growth, personal and interpersonal skills, abilities and traits:
 - a) Improved self-esteem and confidence.
 - b) Improved self-control and emotion regulation.
 - c) Improved motivation and focus.
 - d) Improved social skills.
 - 2) *Supporting social cohesion* - building positive beliefs and attitudes about engagement with society and how to treat others in society (Ryan, John, & Hanna, 2025; England Boxing & Sport Industry Research Centre, 2023; Jump & Hills, 2024):
 - a) Improved prosocial attitudes.
 - b) Improved community connectedness.
 - c) Improved respectful and constructive relationships with authority.
 - 3) *Reducing exposure to risk and providing diversionary opportunities* - supporting young people to avoid situations and people that increase their exposure to risk:
 - a) Reduced likelihood of aggression being expressed in negative and dangerous ways.
 - b) Reduced time and opportunity available for undesirable behaviours.
 - c) Reduced exposure to negative peer groups.
- *Medium-term outcomes* - Changes in young people's actual behaviours (that are a result of those *initial* changes to attitudes, competencies and mindset):
 - 1) *Promoting positive behaviours*:
 - a) Improved prosocial behaviour.
 - b) Improved peer interactions.
 - c) Improved engagement with education.
 - 2) *Deterring negative behaviours*:

- a) Reduced antisocial and aggressive behaviours.
 - b) Reduced substance misuse.
- *Longer-term outcomes* - Significant and lasting improvements in young people's life trajectories (that result from medium-term behavioural changes):
 - 1) *Positive criminal justice system outcomes*:
 - a) Reduced offending (violent offences).
 - b) Reduced offending (non-violent offences).
 - 2) *Positive labour market outcomes*:
 - a) Increased training opportunities.
 - b) Increased employment opportunities.
 - 3) *Positive educational outcomes*:
 - a) Improved academic achievement.

While boxing has the potential to promote self-control, confidence, and pro-social development, the theory of change must also acknowledge possible unintended negative effects. The confrontational and competitive nature of boxing may inadvertently normalise aggression outside the ring or reinforce “macho” norms that valorise physical dominance and reputation defence—particularly if coaching philosophies emphasise winning over emotional regulation or mutual respect (Jump, 2014). We discuss monitoring for unintended negative effects in the subsequent section focusing on the evaluation.

For more detail on the programme's intended outcomes, the hypothesised mechanisms of impact, the links between short- and medium-term outcomes and medium- and longer-term outcomes, see Appendix C.

Figure 1: High level theory of



Programme format and activities

On the basis of feedback we received from broader stakeholder engagement (interviews, survey) and discussions in the co-design workshops themselves, we agreed upon the following key parameters for the programme:

- **Duration** - It was agreed that the core intervention would last for 6 months (although young people may decide to stay on at their local gym and continue to box, accessing the club's standard provision, after the end of this YEF-funded programme). While there was variation in the feedback received, there was broad agreement that 6 months would be sufficient to generate our short- and medium-term outcomes. In addition, 6 months is generally considered the amount of time it takes to develop many young boxers to the point that they are able to safely participate in sparring.
- **Session frequency and length** - It was agreed that each club would aim to deliver 2 sessions per week over the 6-month period, with each session lasting one hour each. Although there was variation in feedback received, this session frequency/length was generally seen to balance the requirements of boxing training with the need to keep young people engaged and the need to not demand unrealistic amounts of their time.
- **Session timing** - It was agreed that clubs would aim to schedule sessions for as close as possible to the end of the school day (but giving sufficient time for CYP to travel and to go home first if they want to), i.e. starting between 5 and 6pm. The reason for this is to schedule boxing sessions at times where antisocial and criminal behaviours would be most likely to occur.
- **Mode of delivery**
 - It was agreed that this programme would be group-based, reflecting standard boxing practice. Optimal CYP group sizes in boxing are considered relative to the number of coaches. England Boxing, in general practice, recommend a 1:10 coach:CYP ratio for CYP over 10 years old. To reflect current practice, and to balance the need to deliver at scale with the need to be able to give each CYP sufficient attention (and to keep group sizes manageable and keep young people safe), it was decided to keep this ratio for the co-designed programme. However, due to session-to-session nonattendance, we believe that the ratio will be closer to 1:8 in practice.
 - Given that we expect most programmes to be delivered by 2 coaches, we propose we aim for an overall initial group size of 20 CYP (a 1:10 coach:CYP ratio), on the expectation that within a few months of programme commencement this will reduce to a smaller group due to programme drop-out. It is difficult to predict programme drop-out - estimates from coaches engaged during co-design varied dramatically - and in any event are unlikely

to be representative of the experience of our co-designed programme (given that we will be making special efforts to retain young people in a way that is not consistently applied in standard boxing practice). We will learn more about programme drop-out during the pilot and can adjust target group sizes accordingly.

- **Activities** - Within these parameters the co-design group discussed potential programme content and activities. We settled upon 2 core strands to Moves Different boxing:

Strand 1 - Boxing training, skills and fitness strand.



- *Context* - The co-design group concluded that a **core boxing curriculum** was required to underpin the programme.
- *Objective* - To develop young people as boxers and athletes.
- *Source material* - A programme developed by England Boxing and Welsh Boxing, based on pre-existing programmes and standardised approaches to training young boxers.
- *Reasons we selected this specific approach for Strand 1 -*
 - It is a well-regarded and widely-recognised approach endorsed by England Boxing.
 - It provides a structured, standardized approach to working with young people, supporting consistency across sites.
 - There are pre-existing, high-quality materials.
 - It formally recognises young people's development and achievement in boxing (through certification and medals), which was identified as a key element of motivating young people to engage with the programme and to progress.
 - The developer has been highly involved in the co-design process and understands the evaluation and that its findings could range from favourable to unfavourable.



Strand 2 - Personal development and support strand.

- *Context* - 'Coach the person, not the sport' is a coaching philosophy promoted by England Boxing. The co-design group concluded that if the new programme was to be optimally successful, it would need to be supplemented by an emphasis in the curriculum on understanding and supporting individual athletes in addition to a focus on technical skills and sporting outcomes. By this, we mean the light-touch mentoring (the organic, relationship-based support and guidance, integrated within boxing sessions) that coaches routinely provide to young people they are training. When specifying this second strand, the co-design group was attentive to YEF's aim of primarily evaluating boxing itself (rather than boxing as a 'hook' for formal

mentoring/socio-emotional skills development programmes). We believe this second strand represents standard boxing best coaching practices (rather than an independent, structured/formalised programme).

- *Objective* - Providing experiences, skills and support that contributes to young people's personal growth.
- *Source material* - Best practices identified by coaches involved in co-design.
- *Reasons we co-designed Strand 2 -*
 - Important for inducting young people into boxing in the right way, providing a welcoming environment, and maintaining young people's comfort and engagement in the gym on an ongoing basis.
 - Important for encouraging the development of supportive peer groups and the development of trusted relationships between coach and boxers.
 - Important for providing opportunities for development within and beyond boxing.

These activities break down as follows over the 6-months of the programme:

Table 1: Intervention blueprint for Moves Different boxing

| Month | Week | Objectives | Strand 1 content - Boxing training, skills and fitness strand | Strand 2 content - Personal development & support strand |
|--------------------------------|--------|--|---|---|
| Month 1 (Preliminary Award) | Week 1 | Introduce basics of the sport; build rapport and sense of belonging. | Session 1/2 - Stance, guard, torso movement and footwork. Session 2/2 - Jab to the head and body with defences. Push away - Lay back - Block. | In the first month, we would expect clubs to: <ul style="list-style-type: none"> ● Building coach-to-boxer rapport - Coaches sharing their stories with CYP; joint goal-setting, w/ coaches discussing with young people what they want to get out of their participation in boxing. ● Building boxer-to-boxer rapport - team-building games, socials outside of the gym. ● Boundary setting - Coaches working with CYP to set their own boundaries and rules within the club. ● Embedding routines to instil key boxing values - coaches model boxing etiquette, pre- and post-fight rituals e.g. glove touching. ● Fostering a sense of belonging – Providing club-branded t-shirts and kit to help young people feel part of the team and identify with the gym community. |
| | Week 2 | | Session 1/2 - Rear hand to head, body and defences. Outside parry - Elbow Block. Session 2/2 - Jab in and out of range (move feet and then throw punch). | |
| | Week 3 | | Session 1/2 - Rear hand in and out of range (move feet and then throw punch). Session 2/2 - Bag or pad work (straight punches only in combination). | |
| | Week 4 | | Session 1/2 - Flair, self expression and preparations for assessments. Session 2/2 - Preliminary Award Final | |

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| | | | Assessment (a demonstration of technique and partner work, shadow boxing, and pad work, and answering questions on healthy lifestyle and human anatomy). | |
| Month 2 (Standard Award) | Week 5 | Reinforce basic techniques and fitness; recognise achievement and build motivation. | <p>Session 1/2 - Re-cap on Preliminary Award. Learn Colour circuit.</p> <p>Session 2/2 - Learn warm up routines and skipping techniques.</p> | <p>In the second and third months, we would expect clubs to:</p> <ul style="list-style-type: none"> ● Recognising achievement - The programme will provide monthly progress milestones; can also use a 'Boxer of the week' award to celebrate effort, discipline and progress. Boxers are also regularly 'assessed' and given certificates and medals to mark & showcase their progression through the training programme. |
| | Week 6 | | <p>Session 1/2 - Jab moving forward, back, left and right. Defend using the inside/outside slip.</p> <p>Session 2/2 - Rear hand moving forward, back, left and right (developing ability to move in all directions throwing jabs and rear hands). Defend using the outside/inside slip.</p> | |
| | Week 7 | | <p>Session 1/2 - Double jabs moving in all directions. Treble jabs moving in all directions.</p> <p>Session 2/2 - Straight combination punching. Switch of attack to head and body.</p> | |

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| | Week 8 | | <p>Session 1/2 - Assessment preparations. Practice all defence and straight punches.</p> <p>Session 2/2 - Final assessment (a demonstration of technique and partner work, shadow boxing, and pad work, and answering questions on healthy lifestyle, human anatomy and boxing rules/knowledge).</p> | |
| Month 3 (Bronze Award) | Week 9 | Enhance technical skills and introduce advanced movements. | <p>Session 1/2 - Re-cap on Standard Award. Learn colour circuit.</p> <p>Session 2/2 - Lead hand hook to head, short, medium and long range and defences. Plus colour circuit.</p> | |
| | Week 10 | | <p>Session 1/2 - Lead hand hook to body and defences. Plus colour circuit.</p> <p>Session 2/2 - Rear hand hook to head (short, medium, long range) and defences. Plus colour circuit.</p> | |
| | Week 11 | | <p>Session 1/2 - Rear hand hook to body and defences. Plus colour circuit.</p> <p>Session 2/2 - Combination punching to include straight punching and hooks.</p> | |

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| | Week 12 | | Plus colour circuit. | |
| | | | <p>Session 1/2 - Flair and self expression and assessment preparations.</p> <p>Session 2/2 - Final assessment (a demonstration of technique and partner work, shadow boxing, and non-contact sparring, and answering questions on healthy lifestyle, human anatomy and boxing rules/knowledge).</p> | |
| <p>Transition point from non-contact to semi-contact: Note that we would not expect all young people to progress into contact and sparring, and this would depend on their willingness, ability, and the judgement of the coach on whether it is suitable. Young people who do not progress would be involved in non-contact sparring instead as well as other skills development activities described below.</p> | | | | |
| Month 4 (Silver Award) | Week 13 | Introduce modified sparring. | <p>Session 1/2 - Re-cap on Bronze Award, and learning ton-up circuit.</p> <p>Session 2/2 - Rear hand uppercut head/body defences and ton-up circuit.</p> | <p>Across the final 3 months of the programme, we would expect coaches to:</p> <ul style="list-style-type: none"> • Building motivation by showing CYP what's possible - taking YP to - and involving them with - the delivery of a club boxing show. This will enable them to see advanced boxers that they train alongside actively competing, and experiencing what goes on behind the scenes as part of a community engagement event in a boxing setting. This involvement and |
| | Week 14 | | <p>Session 1/2 - Lead hand uppercut head/body, defences and fixed load circuit.</p> <p>Session 2/2 - Combination punching to include straights, hooks, and uppercuts, and fixed load circuit.</p> | |

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| | Week 15 | | <p>Session 1/2 - Counter punching and fixed load circuit.</p> <p>Session 2/2 - Condition sparring (partner work) and skipping.</p> | <p>engagement with a club boxing show / community engagement event organised by the DPO's actively reflects day-to-day activities within a traditional boxing club and helps to foster relationships with training partners, coaches, club and community members in general.</p> <ul style="list-style-type: none"> ● Provide opportunities to take on responsibility - giving older young people the opportunity to support younger boxers, giving boxers other areas of responsibility in the gym (e.g. support on social media). |
| | Week 16 | | <p>Session 1/2 - Condition sparring (partner work) and assessment preparations.</p> <p>Session 2/2 - Final assessment (a demonstration of condition sparring, and answering questions on the history of boxing).</p> | |
| Month 5 (Gold Award) | Week 17 | Further development of sparring skills; providing opportunities to take on responsibility. | <p>Session 1/2 - Re-cap on Standard, Bronze and Silver awards, plus target circuit.</p> <p>Session 2/2 - Condition sparring (lead/rear hand and defences), and target circuit.</p> | <ul style="list-style-type: none"> ● Building motivation by showing CYP what's possible - having judges/refs/national boxers visit gyms, talk to young people and share their experiences. ● Encouraging long-term engagement and future aspirations – An individual discussion about the future beyond the programme, where CYP reflect on their progress, set personal goals, and explore pathways to remain involved in the club—whether as a boxer, mentor, volunteer, or role model for new participants. |
| | Week 18 | | <p>Session 1/2 - Condition sparring (counter punches), plus target circuit.</p> <p>Session 2/2 - Condition sparring (short range/inside work), plus target circuit.</p> | |
| | Week 19 | | Session 1/2 - Condition sparring, tactics against different styles, plus target | |

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| | | <p>circuit.</p> <p>Session 2/2 - Equipment circuit (bag, skip, shadow and pads), plus target circuit.</p> | |
| Month 6 (Platinum Award) | Week 20 | <p>Session 1/2 - Preparations for final assessment.</p> <p>Session 2/2 - Final assessment (a demonstration of a range of abilities including the ability to teach others basic boxing, and a short written project on the commitment/dedication of a boxer, the importance of warming up/cooling down, and boxer's behaviour outside the ring).</p> | |
| | Week 21 | <p>Session 1/2 - Step Back, Lay Back, and Step across.</p> <p>Session 2/2 - Duck and the Inside and Outside Slip.</p> | |
| <p>Session 1/2 - Block, Outside Parry, Inside Parry, Elbow Block.</p> <p>Session 2/2 - Block, Slip, Rolling, Ducking</p> | | | |

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| | Week 23 | | <p>Session 1/2 - Switch of Attack</p> <p>Session 2/2 - Short Range Work</p> | |
| | Week 24 | | <p>Session 1/2 - Triggering, Feints.</p> <p>Session 2/2 - England Boxing Skills bout (giving boxer opportunity to experience what its like to box in a bout on a boxing show, in a safe and controlled environment)</p> | |

Programme inputs

Following the co-design group's specification of the core activities and content of the programme, the group took an inventory of the inputs required to deliver it. These broke down into 4 main categories:

- **Physical space and infrastructure** - Facilities or venues required to host the intervention, including gyms, halls, or community centres.
- **Materials and equipment** - All physical resources used during the intervention, such as boxing gear, uniforms, or printed materials.
- **People, training and support for delivery** - Staff and the training needed to deliver the intervention effectively and safely.
- **Other inputs** - Any additional resources required to deliver the intervention.

In terms of practitioners, it was agreed that 2 boxing coaches would deliver the new programme to a group of CYP over the 6-month period:

- All coaches must have at least a Level 1 Boxing Coach qualification. For more information please read [here](#).
- When the latter stages of the programme are being delivered (the final 3 months, corresponding to the Silver, Gold and Platinum levels), a coach with a Level 2 Boxing Coach qualification must be available to provide supervision for the sparring element of the programme (for more information please read [here](#)).

It was agreed that additional training for coaches would be provided to help them support children and young people with complex needs.

For more detail on the programme's inputs, see Appendix D.

Programme target population

It was agreed that the co-designed boxing programme would focus on young people between the ages of 14 and 18, who have one or more risk characteristics for involvement in crime or violence. These include:

- Has been **excluded from school** (two or more fixed term exclusions in the last 3 years or ever permanently excluded).
- Has been referred to **alternative education provision** (PRUs, other relevant educational settings)
- Is identified as **engaging in violent/challenging/antisocial behaviours** at home, school, or in community.
- Is connected to peer groups or environments where involvement in criminal activity is present.
- Is known to engage in **substance misuse**.

- Is known to have been exposed to **domestic abuse** in the home.
- Is believed to be at risk of or currently experiencing **criminal exploitation**
- Is navigating the emotional, social, or practical effects of having a sibling or family member involved in the criminal justice system
- Referrer can produce a **compelling justification (on other grounds)** that they are at risk of involvement in crime, violence or antisocial behaviour.

For more detail on these risk characteristics and programme's target population, see Appendix E. The Participants section of this protocol sets out inclusion and exclusion criteria for the study.

Research questions and study objectives

The **pilot trial** aims to assess the evaluability, deliverability and acceptability of Moves Different boxing, and to determine whether the project could and should progress to a full-scale efficacy trial.

The pilot trial is also designed to be an **internal** pilot (Avery et al., 2017). This means that as part of the pilot trial, we also aim to measure outcomes (i.e. collect high-quality outcome data that could be analysed alongside outcome data collected in any subsequent efficacy trial phase to determine intervention impact).

The **pilot trial** is primarily designed to:

- **Establish evaluability** - This includes answering questions such as: Do we have confidence in the feasibility of a multi-site RCT in this context (particularly in terms of recruitment into evaluation, randomisation and outcome data collection) to justify extending the sample and continuing to efficacy trial?
- **Measure outcomes** - As noted above, we aim to collect high-quality outcome data as part of the pilot trial that could be analysed alongside outcome data collected in any subsequent efficacy trial. The sample size in the pilot alone is unlikely to be sufficiently large to make strong causal claims about effectiveness.

The pilot trial also aims to:

- **Monitor deliverability** - This includes answering questions such as: Can we recruit and retain participants randomised to receive boxing in the intervention? How feasible is the shared practice model to deliver in practice? What barriers and enablers were encountered in working to the practice model and how were they addressed? Can the programme be delivered with fidelity to the shared practice model and with quality?
- **Monitor acceptability** - This includes answering questions such as: Is the boxing delivery model programme seen as acceptable and valuable by participants? Are the

trial arrangements (e.g. recruitment, randomization) viewed as acceptable across all participant groups, including those from different cultural and ethnic backgrounds?

This learning will inform any necessary refinements made between the pilot and efficacy stages, which may include refining referral pathways and recruitment processes, refining how we communicate the project (programme and evaluation) to young people and clubs, how the programme is delivered, and key evaluation procedures.

The **efficacy trial** is primarily designed to:

- **Establish impact** - What is the impact of the Moves Different boxing programme on our key outcomes?
- **Establish mechanisms and moderating factors** - Is there evidence of differential impact according to specific sample characteristics? If we identify statistically significant differences between groups, do the pattern of results conform with expected short-, medium- and long-term outcomes?
- **Further understand key aspects of implementation** - including implementation outcomes of reach, quality/fidelity, and acceptability. For example, is the boxing delivery model delivered as intended when used on a larger scale (fidelity)? What adaptations are made and why? Is the boxing model and the trial arrangements viewed as acceptable to young people, and are there variations in acceptability across young people from different cultural and ethnic backgrounds?

Please see the full set of research questions below in Table 2.

Table 2: Specific research questions

| Project phase | Research objective | Focus | Research questions |
|---------------|---------------------------|-------------|---|
| Pilot Trial | Establishing evaluability | Recruitment | <p><i>Referrals</i></p> <ul style="list-style-type: none"> ● How many young people are referred to the project/study over the pilot trial period? ● What factors affect the volume of referrals? <p><i>Referral suitability</i></p> <ul style="list-style-type: none"> ● What proportion of referred young people are eligible for the co-designed boxing programme? ● What are the most common reasons for young people being deemed ineligible for the project/study? <p><i>Source of referrals</i></p> |

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| | | <ul style="list-style-type: none"> • Which agencies and settings are referring young people? • How many young people are being referred by each? How many young people are self-referring? • Which agencies/settings contribute the most referrals and why? • Are there differences between referring agencies/settings in terms of what proportion of participants are meeting inclusion criteria? <p><i>Recruitment and consent</i></p> <ul style="list-style-type: none"> • How many eligible young people can be successfully consented into the evaluation? • How does this vary across referral source and participant characteristics, including: <ul style="list-style-type: none"> ○ Ethnicity ○ Gender ○ Age ○ SES • What is the typical length of time between referral and randomisation? • Given the number of eligible young people successfully consented into the evaluation over the time-period of the pilot, would a well-powered RCT be achievable at the efficacy stage over the currently planned time period, or would it need to be extended? |
| | Randomisation | <p><i>Feasibility and adherence</i></p> <ul style="list-style-type: none"> • Is the randomisation approach feasible (i.e. can we randomise straightforwardly as planned in this context, or are there unexpected barriers)? • How many/what proportion of recruited participants complete baseline data surveys and are |

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| | | <p>randomised?</p> <ul style="list-style-type: none"> ● Is randomisation adhered to (i.e. is randomisation accidentally or intentionally subverted)? ● How could the approach to randomisation be adapted to increase feasibility and adherence? <p><i>Acceptability</i></p> <ul style="list-style-type: none"> ● Is randomisation acceptable to young people? ● Is randomisation acceptable to coaches and DPO staff? Do they feel that evaluation activities (randomisation) impact the ability to deliver the programme well? In what way? ● Is randomisation acceptable to referrers? ● What factors affect acceptability of randomisation? ● How could the approach to randomisation be adapted to increase acceptability? |
| | <p>Control group services</p> | <ul style="list-style-type: none"> ● What alternative services or support (specifically sport and mentoring) do the control group receive over the trial period, if any? ● To what extent are these similar to the co-designed boxing programme? |
| | <p>Data collection & study retention</p> | <p><i>Participant perceptions of data collection</i></p> <ul style="list-style-type: none"> ● How do participants feel about the questions asked in the outcome data survey? ● How do participants feel about the length of the outcome data survey? ● How do participants feel about having Local Police Data used in the evaluation? ● How do participants feel about the |

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| | | <p>questions asked and approach taken in depth interviews?</p> <p><i>Attrition rates and retention in evaluation</i></p> <ul style="list-style-type: none"> • How many/what proportion of treatment group participants complete post-programme surveys? • How many/what proportion of control group participants complete post-programme surveys? • What data collection approaches work well in retaining treatment and control group participants? • What factors affect attrition rates? Do survey attrition rates vary by participant characteristics? <ul style="list-style-type: none"> ◦ Ethnicity ◦ Gender ◦ Age ◦ SES ◦ Baseline scores on outcome measures. |
| | <p>Effect sizes and sample size</p> | <ul style="list-style-type: none"> • For each outcome, what is the point estimate of effect size, what is the confidence interval around it, and what implication would the range of plausible values have for the required sample size at the efficacy stage? |
| | <p>Mechanisms and moderating factors</p> | <ul style="list-style-type: none"> • Is it possible to collect the data that would be required to assess whether outcomes vary by key characteristics? <ul style="list-style-type: none"> ◦ Ethnicity ◦ Gender ◦ Age ◦ Baseline outcomes ◦ SES ◦ Attendance/engagement with the programme ◦ Key DPO-level, community- |

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| | | level characteristics. |
| Measuring outcomes | | <ul style="list-style-type: none"> For each outcome, what is the directional change and what is the point estimate of effect size? What does this suggest in terms of preliminary evidence that the co-designed boxing programme: <ul style="list-style-type: none"> Reduces arrests (as a proxy for offending - assessed via local police data) Reduces self-reported offending (assessed via survey) Reduces emotional and behavioural difficulties (assessed via survey) Improves self-esteem (assessed via survey) Improves emotion regulation (assessed via survey) Improves sense of community (assessed via survey) |
| Monitoring deliverability | <p>Recruitment and take-up (programme)</p> | <p><i>DPOs</i></p> <ul style="list-style-type: none"> Can the UO recruit a sufficient number of DPOs - and a high proportion (60%) of Black, Asian and Minority Ethnic led DPOs - to participate and remain engaged in the study? What factors affect this? <p><i>Young people</i></p> <ul style="list-style-type: none"> How many eligible young people randomised to receive the co-designed boxing programme take it up¹? Does take-up vary by: |

¹ We define take-up as attending at least one programme session.

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| | | <ul style="list-style-type: none"> ○ Ethnicity ○ Gender ○ Age ○ SES ○ Baseline scores on outcomes. <ul style="list-style-type: none"> ● Are there differences between referring agencies/settings in terms of what proportion of participants randomised to the co-designed boxing programme take it up? ● Can the UO recruit a sufficient number of CYP from minority ethnic communities (30%) into the project/study? |
| | <p>Completion (programme)</p> | <ul style="list-style-type: none"> ● How many CYP randomised to the co-designed boxing programme attend each session and how many complete the boxing programme? ● Does this vary by ethnicity, age, gender, and baseline scores on key outcomes? ● Are there differences between referring agencies/settings in terms of what proportion of participants complete the programme? |
| | <p>Fidelity</p> | <ul style="list-style-type: none"> ● Is the programme being delivered with fidelity to the shared practice model? If not, why not? ● What are the barriers and facilitators to delivering the programme well and with fidelity? ● What variations in delivery are appropriate for effective implementation? ● What variations in delivery are not appropriate for effective implementation? ● Does the level of fidelity differ across different DPOs, e.g. DPO size, DPO geographic location? |

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| | | | <ul style="list-style-type: none"> • Does the level of fidelity differ for those DPOs that have been included in the pilot and efficacy trial compared to those that are only involved in the efficacy phase? |
| | Cost | | <ul style="list-style-type: none"> • What is the average cost of delivering the co-designed boxing programme? • To what extent does this vary across clubs, and what drives any observed heterogeneity? |
| Monitoring acceptability | | | <ul style="list-style-type: none"> • Is the co-designed boxing programme acceptable to young people, DPOs and referral agencies? If not, why not? • Are there any barriers/facilitators of programme acceptability? Are these the same/similar to those expressed during the pilot trial? • Do views on acceptability of the intervention differ amongst: <ul style="list-style-type: none"> ○ Different DPOs, with a specific focus on DPO leads from a racially minoritized background ○ Different referral agencies Different groups of young people, with a specific focus on young people from racially minoritized backgrounds. • Does acceptability vary depending on how the programme is delivered? • Does acceptability vary between the two strands of the co-design boxing programme? |
| Efficacy Trial | Establishing Impact | | <ul style="list-style-type: none"> • For each outcome, what is the directional change, what is the point estimate of effect size, and |

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| | | | <p>what is the confidence interval around it? Does the impact evaluation identify that the co-designed boxing programme:</p> <ul style="list-style-type: none"> ○ Reduces arrests (as a proxy for offending - assessed via local police data) ○ Reduces self-reported offending (assessed via survey) ○ Reduces emotional and behavioural difficulties (assessed via survey) ○ Improves self-esteem (assessed via survey) ○ Improves emotion regulation (assessed via survey) ○ Improves sense of community (assessed via survey) |
| <p>Establishing mechanisms and moderating factors</p> | | | <ul style="list-style-type: none"> ● Is there evidence of differential impact according to specific sample characteristics? Including: <ul style="list-style-type: none"> ○ Ethnicity ○ Gender ○ Age ○ SES ○ Baseline scores on outcomes ○ DPO-level characteristics (TBC) ○ If we identify statistically significant differences between groups, do the pattern of results conform with expected short-, medium- and long-term outcomes? |

| | | | |
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| | Assessing acceptability | | <ul style="list-style-type: none"> ● Is the co-designed boxing programme acceptable to young people, DPOs and referral agencies? If not, why not? ● Are there any barriers/facilitators of programme acceptability? Are these the same/similar to those expressed during the pilot trial? ● Do views on acceptability of the intervention differ amongst: <ul style="list-style-type: none"> ○ Different DPOs, with a specific focus on DPO leads from a racially minoritized background ○ Different referral agencies Different groups of young people, with a specific focus on young people from racially minoritized backgrounds. ● Does acceptability vary depending on how the programme is delivered? ● Does acceptability vary between the two strands of the co-design boxing programme? |
| | Assessing deliverability | | <ul style="list-style-type: none"> ● Is the programme being delivered with fidelity to the shared practice model? If not, why not? ● What are the barriers and facilitators to delivering the programme well and with fidelity? ● What variations in delivery are appropriate for effective implementation? ● What variations in delivery are not appropriate for effective implementation? ● Does the level of fidelity differ across different DPOs, e.g. DPO size, DPO geographic location? ● Does the level of fidelity differ for |

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| | | | those DPOs that have been included in the pilot and efficacy trial compared to those that are only involved in the efficacy phase? |
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Progression criteria

We will use monitoring and progression criteria throughout the project for two purposes:

1. To monitor if the project is proceeding as expected, allowing for us to make adjustments or pause the work if needed.
2. To make recommendations to the Youth Endowment Fund as to whether progression to an efficacy trial should be pursued at the end of the pilot study.

We will use RAG (Red, Amber, Green) ratings to rate the progress of target criteria, on a monthly basis. Criteria meeting red or amber cut-off scores will prompt the following changes to our approach:

- Criteria with Amber ratings will indicate reviewing or adjusting delivery.
- Criteria with Red ratings will indicate pausing delivery for a period of time to carefully assess what changes would be required to justify resuming delivery.

The quantitative monitoring criteria used to monitor evaluability-related objectives are described in Table 2 below. While the criteria below offer guidance for the progression of the evaluation on the basis of quantitative assessments, these will also be complemented by qualitative measures, such as ongoing practitioner feedback and interviews with practitioners and caregivers. Overall, we will not establish a deterministic rule about how many green-, amber-, and red-rated criteria would justify/prohibit progression, but instead will use the criteria to support a balanced judgement, weighing the importance of each criteria in the round.

Table 3: Progression criteria

| Research objective | Criterion | Description | Target | Measurement | RAG scores |
|-----------------------|----------------------------|---|--------|-----------------------|--|
| Deliverability | Eligible referral volume | The number of eligible referrals received across all DPO areas | 400 | EYV Lab database | Green: 75-100%+ Amber: 50-74% Red: less than 50% |
| | Enrolment in the programme | Proportion of referrals who agree to participate in the project, and provide baseline data and consent to randomisation | - | EYV Lab database | Green: 75-100% Amber: 50-74% of Red: less than 50% |
| | Higher-risk CYP enrolment | The proportion of enrolled participants referred from criminal justice and high-risk intervention services (vs. youth development and prevention services and informal referrals), AND/OR are known to have participated in criminal behaviours from their referral data. | - | EYV Lab database | Green: 50%+ Amber: 25-49% Red: less than 25% |
| | Race equity | Proportion of young people in the treatment arm taking up the programme who are from minority ethnic backgrounds | - | EYV Lab database | Green: 30%+ Amber: 20-29% of Red: less than 20% |
| | Retention in the programme | Proportion of young people who attend at least 70% of sessions over the course of the programme | - | Data reported by DPOs | Green: 75-100% Amber: 50-74% Red: less than 50% |

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| | Fidelity | <p>Number of clubs which achieve a medium-high fidelity rating. A bespoke fidelity model will assess the following components:</p> <ul style="list-style-type: none"> ● Target population ● Dosage ● Intervention components ● Quality of intervention for young people ● Quality of intervention for DPOs | - | CEI fidelity model. | <p>Green: 7-10 Amber: 4-6 Red: 3 or less</p> |
| Acceptability | Acceptability to young people (1) | Proportion of young people who report being happy with the programme, i.e. they are satisfied or very satisfied with the programme | - | CEI survey of participants | <p>Green: 75-100% Amber: 50-74% Red: less than 50%</p> |
| | Acceptability to young people (2) | Proportion of young people who report that they would recommend this programme to a friend in similar circumstances to them, i.e. they would be either very likely or likely to recommend the programme. | - | CEI survey of participants | <p>Green: 75-100% Amber: 50-74% Red: less than 50%</p> |
| | Acceptability to DPOs (1) | Number of DPOs who report that they are happy with the programme, i.e. they are satisfied or very satisfied with the programme | - | CEI survey of practitioners from DPOs | <p>Green: 7-10 Amber: 4-6 Red: 3 or less</p> |
| | Acceptability to DPOs (2) | Number of DPOs that report wanting to continue to deliver the programme in wave 2 | - | CEI survey of practitioners from DPOs | <p>Green: 7-10 Amber: 4-6 Red: 3 or less</p> |
| | Acceptability to referral agencies | Proportion of referral agencies who agree or strongly agree that this programme offers | - | CEI survey of referral agencies | <p>Green: 75-100% Amber: 50-74%</p> |

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| | (1) | positive opportunity for young people who are vulnerable to serious violence | | | Red: less than 50% |
| | Acceptability to referral agencies (2) | Proportion of referral agencies who say they will continue to refer young people who are vulnerable to serious violence into the programme, i.e. they are very likely or likely to refer young people. | - | CEI survey of referral agencies | Green: 75-100% Amber: 50-74% Red: less than 50% |
| Evaluability | Completeness of baseline survey data collection | The proportion of respondents answering at least 80% of the questions. | - | EYV Lab database | Green: 75-100% Amber: 50-74% Red: less than 50% |
| | Evaluation retention - treatment | Proportion of participants randomised to the treatment group who complete the post-intervention survey. These thresholds are based on the EIF evidence standards guidelines . | - | EYV Lab database | Green: 90-100% of participants randomised to treatment Amber: 35-89% Red: <35% |
| | Completeness of post-intervention | The proportion of respondents answering at least 80% of the questions | - | EYV Lab database | Green: 75-100% Amber: 50-74% |

| | | | | | |
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| | data collection - treatment | | | | Red: less than 50% |
| | Evaluation retention - control | Proportion of participants randomised to the control group who complete the post-intervention survey. | - | EYV Lab database | Green: 90-100% of participants randomised to control Amber: 35-89% Red: <35% |
| | Completeness of post-intervention data collection - control | The proportion of respondents answering at least 80% of the questions. | - | EYV Lab database | Green: 75-100% Amber: 50-74% Red: less than 50% |
| | Local police data linking | Number of police forces successfully engaged in the project, with data sharing agreements signed for access to arrests data <i>and</i> with baseline arrests data successfully accessed. | - | EYV Lab database | Green: 5-6 police forces successfully engaged Amber: 3-4 police forces Red: 0-2 police forces |
| Preparation for efficacy and additional club recruitment | Progressing recruitment with a sufficient number of clubs. | <p>Our <i>overall</i> aim is that 40 clubs are recruited across both phases of the project.</p> <p>It will be important in the transition point between pilot and efficacy to be reassured that we are able to achieve this. This can be demonstrated through:</p> <ul style="list-style-type: none"> ● Being on track within the pilot itself - Successfully recruiting the planned number of clubs for pilot (10), or | - | Data reported by UOs | Green: Successful recruitment of 10 clubs within pilot OR evidencing strong likelihood of meeting overall recruitment targets at the point of transition (in the form of signed MoUs, SLAs, |

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| | <ul style="list-style-type: none"> ● Success in recruiting clubs for efficacy - Having recruited a sufficient number of clubs for the efficacy phase that compensates for any shortfall in pilot recruitment (i.e. being on course to deliver to 40 clubs overall). <p>We will share an assessment of the likelihood of recruiting the correct number of clubs across the overall project with YEF - on the basis of performance over the pilot phase, and the progress England Boxing and Welsh Boxing have made on recruiting clubs for the efficacy phase - at the transition point between pilot and efficacy.</p> | | | <p>etc with a sufficient number of clubs prior to efficacy).</p> <p>Amber: Recruitment of 6-9 clubs within pilot, without evidencing strong likelihood of meeting overall recruitment targets.</p> <p>Red: Recruitment of 0-5 clubs within pilot, without evidencing strong likelihood of meeting overall recruitment targets.</p> |
| <p>Progressing recruitment with a sufficient number of clubs led by leaders from minority ethnic backgrounds.</p> | <p>Our <i>overall</i> aim is that 60% of recruited clubs are led by leaders from minority ethnic backgrounds across both phases of the project (rather than within any specific phase).</p> <p>It will be important in the transition point between pilot and efficacy to be reassured that we are likely to be able to achieve this. This can be demonstrated through:</p> <ul style="list-style-type: none"> ● Being on track within the pilot itself - Successfully recruiting the planned number of clubs for pilot (6) led by leaders from minority ethnic | <p>-</p> | <p>Data reported by UOs</p> | <p>Green: Successful recruitment of 6 clubs led by leaders from minority ethnic backgrounds within pilot OR evidencing strong likelihood of meeting overall recruitment targets at the point of transition (in the form of signed</p> |

| | | | | | |
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| | | <p>backgrounds, and</p> <ul style="list-style-type: none"> ● Success in recruiting clubs for efficacy - Having recruited a sufficient number of clubs for the efficacy phase that compensates for any shortfall in pilot recruitment (i.e. being on course to deliver to 24 clubs led by leaders from minority ethnic backgrounds overall). <p>We will share an assessment of the likelihood of achieving the target across the overall project with YEF - on the basis of how many minority ethnic led clubs were successfully recruited for the pilot phase, and based on the characteristics of clubs England Boxing and Welsh Boxing have recruited for the efficacy phase - at the transition point between pilot and efficacy.</p> | | | <p>MoUs, SLAs, etc with a sufficient number of ethnic minority-led clubs prior to efficacy).</p> <p>Amber: Recruitment of 4-5 minority-led clubs within pilot, without evidencing strong likelihood of meeting overall recruitment targets.</p> <p>Red: Recruitment of 0-3 minority-led clubs within pilot, without evidencing strong likelihood of meeting overall recruitment targets.</p> |
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Design

Overview

This pilot is designed as a two-armed superiority RCT, with the treatment arm receiving the boxing programme, and the control group receiving gym vouchers to attend alternative fitness services.

The delivery period evaluated by the pilot trial is designed to last approximately 6 months (i.e. encompassing one round of delivery to a group of participants within each participating club). The delivery period evaluated by the efficacy trial would last for approximately 12 months (i.e. encompassing two rounds of delivery to two groups of participants within each participating club), and follow a similar design and process.

The planned methodologies for the pilot and efficacy phases are largely identical, but simply repeated on a larger-scale for the efficacy phase.

Table 4: Trial design

| | | |
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| Trial design, including number of arms | | Two-armed superiority RCT (internal pilot followed by extended efficacy phase) |
| Unit of randomisation | | Individual young people |
| Stratification variables (if applicable) | | N/A |
| Primary outcome | variable | Offending |
| | measure (instrument, scale, source) | A binary indicator of whether a child or young person has been arrested for an offence in the 12 months following randomisation using local police data. |
| Secondary outcome(s) | variable | Self-reported offending |
| | measure (instrument, scale, source) | Young person self-report on the Self-reported Delinquency Scale, measured post-intervention. |

| | | |
|---|---|---|
| | variable | Emotional and behavioural difficulties |
| | measure (instrument, scale, source) | Young person self-report on the Strengths and Difficulties Questionnaire, measured post-intervention. |
| | variable | Self-esteem |
| | measure (instrument, scale, source) | Young person self-report on the Rosenberg Self-esteem Scale, measured post-intervention. |
| | variable | Self-control and emotional regulation |
| | measure (instrument, scale, source) | Young person self-report on the Difficulties in Emotion Regulation Scale, measured post-intervention. |
| | variable | Community connectedness |
| | measure (instrument, scale, source) | Young person self-report on the Community Index, measured post-intervention. |
| Baseline for primary and secondary outcome | The baseline for every outcome is the same measure, collected prior to randomisation. | |

Process

Our evaluation approach has 8 main steps:

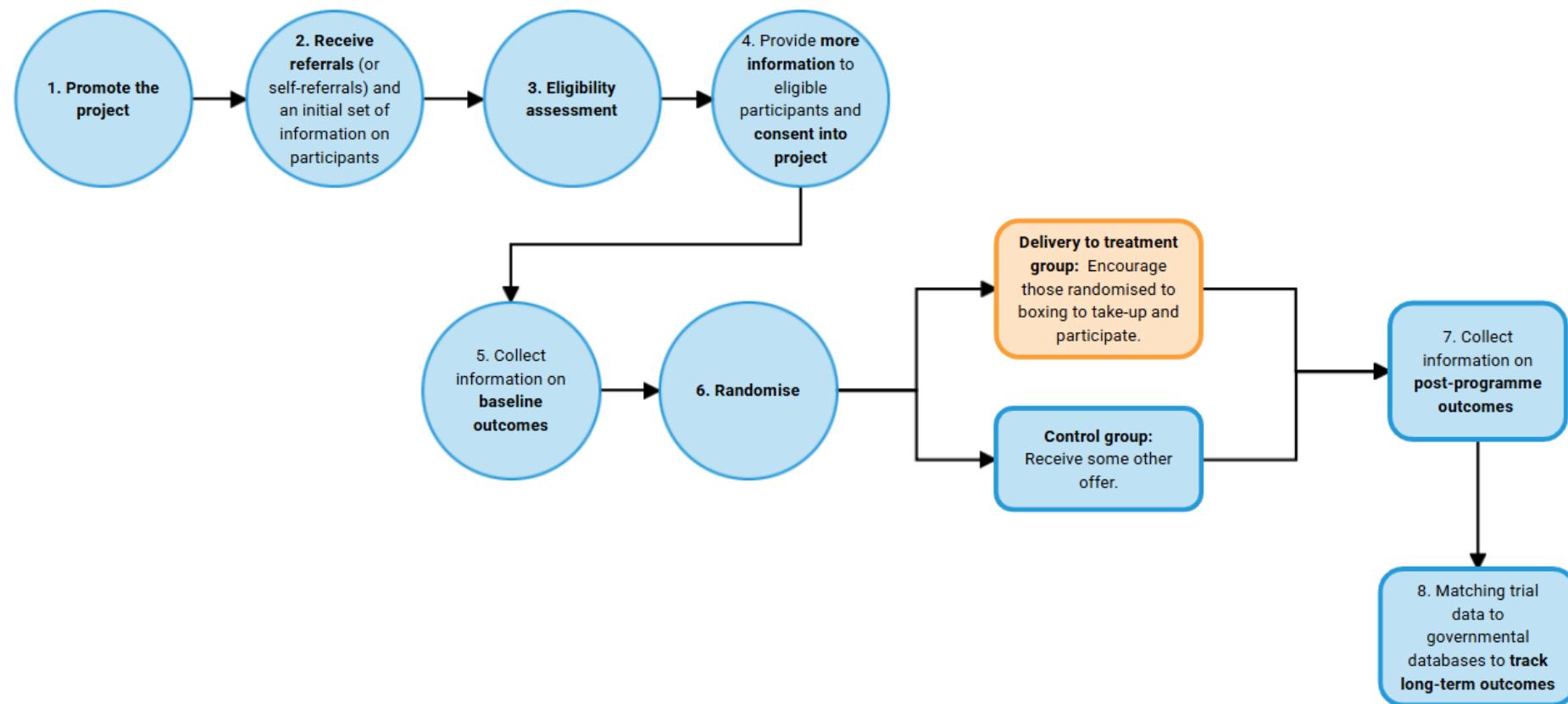


Figure 2: Evaluation approach

Specifically:

1. **Promotion** - England Boxing and Welsh Boxing will promote the programme within local areas and to key referral agencies/settings, e.g. police, education.
2. **Referral** - England Boxing and Welsh Boxing will receive referrals (from local partners identifying CYP who may require support) and self-referrals. Information about the CYP will be collected via a referral form.
3. **Eligibility assessment** - England Boxing and Welsh Boxing will assess referrals for eligibility using a checklist and guidance based on the criteria set out in this evaluation plan. CYP will be assessed as eligible for the programme if they fulfil the specified eligibility characteristics. If they are not eligible, they will not be included in the project and randomised, however they may be signposted or referred to other local services.
4. **Additional information to eligible CYP** - England Boxing and Welsh Boxing will onboard CYP onto the project. This will involve communicating the key points of the project (its aims, the steps involved, how randomisation works, and what data will be collected and why), and seeking their consent to be involved. The Lab will support coordinators/managers by scripting these initial contacts, putting together a list of FAQs we expect from young people along with answers (based on experiences from similar projects), and being available to quickly respond to questions coordinators/managers have as they onboard young people. By exception (owing to the aim of giving CYP one single point of contact), Lab staff will be available to have conversations with young people directly if these are requested or felt to be required.
5. **Baseline data collection** - On a rolling basis, as young people are onboarded, England Boxing and Welsh boxing coordinators/managers will provide young people with the means to complete the baseline survey and support in doing so. This will be part of the same interaction as step 4. Participants will be asked to complete an online survey which will consist of multiple-choice questions about their lives, drawn from a combination of pre-existing surveys. They may complete the survey independently or with additional support depending on the needs of the young person (this could be via a phone call or text/WhatsApp messaging with their point of contact). The Lab will support coordinators/managers by scripting these contacts, putting together a list of FAQs we expect from young people along with answers (based on experiences from similar projects), and being available to quickly respond to questions coordinators/managers have as they onboard young people. By exception (owing to the aim of giving CYP one single point of contact), Lab staff will be available to have conversations with young people directly if these are requested or felt to be required. Young people who do not consent to the evaluation or fail to provide baseline data will not be included in the project or randomised.
6. **Randomisation** - The Lab will use individual-level stratified randomisation to randomise young people on an ongoing basis during the trial period. Randomisation

will be stratified by site (or, more specifically, the boxing club each young person is linked to and *would* be invited to attend if they were randomised to treatment). From this point onwards, CYP will be interacting with a single point of contact. Those in the **treatment group** will be informed of their treatment allocation by England Boxing and Welsh boxing coordinators/managers, who will keep in touch during the trial period. Those in the **control group** will be informed of their allocation by Trusted Guides from ClearView, who will keep in touch and build rapport with young people in the control group who are not receiving the programme (see further detail on Trusted Guides in section below).

7. **Post-programme data collection** - We will collect outcome data from all CYP, regardless of whether they were randomly assigned to the treatment or control group or how much of the program they completed. Post-programme survey outcome data will be gathered shortly after the programme has concluded for CYP randomised to the treatment group. The same process will be followed as with baseline data collection. Those in the treatment group will be prompted to complete the survey by England Boxing and Welsh boxing coordinators/managers, and the coaches who have worked with them can support in reminding and encouraging young people who are initially nonresponsive. In the control group, the Trusted Guides will fulfil this role. Local Police Data will be captured for the trial period 6-months after the co-design boxing programme has concluded, i.e. 12 months post-randomization.
8. **Data archiving** - At the beginning of a CYP's involvement in the study, we will notify them that we intend to submit their data to [YEF's data archive](#), and seek their consent for this. CYP will need to consent to this to be eligible to participate in the study and be randomised. This will permit other researchers to follow up key outcomes (including offending) using administrative data years into the future, and identify the co-design boxing programme's long-term impact.

For more detail on the overall process (incorporating more detail on onboarding, recruitment and programme delivery), please refer to the Process & User Journey Map in Appendix F.

Randomisation

Stratified randomisation of individual young people (rather than at the DPO-level as a cluster RCT) will be conducted on a rolling basis during the trial period by the Lab. Young people will not be blind to treatment allocation. Randomisation will be stratified by site (or, more specifically, the boxing club each young person is linked to and *would* be invited to attend if they were randomised to treatment). This is to promote a more balanced mix of treatment and control allocations within any given locality and within any given recruitment week.

In designing the evaluation approach, we have been attentive to what the co-design group perceive to be elevated risks of resentful demoralisation, differential attrition, and spillover.

There is a risk that young people highly motivated to participate in boxing will be demoralised if randomised to the control group, which may i) adversely impact self-reported outcomes, ii) result in differential attrition and differential participation in data collection activities, and iii) motivate young people to seek our boxing via other means if they are not randomised to boxing. This latter risk is heightened in this context, as boxing is not an exclusive or proprietary activity that we can restrict young people's access to across all possible boxing settings.

In addition, we were mindful of the need to secure buy-in from referral organisations who may have concerns about the randomisation process, as well as the acceptability of randomisation to CYP (see below).

Insights from the youth participatory panel

Participant views on the randomisation process of an RCT were mixed. While a few saw random allocation as an opportunity to try something new, most objected to the perceived lack of personal choice.

"It would make me try something new... meet new people."

"Imagine someone that really likes boxing... being randomly assigned [to something different]... I wouldn't like that."

"If you don't tell me what I'm going to be doing... [I] absolutely will not be taking part."

Other concerns focused on fairness, transparency, and the risk of disengagement:

"They're probably expecting to do one thing... if they get randomly assigned [to something different], they're gonna get angry, leave, maybe leave a bad review."

In order to mitigate these risks, we believe that the single most important step we can take is to offer the control group something that we expect to be appealing to CYP, therefore we propose that we do not have a no-treatment control. In interrogating options for what the control group could be provided with, we decided upon 3 key principles:

- **Low cost and straightforward to administer** - So that the delivery budget can be primarily used for delivering a high-quality boxing programme.
- **Not expected to have the same impact as boxing** - To avoid minimising our potential to identify an effect.

- **Broadly similar in appeal** - To avoid disappointment and disengagement with the evaluation. Relatedly, we wanted the control group alternative to be a *similar category of activity* to boxing (while not being expected to have the same impact), so that young people attracted to boxing are not dissatisfied with the control condition (and similarly, that young people attracted to the control condition are not dissatisfied with boxing).

On balance, the co-design group felt that gifted, time-limited (3-6 month) gym memberships would be the best available option:

- This would be **low cost and straightforward to administer** compared to an alternative intervention.
- As it is fundamentally self-directed and does not include many of the elements that we expect to impact our key outcomes **we do not expect it to have the same impact as boxing**.
- As it is thematically similar to boxing in that it is fitness-oriented and appealing to active young people, we would expect it to be **broadly similar in appeal**. This also allows us to communicate about the project in a way that does not build attachment specifically to the prospect of being involved in boxing (only for half of participants to be offered something different), i.e. the project can be presented as an opportunity for young people to be more active, and to build their focus, discipline and confidence.

In the mobilisation phase, the Project Manager and Project Leads within England Boxing will establish a list of suitable referral gyms and leisure centres for RCT participants to be safely engaged as part of the study. These will consist of a mixture of Everyone Active Gyms - where Junior Gym memberships (suitable for those under 16) are available and overseen by DBS cleared gym supervisors and appropriate safeguarding procedures in-place - and community gyms or leisure centres utilised by county Active Partnerships as part of their Talented Athlete Support Schemes (TASS) (see example at Energise Me Active Partnership [HERE](#)), also with suitable supervision and safeguarding provisions in-place for junior athletes to train safely on-site. England Boxing staff will hold a central record for any gyms and leisure centres used as part of the study where young people are referred for training as part of the study, and engage with gym / leisure centre staff in advance of referrals so that a direct link and point of contact is made before the RCT begins.

While we think that offering the control group an appealing alternative is the single most important thing we can do to mitigate the risks indicated above, we will take other measures to keep the control group engaged. Trusted Guides from ClearView will conduct monthly contacts with the CYP in the control group to keep them engaged in the trial. We anticipate this will involve text messages, voice notes, and occasional video calls, along with automated reminders. We also anticipate that Trusted Guides will discuss renewal of young people's gym memberships halfway through the 6-month engagement period.

We will also offer incentives to all CYP completing surveys and highlight this opportunity in initial and ongoing contacts.

Participants

Inclusion and exclusion criteria for young people

Our aims in defining inclusion and exclusion criteria are to:

- 1) Include young people who stand to benefit most from participation in the project and, potentially, in the boxing intervention.
- 2) Exclude any young people for whom the project and/or programme may not be best suited, or may be at an increased risk of harm if they were to participate.

Inclusion criteria

Young people are eligible to participate in the study (and to receive the boxing intervention, should they be randomised to it) if they:

- Are in, or would be eligible to be in, academic years 9-13 at the point of referral.
 - We note this deviates slightly from the intervention's target population of 14-18. This specification based on academic year would encompass the same age span but would also include some 13 year olds who would turn 14 during the course of the programme. Year 9 pupils are typically aged 13 at the start of the academic year and turn 14 by its end, so nearly all would reach the original age threshold during their participation. The reasons for specifying eligibility based on academic year rather than age includes:
 - Using academic year rather than chronological age aligns better with how schools, youth services, and boxing clubs identify and group young people,
 - It would make the referral process simpler and more practical for delivery partners and referrers. If we applied a strict 14-18 threshold, referrers may identify suitable young people (often aged 13) who meet the programme's risk and engagement profile but are technically ineligible until their next birthday. This can delay referrals or exclude potential participants.
 - We understand that school exclusions peak in Year 9 (and drop off after this), therefore this change would ensure we include more young people at risk of exclusion.
- If one or more of the following characteristics apply:
 - CYPs have been excluded from school (two or more fixed term exclusions in

the last 3 years or ever permanently excluded).

- CYPs have been referred to alternative education provision (PRUs, other relevant educational settings)
- CYP is identified as engaging in violent/challenging/antisocial behaviours at home, school, or in community.
- CYP is known to associate with criminal peer groups/gangs.
- CYP is known to engage in substance misuse.
- CYP is known to have been exposed to domestic abuse in the home.
- CYP is believed to be at risk of or currently experiencing criminal exploitation.
- CYP has a sibling or close family member who has entered into the criminal justice system.
- Referrer can produce a compelling justification (on other grounds) that they are at risk of involvement in crime, violence or antisocial behaviour. We will consider these on a case-by-case basis.

Exclusion criteria

Young people will be excluded from the study if at least one of the following are present:

- They are planning to move out of the local area within the delivery timeframe (otherwise they're likely to drop-out).
- They are known to have participated in criminal/problematic sexual behaviour (because other services may be more appropriate).
- They are assessed to be at immediate risk of harm to themselves or others, or are experiencing active psychosis (because they would be unable to engage meaningfully and would be more appropriately supported by specialist services).
- They have participated in structured boxing training or classes for an extended period of time (more than 8 sessions) in the past (because if participants aren't 'new learners', this will diminish our ability to demonstrate impact).
- They are known to have active conflicts or rivalries with other boxers at their local club or other study participants (because this could pose a danger to them, other club members and to staff). This will be assessed as far as possible on a case-by-case basis, and if it is possible to deliver to such participants at nearby, separate clubs, then this rather than exclusion will be considered.

Inclusion and exclusion criteria for boxing clubs

We also set out criteria for clubs (in addition to standard requirements relating to due diligence, i.e. financial health, policies, insurance etc.). Our aims with these criteria are to:

- 1) Ensure the programme is delivered within clubs that are able to deliver the codesigned programme well.
- 2) Ensure the programme is delivered clubs that are willing to participate in a project delivered in the context of an RCT and understand what this will entail.
- 3) Ensure the programme is delivered within clubs that support our race equity aims.

4) Ensure the programme is delivered within areas where there are elevated challenges relating to youth violence.

Table 5: Boxing club eligibility criteria

| Requirement | More info |
|---|--|
| <i>Commitment to participation</i> | <i>Commitment to adopt a shared practice model</i> DPO must express willingness to deliver the shared practice model with fidelity and in a way consistent with the other project DPOs (likely in the form of signing an MoU). |
| | <i>Commitment to participate in evaluation</i> DPO must express willingness to participate in a project where: i) funding cannot be used to deliver the shared practice model to young people not participating in the evaluation, ii) whether CYP receive the programme or not is decided by the randomisation process, iii) those randomly assigned to the control group must not receive the programme (likely in form of signing an MoU). |
| <i>Ability to deliver the shared practice model</i> | <i>Physical space and infrastructure requirements</i> DPO must currently meet the minimal physical space and infrastructure requirements to deliver the co-designed programme, as set out in the Shared Practice Model. This will be assessed by England Boxing or Welsh Boxing as part of the application process. Alternatively, England Boxing or Welsh boxing must be satisfied that with additional funding provided through the project, the DPO will meet this requirement prior to programme delivery. |
| | <i>Materials and equipment</i> DPO must currently meet the materials and equipment requirements to deliver the co-designed programme, as set out in the Shared Practice Model. This will be assessed by England Boxing or Welsh Boxing as part of |

| | | |
|--|--|--|
| | | <p>the application process.</p> <p>Alternatively, England Boxing or Welsh boxing must be satisfied that with additional funding provided through the project, the DPO will meet this requirement prior to programme delivery.</p> |
| | <i>People and qualifications</i> | <p>DPO must currently meet the people and qualifications requirements (i.e. Level 1 Boxing Coaches, with a Level 2 coach available to provide supervision for sparring) to deliver the co-designed programme, as set out in the Shared Practice Model. This will be assessed by England Boxing or Welsh Boxing as part of the application process.</p> <p>Alternatively, England Boxing or Welsh boxing must be satisfied that with additional funding provided through the project, the DPO will meet this requirement prior to programme delivery.</p> |
| <i>Likelihood of supporting achievement of race equity targets</i> | <i>Club leadership</i> | <p>A majority of clubs must be led by Black Asian, or Minority Ethnic leaders (defined as where 50% or more of senior leadership from those backgrounds). This is not a requirement that all DPOs must meet, but 60% of them across the overall project must.</p> |
| | <i>Ethnic diversity of served population</i> | <p>DPO is situated in a moderately diverse or more diverse area:</p> <ul style="list-style-type: none"> ● “Predominantly White” – Over 90% White ● “Moderately Diverse” – 10–30% ethnic minority ● “Highly Diverse” – 30–50% ethnic minority ● “Super-diverse” or “Majority-minority” – More than 50% ethnic minority |
| <i>Likelihood of supporting</i> | <i>Levels of youth violence in</i> | DPO must be operating within a police force area where a Violence Reduction Unit has been established. |

| | | |
|----------------------------|--|---|
| <i>impact on offending</i> | <i>community served</i> | |
| | <i>Exists within a selected police force area.</i> | DPO must be operating within a police force area selected for this project (typically areas where we know forces have participated in similar evaluations). |

Sample size calculations

We conducted power calculations to determine sample size on the basis of the following inputs and assumptions:

1. **Significance level (two-sided): 0.05**
2. **Power = 0.8:**
3. **Group size = 20 CYP**
4. **Baseline rate of offending:** Given the difficulty of precisely predicting the baseline rate among our population, we present results for a range of plausible values.
5. **Effect size:** We present results for a range of target Cohen's H values. However, we aim for an MDES of approximately 0.1, consistent with [YEF's Magnifying Glass Guidance](#) for offending as a primary outcome.

Table 6: Summary of power calculations

| Overall sample | | | |
|----------------|-------------|------------|--------------|
| Baseline rate | Effect size | Cohen's H | Total N |
| 20% | 4.1% | 0.1 | 2,694 |
| 20% | 8.5% | 0.2 | 570 |
| 41% | 5.0% | 0.1 | 3,020 |
| 41% | 10.0% | 0.2 | 730 |
| 55% | 4.9% | 0.1 | 3,206 |
| 55% | 9.8% | 0.2 | 820 |

Broadly these calculations suggest that, to be conservative, **we should aim for a sample size of at least 3,200** (please see Appendix G for a summary of all power calculations conducted). To achieve this - making a range of assumptions about maximum club capacity - we think we will need to work with 10 clubs during the pilot phase, and expand this by approximately 30 to a total of 40 in the efficacy phase.

Note that in our power calculations we are **not accounting for covariates** which inherently makes these calculations more conservative. In the final analysis we will be able to control for previous offending characteristics and other variables, improving statistical power.

Overall then, England and Welsh boxing aim to target:

- 10 clubs, giving us the opportunity to reach approximately 400 young people, in the **pilot phase** (with half - 200 - receiving the co-design boxing programme).
- 40 clubs (including the previous 10), giving us the opportunity to reach approximately 3,206 young people in the **efficacy phase** (with half - 1,603 - receiving the co-design boxing programme).
- This current plan will give us a surplus on the target of 3206 CYP in the evaluation overall (3606 total, a surplus of 400).
- We think this is sensible to account for unanticipated risks and potential DPO and CYP drop-out. Owing to the lack of clear precedent in this area of intervention, it is difficult to anticipate in advance of the pilot how much we should over-recruit to offset inevitable study attrition from survey data. For local police data, we expect loss of data from those who consent to be minimal, but we cannot estimate the rates of withdrawal or non-consent to police data. The planned figures give us a buffer for approximately 10% evaluation attrition, and we can re-adjust these expectations in light of what is learnt during the pilot.

At the transition point from pilot to efficacy, we may re-profile our power calculations and aim for more precise estimates of required sample size using empirical data acquired through the pilot trial.

Table 7: Summary of power calculations for subgroups

| Racially minoritised CYP (30% of total sample) | | | |
|--|-------------|-----------|------------|
| Baseline rate | Effect size | Cohen's H | Subgroup N |
| 20% | 7.7% | 0.18 | 960 |
| 41% | 9.0% | 0.18 | 960 |
| 55% | 8.9% | 0.18 | 960 |

We also note that this is a YEF Race Equity MST, where we intend to explore sub-group effects. While detecting statistically significant impacts for subgroups is challenging, we believe that if the target of 30% CYP from minoritised ethnic backgrounds is achieved, our study would be able to detect between a 7.7 and 9% reduction in offending (under a range of different

assumptions about levels of baseline offending) for this group in subgroup analyses (investigating intervention*ethnicity interaction effects).

Please see below for more detail on key inputs/assumptions.

Specifying our outcome

Our primary outcome of interest is offending (using arrests from local police data as a proxy measure). This could be measured in one of two ways: as a count of the number of arrests or as a binary variable (i.e. arrested/not arrested). For the sake of these power calculations, we define it as a binary variable. Analysing arrests as a binary variable may sacrifice some statistical power by discarding count detail, however it avoids the assumptions and complexity required by count models (e.g. Poisson or negative binomial) which may be sensitive to highly skewed offences data featuring a large number of zeros.

Specifying our baseline rate

Specifying the baseline rate for this cohort is difficult for a number of reasons but primarily due to lack of available data. Data on the rate of offending among a more universal target population (i.e. young people in general within the target age range) is easily found, as is data for a more high-risk more targeted population (i.e. young people who have already offended). However, it is more challenging for our target population which sits somewhere in between and is picked out through a large variety of potential risk factors. We therefore conduct our power calculations for a range of baselines based on [publicly available data](#) on the rates of offending by certain education and social care characteristics (DfE 2022). We considered characteristics that aligned with our eligibility criteria including i) suspension ii) permanent exclusion and iii) attended alternative provision.

Given the uncertainty over the baseline offence rate, and the fact that binary variables with a baseline closer to 50% are less powered than those on the extremes, we propose being conservative and using the sample size estimates produced by the baseline closest to 50%.

Specifying our effect size

Another complication to conducting power calculations in this context is the lack of certainty over the effect size. There is very little robust RCT evidence relating to boxing on our key outcomes (especially boxing without substantive mentoring/socio-emotional development components), which means there is little precedent to rely on.

While we conducted power calculations for a range of Cohen's H, we propose being powered to detect a 5% reduction in offending. In the absence of a clear precedent-based effect size to aim for, we think it's best to be able to detect relatively modest impacts on offending. Moreover this corresponds broadly to an MDES of 0.1, and so is consistent with [YEF's Magnifying Glass Guidance](#) for offending as a primary outcome. This threshold is based

on work from the Campbell Collaboration commissioned by YEF, indicating that average effects detected on offending outcomes are typically 0.1 or lower (Umezawa, et al., 2024). As noted above, this is a YEF Race Equity MST where we intend to explore subgroup effects, and being powered to detect a relatively small MDES of 0.1 for our main outcome analyses means that we will be powered to detect under a 10% reduction in offending for our subgroup analysis.

Methods and data collection

For the following sections we subdivide our protocol into two parts:

- **Impact evaluation** - Quantitative research focused on determining the impact of the boxing programme via an RCT.
- **Implementation and process evaluation** - Multi-methods research focused on describing how the boxing programme was delivered, participants' views of the intervention and participation in the trial, and key metrics relating to referrals, take-up, fidelity and acceptability.

Impact evaluation: Methods and Data Collection

Our main sources of outcome data are:

- 1) **Young person outcome surveys:** We will invite young people to complete an outcome survey prior to randomisation, and again after those in the treatment group have completed the boxing programme. We will collect this at post-test (i.e. approximately 6-months after randomisation) as the outcomes captured in the surveys are typically shorter-term outcomes we would expect boxing to impact first over the course of the programme (i.e. changes to attitudes, competencies, and mindset) and then medium-term outcomes (i.e. changes in behaviours that result from the shorter-term changes).

While we have successfully used surveys of a similar length (i.e. number of items) in previous evaluations, we will monitor this carefully and also seek CYP feedback on survey length prior to the evaluation.

- 2) **Local police data:** To assess offending a) within a shorter timeframe than is possible through the Police National Computer (where there is a longer-time lag between offence and data availability), and b) more objectively than is possible through self-report surveys, we will attempt to link our trial data with local police data. We propose that arrests are the evaluation's primary outcome (as a proxy for offending). We have chosen arrests rather than other variables included in local police data (such as police outcomes, including cautions) as we would expect these to be entered into the local police systems at or near the time of the event, prior to any subsequent police outcome, and therefore to serve as a more reliable proxy of offending behaviour within the trial's timeframe.

However, we will explore the potential to also collect local police data on positive outcomes (such as cautions) as exploratory variables. This will not be used to assess impact, but rather to understand how young people's cases are dealt with by police following the arrest, including the range of formal and informal disposals applied, and to contextualise patterns of police contact beyond the primary outcome.

As set out in the theory of change, we believe that there is a plausible pathway to a reduction in youth violence. This primary outcome is aligned with the expressed aims of many participating boxing clubs (many of which serve communities disproportionately affected by youth crime), and aligned with the objectives of the funder. We propose to collect arrests data covering the trial period and up to 6-months after post-test and the completion of the programme (i.e. approximately 12-months after randomisation). An immediate post-programme assessment of local police data might primarily capture novelty effects or the fact that boxing has been occupying CYP's time, rather than meaningful or sustained change. A 6-month delay may also be better aligned with cycles of police reporting and increase the likelihood that any newer arrests are captured in our data.

In deciding what data to collect, we have decided to prioritise a subset of the short- and medium-term outcomes specified in the Shared Practice Model - those that were believed to be the key drivers of the main long-term outcomes. Our specific outcomes are set out in Table 8 below.

Table 8: Outcome measures

| Type of outcome | Outcome measured | Instrument | Completed by | Number of items | Age suitability | Subscales to be used | Scoring | References |
|-----------------|--|--|-------------------|-----------------|------------------------------------|----------------------|--|---------------------------|
| Primary | Offending (arrests as a proxy for offending) | Admin data | Local Police Data | NA | NA | NA | A binary indicator of whether a child or young person has been arrested for an offence in the 12 months following randomisation (no arrests = 0, one or more arrests = 1). | NA |
| Secondary | Self-reported offending | Self-reported Delinquency Scale (SRDS) | CYP self-report | 19 | Has been validated for adolescents | NA | <p>Variety of delinquency score (ranging from 0-19): Sum the number of items the respondent answers 'yes' to:</p> <ul style="list-style-type: none"> • Yes = 1 • No = 0 <p>Volume of delinquency score: Summing the point values when respondents report a number of times. Point values are assigned as follows:</p> <ul style="list-style-type: none"> • Once = 1 • Twice = 2 • 3 times = 3 • 4 times = 4 • 5 times = 5 | Thornberry & Krohn, 2000. |

| | | | | | | | | |
|-----------|--|---|-----------------|----|------------------------------------|--------------------|--|-----------------------|
| | | | | | | | <ul style="list-style-type: none"> • Between 6 and 10 times = 6 • More than 10 times = 11 | |
| Secondary | Emotional and behavioural difficulties | Strengths and Difficulties Questionnaire (SDQ) | CYP self-report | 25 | Has been validated for adolescents | All subscales (5). | Total difficulties Score: A score from 0-40 is generated by summing scores from all the subscales, except the prosocial subscale. We will also examine the total difficulties score when broken down into the externalising score (the sum of the conduct and hyperactivity scales), and the internalising score (the sum of the emotional and peer problems scales). | Goodman, 1997. |
| Secondary | Self-esteem | Rosenberg Self-Esteem Scale (RSES) | CYP self-report | 10 | Has been validated for adolescents | NA. | Total scores range from 0 to 30. Items are assessed on a 4-point Likert scale. Overall, higher scores indicate higher self-esteem. | Rosenberg, 1979. |
| Secondary | Self-control and emotional regulation | Difficulties in Emotion Regulation Scale (DERS) | CYP self-report | 36 | Has been validated for adolescents | All subscales (6). | Total scores range from 36 to 180. Items are assessed on a 5-point Likert scale. Overall, higher scores indicate greater difficulties in emotion regulation. | Neumann et al., 2010. |

| | | | | | | | | |
|-----------|-------------------------|----------------------------------|-----------------|----|------------------------------------|--------------------|---|----------------------|
| Secondary | Community connectedness | Sense of Community Index (SCI-2) | CYP self-report | 24 | Has been validated for adolescents | All subscales (4). | Total scores range from 24 to 96. Items are assessed on a 4-point Likert scale. Higher scores indicate a stronger sense of community. | Chavis et al., 2008. |
|-----------|-------------------------|----------------------------------|-----------------|----|------------------------------------|--------------------|---|----------------------|

Implementation and Process Evaluation: Methods and Data collection

Methods and data collection for quantitative and qualitative research activities have been separately described below. Insights from the pilot trial across data collection sources will be used, where appropriate and necessary, to adapt methods for the efficacy trial. Throughout both quantitative and qualitative data collection, we will take a theory-informed approach that is guided by the Theory of Change.

Throughout, we will also ensure methods and data collection allows for understanding and exploration of structural factors on the experiences of young people and DPOs. This includes examining any differences in experience across sub-groups, with a particular focus on ethnicity and gender of participant groups.

Quantitative IPE methods and data collection

For the **pilot trial** we will be conducting quantitative IPE research activities with the following key data sources:

- 1) **Practitioner satisfaction surveys:** We will invite practitioners (DPO coaches, DPO staff, referral practitioners) to complete an online survey towards the end of the pilot trial. The survey will be used to collect information on key fidelity components included in the fidelity model, and to explore practitioner views on feasibility, acceptability, and appropriateness of the shared practice model. The survey will incorporate a validated psychometrically tested pragmatic measure of feasibility and acceptability (Weiner et al., 2017), as well as questions relating to key quality and fidelity criteria defined by the shared practice model and the fidelity model. For coaches, this survey will also ask participants to complete a profile which will include their demographics, background, coaching qualifications, training, and supervision received.
- 2) **Young person satisfaction surveys:** We will distribute a short survey to CYP in the treatment group in the final session of the boxing intervention, during month 6 of programme delivery. The survey will be kept short and written at an appropriate, accessible reading level to ensure active engagement from CYP from diverse backgrounds. CYP will be able to complete the survey independently or with support from an adult (e.g. club practitioner, club coach) to provide autonomy over the survey setting. CYP will be assured during the process that their responses will remain confidential, and opinions will not be attributed to any individuals.

We will support DPO staff in encouraging CYP to complete the satisfaction survey, as they are both an important and influential part of the programme. Over the course of the trial, they will have built a trusted relationship and rapport with CYP and therefore will be well-placed in doing so.

We will pilot this survey with the ClearView youth advisory panel during the mobilisation phase of the project to gain feedback on aspects of survey design, e.g.

survey length, question design, question language, and question content. We will refine the survey during the mobilisation phase using CYP feedback. We anticipate that the survey will measure CYP views on fidelity components (dosage, intervention components, quality of intervention), expectations and feedback on the intervention, quality of support received, and overall acceptability of the intervention, trial and shared practice model.

- 3) **Young person post-test outcome survey questions:** We will embed questioning for young people in the control group within the young person post-test outcome survey. This will reduce additional burden on participants, and take advantage of a data collection tool already being administered to those in the control group.

The questions will be kept short and written at an appropriate, accessible reading level to ensure active engagement from CYP from diverse backgrounds. We will pilot these questions at the same timepoint as piloting the young person satisfaction survey with the ClearView youth advisory panel, as detailed above. We anticipate that questions will broadly measure CYP views and experiences of the control strand, such as gym attendance rates, meetings had/support received by ClearView Trusted Guides, and overall acceptability of the control strand offer and trial arrangements.

- 4) **Administrative data:** We will work with the UO, DPOs, and referral services to capture and track essential administrative programme data. This will include the use of referral form data (e.g. referral sources, referral frequency) to assess reach and adherence to the fidelity model, CYP consent form data, and programme attendance sheets. We also plan to support the UO to systematically log the frequency and type of support (e.g. training, physical resources) provided to the DPOs, to capture the nature of support needs and challenges.

We will also use administrative data to consistently monitor any differences in the above (i.e. referrals, recruitment, session attendance, intervention attrition) across CYP sub-groups, with a particular focus on ethnicity and gender. This will allow for any potential disproportionalities across all stages of the project to be identified, and strategies put in place to minimise these during the trial. We will use this data where necessary to adapt approaches prior to the efficacy trial, to ensure equitable access and engagement of CYP across all stages of the process and user journey.

For the **efficacy trial** we will be conducting quantitative IPE research activities with the following key data sources:

- 1) **Practitioner satisfaction surveys:** We will invite practitioners (DPO coaches, DPO staff) to complete an online survey at the end of each delivery cycle. In line with practitioner surveys during the pilot trial, we will again collect information on key fidelity components included in the fidelity model, and to explore practitioner views on the

feasibility, acceptability, and appropriateness of the shared practice model. There is also scope for surveys to be completed with referral practitioners during the efficacy trial post-participant randomization.

- 2) **Young person satisfaction surveys:** We will distribute a short survey to CYP in the treatment group in the final session of the boxing intervention, during month 6 of programme delivery. The survey will be kept short and written at an appropriate, accessible reading level to ensure active engagement from CYP from diverse backgrounds. CYP will be able to complete the survey independently or with support from an adult (e.g. club practitioner, club coach) to provide autonomy over the survey setting. CYP will be assured during the process that their responses will remain confidential, and opinions will not be attributed to individual CYP.

We will again support DPOs in encouraging CYP to complete the satisfaction survey, as they are both an important and influential part of the programme. Over the course of the trial, they will have built a trusted relationship and rapport with CYP and therefore will be well-placed in doing so. We will use feedback from the pilot practitioner satisfaction surveys and the completion rates of pilot young person satisfaction surveys to assess the level of support provided to DPOs during the efficacy trial.

Feedback from CYP on the pilot satisfaction survey will be used to e.g., alter survey content and design for questions with low completion rates. We again anticipate that the survey will measure CYP views on fidelity components (dosage, intervention components, quality of intervention), expectations and feedback on the intervention, quality of support received, and overall acceptability of the intervention, trial and shared practice model.

- 3) **Young person post-test outcome survey:** We will embed questioning for young people in the control group within the young person post-test outcome survey. This will reduce additional burden on participants, and take advantage of a data collection tool already being administered to those in the control group.

The questions will be kept short and written at an appropriate, accessible reading level to ensure active engagement from CYP from diverse backgrounds. We will pilot these questions at the same timepoint as piloting the young person satisfaction survey with the ClearView youth advisory panel, as detailed above.

Completion rates of questions within the pilot trial will be assessed and where appropriate, the content and design of questions will be adapted for the efficacy trial to improve completion rates. We again anticipate that questions will broadly measure CYP views and experiences of the control strand, such as gym attendance rates,

meetings/support received by ClearView Trusted Guides, and overall acceptability of the control strand offer and trial arrangements.

- 4) **Administrative data:** We will work with the UO and DPOs, and referral services to capture and track essential administrative programme data. This will include the use of referral form data (e.g. referral sources, referral frequency), CYP consent form data, and programme attendance sheets.

We plan to support the UO to systematically log the frequency and type of support (e.g. training, physical resources) provided to the DPOs, to capture the nature of support needs and challenges. We will compare this to the frequency and type of support provided to the DPOs as a whole during the pilot phase of the programme. For those clubs that may have been included in the pilot trial, here we will compare the difference in level of UO support given compared to those clubs that are only involved in the efficacy trial. This information will be used to further inform fidelity and acceptability of the programme during the efficacy phase.

We will also use administrative data to consistently monitor any differences in the above (i.e. referrals, recruitment, attendance, attrition) across CYP sub-groups, with a particular focus on ethnicity and gender. This will allow for any potential disproportionalities across all stages of the project to be identified, and strategies put in place to minimise these during the trial.

Table 9: Overview of IPE quantitative methods, data sources, and data collection

| Purpose | Trial phase(s) | Focus | Data source | Data collected | Data analysis |
|---------------------------|-------------------------------|-------------------------------|---|--|------------------------|
| Establishing evaluability | Pilot trial Efficacy trial | Referral into study | Administrative data: referral form data | Number of referrals received by the UO. | Descriptive statistics |
| | Pilot trial Efficacy trial | Source of referrals | Administrative data: referral form data | Number of referrals received from each referral source. | Descriptive statistics |
| | Pilot trial Efficacy trial | Referral suitability | Administrative data: referral form data | Number of referrals meeting eligibility criteria. | Descriptive statistics |
| | Pilot trial Efficacy trial | Promotion/outreach approaches | Administrative data: referral form data | Number of referrals arising from each outreach approach. | Descriptive statistics |
| | Pilot trial Efficacy trial | Recruitment into study | Administrative data: consent form data, and young person outcome surveys. | Number of participants consenting into the study and providing baseline outcome data. | Descriptive statistics |
| | Pilot trial Efficacy Pilot | Compliance with randomisation | Administrative data: DPO programme attendance sheets | Proportion of participants that remain in their randomized group and do not cross-contaminate across strands | Descriptive statistics |

| | | | | | |
|--|-------------------------------|--------------------------------|---|--|------------------------|
| | | | Survey data: post-test young person outcome survey | | |
| | Pilot trial Efficacy trial | Acceptability of randomisation | Survey data: practitioner satisfaction survey | Proportion of DPOs (and referrers) who deem the randomisation process to be suitable. | Descriptive statistics |
| | Pilot trial Efficacy trial | Acceptability of randomisation | Survey data: young person satisfaction survey | Proportion of CYP who deem the randomisation process to be suitable | Descriptive statistics |
| | Pilot trial Efficacy trial | Retention in study | Survey data: young person outcomes surveys, and young person satisfaction surveys | Proportion of randomised participants completing post-test and 6-month follow-up surveys | Descriptive statistics |

| | | | | | |
|----------------------------------|-------------------------------|----------------------------|--|---|------------------------|
| Monitoring deliverability | Pilot trial Efficacy trial | Programme completion | Administrative data: DPO programme attendance sheets | Proportion of participants randomised to the intervention group who complete the programme (attend at least 70% of sessions). | Descriptive statistics |
| | Pilot trial Efficacy trial | Fidelity | Administrative data: referral form data, DPO programme attendance sheets Practitioner satisfaction survey Young person satisfaction survey | Number of clubs that have a high fidelity rating as per the fidelity model. | Descriptive statistics |
| Monitoring acceptability | Pilot trial Efficacy trial | Acceptability of programme | Young person satisfaction survey | Likert-scale and open text responses to questions about programme characteristics and delivery. | Descriptive statistics |
| | | | Young person outcomes survey | Multiple choice, likert-scale questions and open text responses to questions about control strand characteristics and delivery. | Descriptive statistics |
| | | | Practitioner satisfaction survey | Validated psychometrically tested pragmatic measure of acceptability (Weiner et al., 2017). | Descriptive statistics |

Qualitative IPE methods and data collection

The overall purpose of qualitative data collection is to further inform the feasibility and acceptability of the programme and of the trial arrangements. Interviews will be conducted in-person, by telephone or online platform (e.g. Zoom, Microsoft Teams). Participants will be given the choice of interview setting to facilitate equality of access, with the one exception of focus groups with the UO, which will be conducted online given geographical variation.

We will develop topic guides, and digitally record interviews/focus groups with consent for verbatim transcription. We will use the Consolidated Framework for Implementation Research (CFIR) to develop our topic guides. In line with diversity and inclusion principles, CFIR recognises the important role of structural factors and how these may affect experiences with the programme. The content of topic guides and how structural factors are approached within these will also be discussed in close collaboration with the YEF's Race Equity Associate, and with ClearView and the youth advisory panel.

For the **pilot trial** we will be conducting qualitative IPE research activities with the following key data sources:

- 1. Practitioner interviews:** We will invite club leads/managers, club coaches, boxing apprentices, and representatives from referral organisations for in-depth interviews. Depending on the total number of practitioners enrolled in the trial, we will purposely sample practitioners based on certain characteristics, e.g., site/community, role, number of CYP supported, gender, ethnicity. This will ensure that the range of qualitative insights from practitioners is equitable, and we are able to assess any key differences between sub-groups. We will also be able to specifically consider the effect of structural factors on DPO experiences of the programme amongst sub-groups, with a particular focus on DPO practitioners from a racially minoritized background.

Topics of discussion will explore acceptability and feasibility of the trial arrangements and the shared practice model, feedback on training and support/resources received, key implementation barriers and/or facilitators, and perceived engagement, impacts on young people, and perceptions of the causal mechanisms leading to change.

- 2. Young person interviews:** We will invite a sample of young people taking part in the programme for in-depth interviews. Sampling criteria will likely include age, gender, ethnicity, LGBTQ+ status, care and SEND status, and school attendance. We will specifically explore whether perceptions differ for young people from different backgrounds, with a particular focus on young girls and women, and young people from a racially minoritized background. In doing so, we will be able to specifically draw

upon the voices of these groups in our evaluation to identify potential disproportionalities, and how these might be addressed for the efficacy trial.

The majority of these interviews will be conducted at the end of the programme, with a portion to be conducted post-trial to consider longer term impacts. Topics of discussion will explore experiences of the programme and core components of the shared practice model (e.g., appropriateness of the number of sessions, duration, focus), any impacts of the programme, and experiences of trial procedures (which are of particular interest in the pilot stage). For interviews conducted post-trial, we will evaluate mechanisms of effect and explore sustainment, e.g. continuation of boxing/an associated activity.

3. UO focus groups: We will invite staff from England Boxing and Welsh Boxing for focus group sessions (e.g. regional coordinators/managers).

As with practitioner interviews, topics of discussion will explore acceptability and feasibility of the trial arrangements and the shared practice model. There will also be specific discussions around the recruitment phase of the trial, including barriers/facilitators, and any feedback from control group participants collected during monthly touch-points.

4. Session observations: If feasible, we will observe session delivery within a subset of clubs. We will observe interactions between practitioners and young people to monitor acceptability, and will likely assess the level of enthusiasm and engagement of young people, and the quality of these shared interactions. As part of the fidelity model, we will also observe adherence to and/or adaptations made to the intervention components.

Reflections from qualitative data collection during the pilot trial will be incorporated into topic guides for the efficacy trial. We will use findings from the pilot stage to further inform areas for discussion, i.e. areas that require more depth of discussion, areas that were discussed but not included within original topic guides.

If session observations are conducted during the pilot phase, we will use observation field notes as well as any interview data on observation acceptability and appropriateness to again adapt this process where appropriate.

We will also reflect on the positionality of the research team for session observations conducted in the pilot trial.

For the **efficacy trial** we will be conducting qualitative IPE research activities with the following key data sources:

1. **Practitioner interviews:** We will invite club leads/managers, club coaches, boxing apprentices for in-depth interviews. There is also scope to invite representatives from referral organisations for in-depth interviews dependent on data collected during the pilot phase and if further qualitative insight is required. Depending on the total number of practitioners enrolled in the trial, we will purposely sample practitioners based on certain characteristics, e.g., site/community, role, number of CYP supported, gender, ethnicity. This will ensure that the range of qualitative insights from practitioners is equitable, and we are able to assess any key differences between sub-groups. We will also be able to specifically consider the effect of structural factors on DPO experiences of the programme amongst sub-groups, with a particular focus on DPO practitioners from a racially minoritized background.

Topics of discussion will explore acceptability and feasibility of the trial arrangements and the shared practice model, feedback on training and support/resources received, key implementation barriers and/or facilitators, and perceived engagement, impacts on young people, and perceptions of the causal mechanisms leading to change.

For those clubs that may have been included in the pilot trial, we will also compare any differences of opinion regarding acceptability and feasibility to those clubs that are only involved in the efficacy trial. This information will be used to further inform fidelity, feasibility and acceptability of the programme during the efficacy phase.

2. **Young person interviews:** We will invite a sample of young people taking part in the programme for in-depth interviews. Sampling criteria will likely include age, gender, ethnicity, LGBTQ+ status, care and SEND status, and school attendance. We will specifically explore whether perceptions differ for young people from different backgrounds, with a particular focus on young girls and women, and young people from a racially minoritized background.

The majority of these interviews will be conducted at the end of the programme, with a portion to be conducted post-trial to consider longer term impacts. Topics of discussion will explore experiences of the programme and core components of the shared practice model (e.g., appropriateness of the number of sessions, duration, focus), any impacts of the programme, and experiences of trial procedures (which are of particular interest in the pilot stage). For interviews conducted post-trial, we will evaluate mechanisms of effect and explore sustainment, e.g. continuation of boxing/an associated activity.

3. **UO focus groups:** We will invite staff from England Boxing and Welsh Boxing for focus group sessions.

As with practitioner interviews, topics of discussion will explore acceptability and feasibility of the trial arrangements and the shared practice model. There will also be

specific discussions around the recruitment phase of the trial, including barriers/facilitators, and any feedback from control group participants collected during monthly touch-points.

4. **Session observations:** If feasible, we will observe session delivery at a subset of clubs. We will observe interactions between practitioners and young people to monitor acceptability, and will likely assess the level of enthusiasm and engagement of young people, and the quality of these shared interactions. As part of the fidelity model, we will also observe adherence to and/or adaptations made to the intervention components.

Table 10: Overview of IPE qualitative methods, data sources, and data collection

| Purpose | Trial phase(s) | Data source | Timepoints | Data analysis |
|--|-------------------------------|---|--|--|
| Monitoring acceptability and feasibility | Pilot trial Efficacy trial | Practitioner interviews: club lead/manager | Interviews will take place towards the end of the pilot trial, and at the midpoint and end of the efficacy trial. | Qualitative analysis of transcripts |
| | Pilot trial Efficacy trial | Practitioner interviews: boxing coach and boxing apprentice | Interviews will take place towards the end of the pilot trial, and at the midpoint and end of the efficacy trial | Qualitative analysis of transcripts |
| | Pilot trial | Practitioner interviews: referrer interviews | Group interviews will take place at the end of the pilot trial, but may also be extended into the efficacy trial. | Qualitative analysis of transcripts |
| | Pilot trial Efficacy trial | Young person interviews | Interviews will take place towards the end of the pilot and efficacy trials, with a portion of interviews also conducted post pilot and post efficacy trial. | Qualitative analysis of transcripts |
| | Pilot trial Efficacy trial | UO focus groups | Focus groups will take place toward the end of the pilot trial and at the mid-point of the efficacy trial. | Qualitative analysis of transcripts |
| | Pilot trial Efficacy trial | Observations of club sessions | Observations would likely take place during the mid-point of the pilot trial and at regular intervals during the efficacy trial. | Qualitative analysis of field notes and a bespoke observation checklist. |

Data collection during pilot trial

Using a hybrid approach, all DPOs in the pilot trial will be included in qualitative data collection. Five of the ten sites will be purposefully sampled for diversity in DPO characteristics, location, and delivery model. At each of these five sites, we will interview the DPO lead/manager, 2-3 DPO practitioners, representatives from 2-3 referral agencies, and 2-3 young people. If feasible, session observations will also be carried out at regular intervals across the five DPO sites. The remaining five sites will participate via remote data collection across the same groups outlined above.

Data collection during the efficacy trial

Data collection during the pilot trial will be used to confirm the most appropriate approach to qualitative data collection to be used for the efficacy trial, i.e. in-person, remote, or hybrid. Qualitative data collection will then be conducted in 10 DPO sites during the efficacy trial. A minimum of one site from Wales will be included.

Analysis

Impact evaluation: Data analysis

Main effect outcome analysis

For the pilot phase, we will conduct descriptive analyses of outcomes but will not conduct inferential statistical analysis. The pilot trial - on its own - is not primarily designed to estimate effect sizes or evaluate the impact of the intervention.

However, if the project progresses to efficacy, outcome data from both the pilot and efficacy phases will be analysed together to determine the impact of the programme. All outcome data will be analysed using an intention to treat (ITT) analysis. Our primary outcome of arrests (as a proxy for offending) will be analysed using logistic regression, and our secondary survey-based outcomes will be analysed using linear regression.

To account for the multi-site nature of the evaluation, we will include site fixed effects in our analysis models.

We will collect pre-intervention outcomes for all CYP to increase power and adjust for regression to the mean. Our control vector will include ethnicity, gender, age, SES, site and baseline outcomes.

$$Y_i = \alpha + \beta_1 * Treatment + \beta_2 * Control\ vector + \epsilon_i$$

Subgroup analysis

In addition to the primary analysis of short- and medium-term outcomes, we will also conduct sub-group analyses (investigating intervention*ethnicity interaction effects) to analyse differential impact, particularly for those from minoritised ethnic backgrounds.

Interim analyses and stopping rules

Given the potential for unintended negative effects, we will conduct interim analyses of outcomes (arrests, as assessed through local police data) each time we successfully access a new tranche of data throughout the lifecycle of the project. This will involve statistically comparing the treatment and control groups on the outcome data available (as specified above for the main effect outcome analysis).

If a statistically significant negative effect is identified at any point, then the study will pause intake for one month to allow for options regarding progression to be identified and discussed with YEF and the delivery/evaluation partnership.

Implementation and Process Evaluation: Data analysis

We will take a theory-based approach to the IPE, that is guided by programme theory and the Theory of Change agreed for the boxing model, as well as informed by implementation theory and an understanding of how context interacts with processes of change.

IPE data collection and analysis will be informed by two widely used and validated implementation science frameworks. The Implementation Outcomes Framework (Proctor et al., 2011) will be used to shape data collection and analysis, and the Consolidated Framework for Implementation Research (CFIR, Damschroder et al., 2022), which identifies the determinants of effective implementation, will guide the analysis of barriers and facilitators.

Data from each element of the IPE will be analysed separately, then triangulated and integrated, identifying areas of difference and reinforcement, and using different data sources to substantiate and explain findings.

Quantitative IPE data

As part of quantitative IPE data collection and analysis, a bespoke fidelity model has been created and will continue to be refined during the mobilisation phase with further input from the UO and DPOs.

Fidelity to the shared practice model will be assessed through the criteria set out below using items from acceptability surveys (practitioners and young people), and programme administrative data. Each DPO will be given a score against the fidelity criteria within five areas, reflecting high, medium, or low fidelity to the shared practice model per DPO.

For quantitative data analysis against the fidelity model, ethnicity of participants will be recorded within each DPO and assessed collectively across all settings. In the intervention strand, 30% of CYP should be from a racially minoritized background to reach high fidelity. DPO inclusion criteria specifies that a DPO should be situated at a minimum in a 'moderately diverse' area, where 10-30% of the served population are of an ethnic minority background. Therefore, diversity within the intervention strand for each DPO may differ depending on geographical location and an assessment of fidelity will be made across all DPOs.

Table 11: Fidelity model

| | Intervention component | Evaluation source | Measure of component | Degree of flexibility | Scoring |
|--------------------------|-------------------------------|-------------------------------|---|------------------------------|--|
| Dosage | 6-month duration | Administrative programme data | Duration of intervention | None | % of weeks ran (out of intended 24 weeks) |
| | 2 sessions per week | Administrative programme data | Frequency of intervention sessions | None | % of sessions ran (out of the intended 48 sessions) |
| | 60 minutes per session | Administrative programme data | Length of intervention sessions | None | % of sessions that ran for a minimum of 60 minutes (out of the intended 48 sessions) |
| Target population | Age | Administrative programme data | CYP aged between 14-18 at the time they would be expected to begin the programme. | None | % of CYP within defined age range |
| | Ethnicity | Administrative programme data | Ethnicity of the CYP | None | 30% of CYP in the intervention strand are from a racially minoritised background |
| | Risk characteristics | Administrative programme data | CYP must meet at least one of the risk characteristics | None | % of CYP with at least one risk characteristic |

| | | | | | |
|--------------------------------------|--|--|--|---|--|
| Intervention activities | Boxing strand | Administrative programme data Practitioner (DPO) satisfaction surveys | Adherence to activities and activity structure month by month | Limited - There is some flexibility in the transition from non-contact to semi-contact activities, as this will depend on CYP and coach judgement. | % of DPOs who adhere to monthly activity structure |
| | Personal development and support strand | Administrative programme data Practitioner (DPO) satisfaction surveys | Adherence to activities and activity structure month by month | Limited - There may be some flexibility in the exact nature and content of development and support activities, however these will all follow the activities and intervention blueprint. | % of DPOs who provide a personal development and support strand throughout the 6-month delivery period |
| Intervention quality for DPOs | Support from the UO, other practitioners | Practitioner (DPO) satisfaction surveys | DPOs feel that the level of support received to deliver the intervention is sufficient | None | % of DPOs who strongly agree/agree with component measure |
| | Appropriateness | Practitioner (DPO) satisfaction surveys | DPOs feel that the intervention is appropriate for the target population | None | % of DPOs who strongly agree/agree with component measure |

| | | | | | |
|--|---------------|----------------------------------|---|------|--|
| Intervention quality for young people | Safety | Young person satisfaction survey | Young people feel that boxing sessions are conducted in a safe manner and in a safe space | None | % of CYP who strongly agree/agree with component measure |
| | Support | Young person satisfaction survey | Young people feel that they received enough help and guidance/support during boxing sessions from DPO practitioners | None | % of CYP who strongly agree/agree with component measure |
| | Relationships | Young person satisfaction survey | Young people feel they have built a trusted relationship/rapport with DPO practitioners | None | % of CYP who strongly agree/agree with component measure |

Qualitative IPE data

Qualitative data will be analysed using a version of the framework approach, which is widely used in applied social research. Framework analysis (Ritchie & Spencer, 1994) will be undertaken to examine and interpret qualitative data, with themes developed both deductively and inductively to include unexpected issues. Framework analysis facilitates systematic theme-based comparison within study populations (e.g. between different groups of CYP) and between study populations (e.g. comparing the views of coaches and DPO staff, and CYP), as well as within case analysis (e.g. exploring how the delivery setup in a site links with feasibility and perceived outcomes).

We will also utilise the insights of the YEF Race Equity Associate when approaching qualitative sub-group analysis, and qualitative analysis more broadly. This will further ensure the positionality of the research team is considered, and an equitable approach to analysis is fostered throughout.

Cost data reporting and collecting

We will report the cost of delivering the intervention in the final report, following [YEF costing guidance](#).

We will:

- Use a bottom-up costing approach and break costs down into: prerequisites, set-up costs, and recurring costs.
- We will report the total cost for a typical single cohort receiving the intervention for one round of delivery and the costs per participant for one round of delivery, assuming full compliance.
- Depending on heterogeneity in costs across cohorts and clubs, we will either report average costs, or select a case which we think is most representative of the costs we expect to be incurred in future, typical rounds of delivery.

The organisations and practitioners involved in delivery are England Boxing and Welsh Boxing and boxing clubs. To report cost at the end of this study, we have produced a template for these organisations to complete, covering staff costs, equipment/materials costs, programme procurement costs, and buildings and facilities costs. We will collect this information from clubs at the end of each round of delivery, across both pilot and efficacy phases.

Diversity, equity and inclusion

Diversity, equity and inclusion considerations in co-design and programme delivery

This project will be a key contributor to YEF's commitment to be a racially equitable funder. YEF have specified that they expect at least 30 percent of participants will be from racially minoritised backgrounds, specifically those from black (African and Caribbean), Asian, or other minority ethnic groups. Additionally, at least 60% of DPOs are to be led by leaders from racially minoritised groups. These targets are not only aligned with the funder's criteria—they are vital to ensuring that the work genuinely reflects and responds to the communities most affected by serious youth violence. We are aware that fear of racism or discrimination can be a huge barrier for racially minoritised young people to access certain programmes, and can affect retention too. Representation among both participants and delivery partners helps to build trust, relevance, and impact. It also supports the development of leadership and infrastructure within underrepresented communities, contributing to more equitable systems beyond the life of the project.

Ensuring that the programme is designed to engage young people from diverse backgrounds has been central to our co-design process. This has included

- Conducting interviews with a diverse set of boxing coaches, and young people currently undertaking boxing training, prior to the co-design work to inform our approach and the key issues to discuss.
- Carrying out a literature review which searched for information on i) the characteristics of the samples in the underlying studies (e.g. ethnicity) and ii) any evidence that programme recruitment, retention, acceptability, and impact vary by those characteristics.
- Working with our race equity partner, ClearView research, to conduct a participatory panel with young people who share many of the eligibility characteristics for participation in the programme, to seek their views on the design of the programme and our approach to evaluation (see more on this below and throughout this document).
- Working closely with YEF's Race Equity Associate, including having them attend multiple co-design sessions.
- Inviting challenge to the shared practice model from a range of experts, including ClearView, and UK Youth who have deep expertise in delivering programmes to diverse groups of young people.

We are confident that we are in a strong position to meet YEF's expectations on take-up and participation by young people from Black, Asian and Minority Ethnic backgrounds, and that we have in place the systems to monitor progress against targets throughout delivery. Boxing has a strong tradition of working in diverse and disadvantaged communities and encouraging ongoing participation amongst minoritised groups. 28% of the England Boxing membership who have competitive or recreational valid medicals are from ethnically diverse communities. 26% of members (between 2020 and 2024) are from these communities. This shows that there is good retention in the sport amongst these communities from a boxer perspective.

However, we will ensure that we are able to meet YEF's commitments on this project by:

- ***Partnering with representative and equity-driven DPOs:***
 - Working with DPOs that are based in and work with diverse communities (please see club eligibility requirements in sections that follow), with coaches/leadership that have experience with the target population (or potentially have experiences of the criminal justice system themselves) to support building trust.
 - Recruiting DPOs who share our commitment to working with all eligible young people in the local community.
 - Simplify participation so that DPOs, who may be smaller and have less capacity to engage with evaluation, are able to participate. We'll do this by taking responsibility for the majority of data collection and providing training and support on what we would expect from DPOs.

- Building relationships and trust by visiting clubs to understand their work.
- Highlighting benefits of participation including the opportunities for funding, increased visibility of their work and the opportunity to demonstrate impact.
- Positioning the work as a collective effort to address a pressing issue that affects the communities they serve and highlighting that their participation is essential for authentic culturally sensitive engagement with CYP.
- Securing commitments from a few racial minority led clubs in the pilot phase and then highlighting their involvement to encourage others to join.
- Sharing testimonials from other clubs who have benefited from similar collaborations.
- ***Embedding equity in local youth recruitment strategies:***
 - Ensuring that regional coordinators who will lead on work with local organisations and agencies to recruit young people into the evaluation and then the programme are fully aware of the need to ensure take-up from diverse communities. This will include working with local community groups and leaders to establish trust and raise awareness of the evaluation and programme.
 - In addition, when recruiting for these coordinators England Boxing will utilise the Sporting Equals job boards (which are only accessible to those from racially minoritised groups) to maximise the chances of recruiting from underrepresented groups. This will support embedding race equity considerations into the project leadership and recruitment efforts.
- ***Delivering a culturally responsive programme:***
 - Embedding training on racial equity for all coaches and mentors in the onboarding process (as part of the co-design process, leaders from the 13 initial clubs received EDI training from Sporting Equals, an organisation aiming to serve ethnically diverse communities, promote community cohesion and, importantly, to take action to eradicate racism in sport).
 - Using culturally sensitive language and imagery in all programme materials (we will benefit from the ongoing insights of ClearView's youth participatory panel to support this).

Additional race equity considerations focused on the evaluation itself are addressed in section that follows.

It is also a priority of the project partnership that the inclusion of girls and young women is carefully considered. Though participation in women's boxing is always increasing, the percentage of women and girls in the England Boxing membership currently sits at 10%. As such, it is not uncommon for there to be only one or two female participants in a boxing session. Club coaches are used to these situations and have ample experience of working to ensure those individuals are safe and included in the sessions. 11% of England Boxing

coaches are female, and we will ensure that clubs recruited onto the programme will have a coaching team that is reflective of the wider membership, as a minimum – we are able to easily access this type of club data via England Boxing’s membership system ‘The Locker’.

In addition to the above, all DPOs involved will have access to a suite of resources regarding women and girls’ inclusion, some of which will be provided through partners Boobydoo and BreastProtect, who specifically look at women’s health in the context of combat sports and exercise. All DPOs will be expected to attend the annual Inclusion Conference that will take place in November 2025, which will include specific sessions on women and girls’ inclusion. Previous inclusion conferences have featured a session on REDs as well as one on nutrition through the menstrual cycle. There is also the opportunity for some training with coaches engaged in delivery at DPOs, as we have allocated a budget to get people together in person and online for regular CPD.

For any participants who get to the point of sparring, DPOs will be able to arrange sparring sessions with neighbouring clubs and their female boxers. This is very common practice in amateur boxing, due to the size of the female athlete pool (which naturally gets smaller when you factor in boxer experience, weight class, etc).

Diversity, equity and inclusion considerations in evaluation

The Lab and our partners are committed to conducting research in which equality, diversity and inclusion principles are firmly embedded across all stages of the evaluation, from the design through to recruitment, data collection, and analysis.

As noted previously, during the co-design phase we have strived to ensure that both the content and the delivery of the programme is informed by cultural, racial, and other relevant demographic sensitivities by working closely with YEF’s Race Equity Associate and inviting challenge from our partner ClearView Research who have deep expertise in racial justice and giving voice to the unheard.

Inclusivity during recruitment

As discussed in the Shared Practice Model and the section on race equity and inclusion considerations in co-design and programme delivery, we will embed equity in local youth recruitment strategies, by:

- Ensuring that regional coordinators who will lead on work with local organisations and agencies to recruit young people into the programme are fully aware of the need to ensure take-up from diverse communities. This will include working with local community groups and leaders to establish trust and raise awareness of the evaluation and programme.

- In addition, when recruiting for these coordinators England Boxing will utilise the Sporting Equals job boards (which are only accessible to those from racially minoritised groups) to maximise the chances of recruiting from underrepresented groups. This will support embedding race equity considerations into the project leadership and recruitment efforts.
- Providing young people with welcoming information documentation, which provides all necessary information about data security, anonymity and the reasons for undertaking research, in Plain English. This information will be stress tested with ClearView's youth participatory panel, to ensure that our materials and approach are considerate of young people from different backgrounds and with different vulnerabilities.

In addition, as part of the evaluation, we will work with England Boxing and Welsh Boxing to monitor for inequalities within the referral and recruitment processes to ensure that no demographic group is unduly excluded from access to the programme, and ensuring that no group is under- or over-represented in referrals to the programme by referral agencies. This may occur due to unconscious bias within referral agencies, and/or because the programme is viewed by agencies as unsuitable for young people with certain demographic characteristics. We will also work with E&W Boxing to monitor whether the rate of young people accepting the offer to participate in the placement varies across certain demographic groups. If this is the case, we will investigate why and whether the programme content and/or delivery needs to be adapted to ensure equality of acceptability and access.

Inclusivity during data collection and analysis

Whilst many of the Lab's projects work with a high proportion of young people from minoritised communities, we are very conscious that in this project there is also a focus on ensuring that a significant proportion of delivery is conducted by *DPOs* who are Black, Asian or Minority ethnic led. We will focus on ensuring all our work with DPOs is sensitive to this, including ensuring surveys and topic guides for qualitative work have specific content which explores issues of diversity, race and racism.

The collection of data directly from *young people* will occur via surveys and interviews and focus groups. To ensure that the principle of inclusivity is adhered to during this process, we will:

- Sample participants (for our qualitative and stakeholder engagement work) to capture a range of backgrounds and perspectives and ensure that there is the space within interviews and focus groups to explore specific equity and diversity issues.
- Use inclusive and accessible language in all survey and interview questions and guidance (we will stress test these with ClearView's youth participatory panel).

- Carefully monitor data completion for CYP from racially minoritised backgrounds, particularly in terms of drop-out rates. Ongoing monitoring will permit us to identify issues as they arise and respond to them during the course of the project.
- Strive for equality of access by enabling online (remote) participation in interviews and offering different locations and times for interviews to facilitate access.
- Explore the feasibility of aligning researcher and participant identities (or utilising peer researchers) in the collection of qualitative data, to improve the perceived safety of the space, increase CYP comfort, and to reduce barriers to forming connection and trust.
- All researchers conducting interviews will have undertaken NSPCC's Introduction to safeguarding and child protection training and complete a pre-interview training on interviewing best-practice.

We expect to encounter issues of trust, and concern around confidentiality and data collection relating to sensitive topics (including the use of arrest data). These issues were identified during the co-design process and in ClearView's youth participatory panel work.

Insights from the youth participatory panel

There was a strong reaction to the idea of answering questions about past criminal behaviour and access to police records. Several participants said they would lie or disengage entirely. Others were more open, but only if anonymity was guaranteed and the purpose was explained clearly. However, they still described feeling reluctant to take part in completing such a survey.

Participants were informed about survey questions, which would include questions on past criminal behaviour. They were then asked about their feelings and views on these questions. Many participants expressed discomfort with being asked about their past behaviour, particularly in the early stages of signing up.

“Those type of questions go too much into people’s personal life.”

“If I did have a criminal background... I would just lie.”

When it came to asking specifically about criminal records, all participants described feeling especially uncomfortable with the idea of sharing police records:

“That’s totally different... now you’re trying to dig deep into somebody’s life.”

“Why do you need it? What are you doing with that information?”

There was concern that such questions could deter other young people from taking part:

“They’ll probably think it’s something undercover and you’re trying to catch them out on something.”

To mitigate these concerns we will:

- *Explain the rationale and prioritise transparency* - Some participants in ClearView’s panel expressed an openness to answering such questions (and the use of police data) if their purpose was clear. Transparent and accessible communication will be essential to building trust in the evaluation process among CYP. As one CYP said: “**Be honest about what’s going to happen.**” It will be important to balance being clear about why this information is being collected, whilst avoiding risks around ‘othering’ or stigmatising young people and causing them distress. This would include emphasising that:
 - The programme (and project) is about much more than offending, and is designed to support a broad range of young people who could benefit from involvement in all sorts of ways (physical fitness, confidence, self-esteem, etc.).
 - While one intended outcome of the project is to reduce antisocial and criminal behaviours for some, we do not suspect or believe that all or most involved young people are participating in antisocial or criminal behaviour.
 - We are not collecting this data to check up on individuals, we just want to see if - on average - certain types of behaviour increase or decrease over time.
- *Emphasise confidentiality* - Some participants expressed an openness to answering such questions if anonymity was assured (“**If the survey was anonymous and put online, then I probably would be fine with it.**”). Young people should be reassured that their responses will be anonymous, and that they will not affect their participation or be used punitively. This is particularly vital when working with young people from racially minoritised communities who are more likely to have an inherent distrust of the police and/or the wider criminal justice system. It needs to be clear that we are using police data but not actively working with the police or sharing information with them, and the language around this needs to be accessible for young people.

More broadly we will acknowledge the bias in certain sources of data as a limitation in our interpretation and reporting of findings. We will acknowledge in all interpretation and reporting that:

- Being arrested is not the same as having committed a crime, and certain minoritised communities are systematically more likely to be arrested. Whilst any potential bias in an outcome measure is of course of concern, it is worth remembering that the evaluation will involve a large sample of young people and randomisation will ensure balance of characteristics such as gender, age and ethnicity across the treatment and control arms, which will effectively control for any bias when measuring the difference in number of arrests between the two arms. We will also conduct exploratory sub-group analysis to see the extent to which arrests and other outcomes interact with ethnicity. Of course a more fundamental question is the extent to which being arrested is a good proxy for offending. However, it is worth bearing in mind that we are collecting a range of other administrative and self-report outcomes through our work and the data will be submitted to the YEF archive for future linking to the Police National Computer, meaning we are in a strong position to form a holistic view of the impact of the programme on young people.
- Racially minoritised communities are more *criminalised* rather than more 'criminal', highlighting injustices and inequalities relating to racialised suspicion and structural risk factors.

We will analyse qualitative and quantitative data from the perspective of race and ethnicity to uncover if participants' perceptions or experiences of the programme differ across groups, and whether their outcomes differ.

Wellbeing and safety during surveys and interviews

More broadly, we are conscious that young people who engage in the evaluation could be vulnerable to negative and stressful impacts of the research process. We will work to ensure the wellbeing and psychological safety of individuals during data collection by:

- 1) **Designing interview questions to minimise harm and maximise comfort:** We will do this by (i) structuring questions to build in complexity and difficulty to increase comfort as rapport develops, (ii) depersonalising questions to elicit comfort and stronger answers (e.g. instead of 'what do you hate about X', ask 'If you had a magic wand, what 3 things would you change about X?'), (iii) being aware of tension, discomfort or distress during the interview, repeating that the interview can be stopped may help participants and repeatedly ask if they want to continue, (iv) ensuring that researchers are aware of places to signpost participants and offer this information, and (v) auditing the questions for their sensitivity within the context before the interview.
- 2) **Allowing the participants to choose their environment for participating:** Where possible we will allow the interviewees to make decisions about the survey and interview setting.
- 3) **Reminding participants of anonymity and data security:** We will seek to minimise anxiety for young people by reminding them that the information they provide will not be shared with other individuals and that all identifiable information will be

removed from the transcripts and report. This will be repeated during the survey as well as during interviews.

Ethics and registration

This trial is self-assessed as being high risk due to the inclusion of high-risk participants in the form of vulnerable young people. As a result we will seek ethical approval from an independent panel of external experts with experience of working with vulnerable children and experience with safeguarding and child protection.

The independent ethics review committee (ERC) will review the following information:

- Ethical review form.
- All participant-facing materials, including consent forms and information sheets for young people.
- Topic guides.
- Safeguarding and distress protocol.

The ERC will discuss any issues raised by the research with the aim of finding solutions that meet ethical requirements. If there are substantial changes while the research or evaluation is being implemented, the ethics form will be revised and the revisions agreed with the ERC.

The pilot and efficacy trials will be registered at www.controlled-trials.com.

Data protection

We will follow appropriate data protection processes in accordance with BIT processes, including completing a Data Protection and Security Checklist and Data Protection Impact Assessment, which will be reviewed and approved by BIT's legal team.

The Lab will store and handle all data securely and confidentially in line with requirements of the UK GDPR, and Data Protection Act (2018), including that Personal Data shall be processed lawfully, fairly and in a transparent manner that ensures the security of the Personal Data. It is initially proposed that only the Lab and CEI research team will have access to data collected as part of the evaluation.

We anticipate that the Lab and CEI will be joint-controllers who will also process data. The legal basis will be "legitimate interest". Article 6(1)(f) of UK GDPR states that "*processing is necessary for the purposes of the legitimate interests pursued by the controller or by a third*

party except where such interests are overridden by the interests or fundamental rights and freedoms of the data subject which require protection of personal data, in particular where the data subject is a child."

We determine that there is a genuine purpose to process this data. This data will inform building the necessary evidence around what works to reduce offending and build young people's social and emotional competencies. Data processing is necessary to complete a robust evaluation. The data subjects will include: at-risk youth and staff at boxing clubs.

During this trial, data will be stored on secure, password-protected and encrypted network drives (hosted by BIT). Access to the data will be restricted to the relevant members of the project team involved in this evaluation.

In case a Personal Data Breach occurs despite the mitigations in place, project team staff will deal with the security incident without undue delays. All Personal Data Breaches (or suspected Personal Data Breaches) will be reported to BIT's Data Protection Officer as soon as a project team member becomes aware of one (including if this is outside of office hours) by contacting the Data Protection Officer directly and by completing a Data Incident Notification Form. Staff will not attempt to investigate a Personal Data Breach themselves but will take steps to contain the Personal Data Breach as quickly as possible. Such steps might be taken prior to reporting the incident to the Data Protection Officer where this is reasonable and necessary to protect Data Subjects and mitigate the potential impact of the Personal Data Breach.

Timeline

The study as a whole (pilot and efficacy) is expected to last just under three years from November 2025 to September 2028. However, the overall timeline is dependent on any necessary pausing period between pilot and efficacy. Below is a timeline of the pilot and efficacy phases of the study, as described in this protocol:

Table 12: Timeline of key activities

| Dates | Activity | Staff responsible/leading |
|-----------------------------------|--|---|
| November 2025 to June 2026 | <p>Recruitment and referral for pilot (rolling)</p> <p>Baseline quantitative data collection (rolling)</p> <p>Randomisation (rolling)</p> <p>NB: Note that we intend to run rolling recruitment with progression straight from pilot to efficacy without pause. In practice what this means is that all young people who are enrolled in the programme during the first two months (until April 2026) will be considered as the sample for the pilot, and everyone enrolled after that period will be the sample for efficacy study</p> | England Boxing and Welsh Boxing with support from the Ending Youth Violence Lab |
| February 2026 to July 2026 | Programme delivery for pilot | Boxing clubs |
| August to September 2026 | Post-test quantitative data collection for pilot | England Boxing/Welsh Boxing and ClearView Trusted Guides. |
| August to September 2026 | Practitioner and CYP interviews | Centre for Evidence and Implementation |
| August to September 2026 | Practitioner and CYP satisfaction surveys | Centre for Evidence and Implementation |

| | | |
|---|---|---|
| July to October 2026 | Drafting and submission of pilot summary (Transition Report) and YEF decision | Ending Youth Violence Lab |
| July 2026 to July 2027 | Recruitment and referral for efficacy (rolling) Baseline quantitative data collection (rolling) Randomisation (rolling) | England Boxing and Welsh Boxing with support from the Ending Youth Violence Lab |
| September 2026 to September 2027 | Programme delivery for efficacy | Boxing clubs |
| September 2026 to October 2027 | Post-test quantitative data collection for pilot (rolling) | England Boxing/Welsh Boxing and ClearView Trusted Guides. |
| September 2026 to October 2027 | Practitioner and CYP interviews (rolling) | Centre for Evidence and Implementation |
| September 2026 to October 2027 | Practitioner and CYP satisfaction surveys (rolling) | Centre for Evidence and Implementation |
| November 2027 to April 2028 | Acquiring 3-month police data for final participants | Ending Youth Violence Lab |
| July 2028 | Report submission | All partners |
| August 2028 | Publication process | All partners |
| September 2028 | Data archiving | Ending Youth Violence Lab |

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Appendix

Appendix A - Overview of evaluation project staff

The Lab's team - The Lab will lead the overall consortium, and directly lead the co-design and impact evaluation strands of the work.

- **Tom McBride (The Lab)** is the Director of the Ending Youth Violence Lab and has 15+ years of experience in research and evaluation roles. He is the former Director of Evidence at the Early Intervention Foundation and Head of Strategic Analysis at the Department for Education. Tom is principal investigator on all Lab projects, including GenPMTO, Summer Jobs, and Fathers for Change. Tom is an experienced sports coach, and spent several years coaching young people from diverse backgrounds as part of a community rugby league team in Brixton.
 - Tom will have ultimate responsibility for project delivery and provide strategic direction and oversight. He will be the point of escalation for any concerns about team performance. Tom will ensure appropriate staff resources are allocated, that milestones are met and that all deliverables are high-quality, insightful and meet YEF's expectations
- **Jack Martin (The Lab)** is Assistant Director at the EYV Lab and has over 8 years of experience working at the Early Intervention Foundation (EIF). At EIF, Jack led on evidence synthesis work to support the Youth Endowment Fund's 'supportive home' grant round, providing recommendations around which parenting programmes and domestic abuse interventions were most promising to fund given their stage of development and YEF's objectives. Jack is currently leading the adaptation phase of BIT's Fathers for Change project, involving coordinating and conducting extensive stakeholder engagement, and running co-design workshops, focused on adapting a domestic abuse intervention so that it is feasible, acceptable and evaluable in the UK context. He is currently leading the Lab's pilot and efficacy evaluation of the parenting programme GenPMTO.
 - Jack will be the primary point of contact for YEF and E&W Boxing, bringing in other team members from BIT and the consortium as required. He will attend regular meetings with E&W Boxing and YEF and provide written updates at an agreed upon frequency. Jack will ensure smooth collaboration between E&W Boxing, YEF, The Lab and the consortium. Jack will lead the stakeholder engagement and the co-design phase of the work, and the pilot and efficacy evaluations, overseeing and coordinating all quantitative and qualitative research activities. He will set the plan and protocol of the research, track risks and issues and lead the day-to-day project management..

- **Lilli Wagstaff (The Lab)** is quantitative lead in the EYV Lab and brings 6+ years experience in quantitative research and evaluation. At BIT, Lilli has worked on a large number of evaluations of violence reduction interventions. She is currently the quantitative lead on the Lab's GenPMT and Summer Jobs evaluations and leads BIT's work on domestic abuse with Foundations, including the Fathers for Change evaluation. Before joining BIT, Lilli worked as a football coach, where she used football as a means to improve social and emotional skills among 2-12 year olds from diverse backgrounds.
 - Lilli will lead the collection and analysis of quantitative data in all phases of the study. She will design surveys and advise on the structures needed for routine data collection. Lilli will also analyse real-time administrative data on recruitment, retention and completion rates of participants in the programme. Lilli will ensure the quantitative data collected and analysis are appropriate to answer the research questions.
- **Faisa Abdi (The Lab)** is an Advisor working in the Health and Wellbeing team. Since joining BIT, Faisa spent time in the Research and Evaluation team, working across a range of policy areas. Before joining BIT, Faisa worked as a consultant advising clients on how to replicate and scale social impact programs, both domestically and internationally. She also previously worked at The Greater London Authority (GLA) focusing on Housing and Homelessness policy in London. Faisa holds an MSc in African Politics from the School of Oriental and African Studies and a BSc in International Politics and Sociology from City University of London.
 - Faisa will support the team with day-to-day project delivery. She will support across all phases of work, including co-design, quantitative and qualitative data collection, and reporting. Emily will support all team members in ensuring successful and timely delivery.
- **Dr Clare Tanton (The Lab)** brings 20+ years experience in violence, sexual and reproductive health research. Clare has experience designing research projects, developing research protocols, developing quantitative and qualitative tools, data collection and management, mixed-methods formative evaluations, and evidence synthesis. She worked closely with Raising Voices, a Ugandan NGO which develops evidence-based violence reduction interventions, to pilot school-based violence reduction intervention. She is project manager on our Summer Jobs and Football Beyond Borders projects. She is the Chair of the MSI Reproductive Choices Independent Ethics Review Committee since 2023 and the Designated Safeguarding Lead for the team within which this work will be based.
 - Clare will QA research outputs, including the research plan, interview materials, protocol and final report. Her reviews will ensure the design and execution of all research activities are appropriate to answer the research questions.

CEI Team - CEI will lead the implementation and process evaluation, as well as feed into other stages of the evaluation. They will bring their substantial experience conducting similar evaluations.

- **Jane Lewis** is an Associate Director at CEI and formally the Managing Director of the UK team. Jane has been a key user and advocate for evidence and implementation science in the UK for a number of years, with her earlier career based in evaluation and research dissemination. She leads projects and programmes of work for several of the UK what works centres (Foundations, Youth Endowment Fund, Youth Futures Foundation and Early Education Foundation) as well as for national government and NGOs in areas including early years, school inclusion, education. Jane was previously Head of UK Programme Development & Quality with Save The Children UK (SCUK), leading on innovation, implementation, evaluation and scale-up strategies for SCUK's UK programmes.
 - Jane will provide expert input throughout the evaluation based on her experience of working on other YEF-funded MSTs.
- **Dr Stephanie Smith** is an Associate Director at CEI. Stephanie has over 15 years' experience of leading rigorous mixed-methods evaluations, including school-based interventions, mentoring-based programmes, and interventions to support young people at risk of violence. She has led several YEF-funded evaluations, including the feasibility phase of YEF's previous multisite trial of mentoring, an evaluation of the intensive social work intervention - SHiFT, and the reviews of place-based approaches to reducing youth violence. She holds a PhD in health services research from KCL. Of relevance to this project, she is also a member of a local boxing gym and regularly takes part in classes.
 - Stephanie will be the project manager for CEI's involvement in the evaluation, and will oversee the IPE, leading on design and approaches to data collection and analysis, and reporting.
- **Alice Mills** is a senior research assistant at CEI. She has extensive knowledge of youth justice research and service implementation, and is working on the YEF-funded project on barriers and facilitators to implementing diversion effectively. Prior to CEI, she worked on an evaluation of Emergency Department Navigators in partnership with the Lancashire Violence Reduction Network. She is completing her PhD in Criminology at Lancaster University, looking at the violent offending patterns of young people over time using the Offenders Index.
 - Alice will be the lead researcher for the IPE, involved in the design, data collection, analysis and reporting.

UK Youth Team - UK Youth will provide advisory support to the evaluation team, bringing their expertise in delivery, understanding of the sector and relationships with relevant co-design participants.

- **Oscar Bingham (Assistant Director of Research & Impact)** oversees evaluation and service design at UK Youth. He started his career as a consultant to the voluntary sector for eight years. Before joining UK Youth in 2022, Oscar built and led a new Evidence & Learning team at Comic Relief, where he managed a number of sport for change evaluations, working closely with organisations delivering boxing interventions such as: Fight for Peace, Empire Fighting Chance and the Vulcan Centre. **Henry Poulney** is a Head of Network Delivery at UK Youth, overseeing physical literacy, mental health and outdoor learning. Experienced in community co-production with marginalised young people, Henry was awarded a Lord Mayor's medal for work with underserved communities. He also led delivery at the UK's longest-running LGBTQ+ youth service, Freedom Youth.
- **Rania Hamdi** is a Project Manager leading on UK Youth's Sport England Systems Partnership. Her experience spans research and programming focused on Health Promotion, REDI and youth work more broadly.

ClearView Team - ClearView Research will act as a critical friend and provide advice and challenge from a race equity perspective to all aspects of the intervention design and evaluation. In addition to this, they will lead the on designing and delivering the participatory work for the project.

- **Dr Kenny Imafidon** Managing Director and co-founder at ClearView with 10+ years of experience in leading award-winning research and evaluation projects across the UK and internationally. Kenny is a thought leader in the equity, diversity, and inclusion space and is a founding member of the Market Research Society's (the industry's regulatory body) diversity and inclusion council. Internationally, he is a highly sought speaker, commentator, and advisor as to best practices in participatory research and research exploring inequalities. Recently, he was featured in the Forbes 30 under 30 list for social impact.
- **Dr Vivian Latinwo-Olajide** Has a research focus on spatial justice, accessibility barriers, migration, race, and power. A transdisciplinary scholar, she specializes in qualitative, embodied, and sensory methodologies to address complexity and conflicting values in research. She advocates for more inclusive, equitable research and policy, recognising the impact of historical exclusions on outcomes. She is currently the project lead for a YEF initiative, serving as Insights Partner, exploring strategies to reduce youth violence in racialised communities.
- **Yota Bratsa** With 5+ years of experience in public and third-sector research, Yota holds an MA in Social Anthropology of the Global Economy. She specialises in participant-centred, inclusive approaches, ensuring diverse voices shape research design and outcomes. At ClearView Research, she has managed projects on urban health, literacy education in prisons, and inclusive research practices. Previously, Yota worked at Ipsos UK, studying the resettlement of Syrian refugees and the experiences of people aged 50-70 in inadequate housing.

Appendix B - Overview of initially recruited clubs

At least 60% of the following clubs have leadership from minority ethnic backgrounds:

| Club name | Location | Description | Reason for being recruited |
|---------------------------|---------------|---|--|
| Unity Boxing Club | Rotherham | A community boxing club with a wide variety of community engagement experience and strong volunteer & staffing base. | Strong community project delivery experience, ethnically diverse community area, and currently works with VRU and P&CC |
| Heart of Portsmouth ABC | Portsmouth | Long history of experience delivering community engagement projects to local schools, PRU's, charities and community groups in and around Portsmouth | Wealth of exp. In community delivery; possibly not fully engaged / club leaders may have agenda to push certain products as part of the project |
| Pat Benson Boxing Academy | Birmingham | 40+ years experience as a community boxing club and registered charity. A well spaced and equipped boxing club with strong community partnerships. Experience of supporting community apprentice coaches as well. | Experience in crime prevention, working with the police and crime commission and other community projects. Central Birmingham, ethnically diverse area, high IMD. Registered charity |
| Bright Star | Wolverhampton | Delivering a broad range of programmes to under-represented communities including EB's Box to Beat It programme. Also with strong referral pathways and community engagement experience | Multiple sites across Midlands (Wolverhampton branch - 80% participants from ethnically diverse communities). Involved in projects of this scale already |
| MLSS | Walsall | Run by the Midland Langar Seva Society, the club uses the power of boxing to engage young people. | Full-time, registered charity, work on a variety of projects with young people, including projects with VRU |

| | | | |
|--------------------------------------|-------------|---|---|
| Billingham Boxing | Billingham | Award winning club with a wealth of crime prevention project delivering experience | Experience in crime prevention, big community club, diverse membership, work with Cleveland police and curve team |
| Moss side Fire Station Boxing Club | Manchester | A club that was originally set-up in a disused fire station to engage young people who were committing acts of arson in the local community. | Wealth of experience delivering crime prevention programmes including anti-knife crime projects throughout Moss Side |
| Broadplain's Boxing Club | Bristol | Established as part of a Youth centre originally, but expanded into a wide variety of youth and community engagement projects including partnerships with Parkinson's UK and others | Have experience working with young people who have been referred by the Police. A Hub offering a variety of activities for young people, with a focus on providing safe, engaging spaces for social, recreational, and educational programs |
| Waterfront | Leicester | Strong links with local community including Leicester Football club and PRU's | Leicester based, full-time delivery boxing club, involved in other crime prevention projects |
| Fight for Peace | East London | An active system partner supported directly by Sport England to engage CYP in crime prevention projects | Have a wealth of experience with YP and working with Stakeholders |
| Feltham Police Community Boxing Club | West London | A local community boxing club receiving referrals from local police and experience of working with Apprenticeship coaches | Police lead club, with experience in projects around youth offending and in an ethnically diverse part of London |
| St Josephs East ABC (Newport) | Newport | Active community boxing club providing competitive and recreational boxing opportunities with a long history. | Crime prevention experience |
| Splott Adventure ABC (Cardiff) | Cardiff | A community delivery focussed club focussed primarily on engaging disadvantaged and under-represented CYP. | Crime prevention experience |

Appendix C - Programme outcomes and mechanisms

In setting out the intended outcomes of our boxing programme, we started by interviewing clubs and exploring the literature, to identify people's perspectives on how boxing supports young people (and to identify any data on this that might exist). We built on this starting point in co-design workshops, and put together a full set of intended outcomes for our boxing programme.

Our principles in setting out intended outcomes were:

- They must be **well-specified and measurable** - i.e. outcomes are sufficiently specific (e.g. broader concepts like 'school readiness' would be broken down into specific constituent outcomes like 'communication skills' and 'literacy') and measurable (i.e. there is a validated way of measuring the outcome).
- They must be **evidence-based** - i.e. there is a clear account of why these longer-term goals are meaningful for families and children, why medium-term goals are likely to generate long-term outcomes, and why short-term goals are likely to generate medium-term outcomes, justified by scientific literature.
- They must be **realistic** - i.e. there is a specific, plausible & logical hypothesis (or ideally evidence-based case) that the programme is likely to have an impact on a given outcome.

Short-term outcomes

| Category | Outcomes | Mechanisms (how we think boxing will impact these short-term outcomes) |
|---|---|--|
| Improved socio-emotional development | Improved self-esteem and confidence | Boxing supports this by: i) exposing young people to <i>a confrontational context</i> that requires courage to participate in, building self-respect; ii) providing <i>a mentoring relationship</i> with a coach that helps young people to feel respected and valued; iii) providing <i>opportunities to become fitter and stronger</i> ; iv) <i>developing mastery and competence</i> and seeing tangible progress over time helps shift self-perception from 'troublemaker'/'outsider' to 'athlete' or 'hard worker'; v) giving longer-term boxers <i>responsibilities within the gym</i> . |
| | Improved self-control and emotion regulation | Boxing supports this by: i) exposing young people to a <i>competitive and confrontational context</i> which provides opportunities to practice anger/emotion management strategies (and which <i>rewards staying composed with success</i>); ii) <i>motivating young people to exercise self-control in other areas of life</i> (e.g. nutrition). |
| | Improved motivation and focus | Boxing supports this by: i) involving young people in <i>structured goal setting</i> ; ii) older or more experienced boxers in the gym acting as <i>role models demonstrating the rewards (e.g. achievement, respect) of persistence and motivation</i> . |
| | Improved social skills | Boxing supports this by: i) providing a <i>social context and opportunities to socialise</i> and engage in prosocial behaviour (helping, sharing, cooperating) with other young people; ii) developing <i>trusted relationships between coaches and boxers</i> ; iii) exposing young people to <i>social diversity</i> . |
| Supporting social cohesion | Improved prosocial attitudes (positive beliefs) | Boxing supports this by: i) <i>exposing young people to a specific behaviour code</i> and set of rules enforced within the club/gym (paralleling moral and societal values/norms); |

| | | |
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| | around helping others and co-operation) | ii) <i>reinforcing particular values through coaching and boxing rituals/etiquette</i> (i.e. respect for opponents, fairness and fair play). |
| | Improved community connectedness (sense of belonging within, and desire to engage with, one's local community) | Boxing supports this by: i) <i>providing young people with a sense of belonging in their local club</i> and by extension the wider community it serves; ii) <i>reducing feelings of marginalisation by building connections between people</i> from different backgrounds. |
| | Improved respectful and constructive relationships with authority | Boxing supports this by: i) <i>developing trusted relationships between boxers and authority figures</i> (coaches); ii) <i>giving young people opportunities to take on roles of authority</i> and responsibility themselves. |
| Reducing exposure to risk and providing diversionary opportunities | Reducing the likelihood of aggression being expressed in negative and dangerous ways | Boxing supports this by <i>providing a constructive/positive opportunity to vent stress or aggression in a controlled and safe setting</i> . |
| | Reduced time and opportunity available for undesirable behaviours | Boxing supports this by: i) being <i>scheduled at times where undesirable behaviour might otherwise occur</i> , ii) <i>providing a high-status activity with 'street cred' that appeals to young people</i> , offering an attractive and positive alternative to riskier behaviours. |
| | Reduced exposure to influence of negative peer groups | Boxing supports this by offering a <i>structured support system of positive influences</i> (coaches, other boxers) that replaces the sense of belonging found in negative peer groups. |

Medium-term outcomes

| Category | Outcomes | Mechanisms (how/why we think our short-term outcomes will impact these medium-term outcomes) |
|-------------------------------|---|---|
| Promoting positive behaviours | Improved prosocial behaviour (more helping, sharing, cooperating). | <p>There is evidence the following short-term outcomes promote prosocial behaviours:</p> <ul style="list-style-type: none"> Self-esteem and confidence - Self-esteem linked to prosocial behaviours (Fu et al., 2017). Self-control and emotional regulation - Adolescents with greater self-control show more prosocial behaviours (Li et al., 2022). Prosocial attitudes - Adolescents who internalise prosocial values tend to exhibit more prosocial behaviour over time |
| | Improved peer interactions (better conflict resolution, better communication). | <p>There is evidence the following short-term outcomes promote improved peer interactions:</p> <ul style="list-style-type: none"> Self-esteem and confidence - Adolescents with higher self-esteem tend to have better social relationships and peer satisfaction over time (Marshall et al., 2014). Self-control and emotional regulation - Better emotional regulation and impulse control in youth facilitate healthier peer relationships (Blair et al., 2015) Social skills - Adolescents with stronger social skills tend to develop more positive peer relationships and greater peer acceptance. Exposure to negative peer groups - Linked to worsening peer relations (disrupting the formation of positive friendships) (Allen et al., 2019). |
| | Improved engagement with education (better attendance, more effort and focus at school) | <p>There is evidence the following short-term outcomes promote improved engagement with education:</p> <ul style="list-style-type: none"> Self-esteem and confidence - Self-esteem positively predicts academic engagement (Zhao et al., 2021). Self-control and emotional regulation - Self-esteem in adolescents positively predicts educational outcomes (graduating on time, and college attendance) (Johnson et al., 2023). Motivation and focus - Motivation is associated with better educational outcomes (Goodman et al., 2015). |

| | | |
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| | | <ul style="list-style-type: none"> ● Exposure to negative peer groups - Affiliation with negative peer groups undermines academic engagement (Jiang 2023). |
| Deterring negative behaviours | Reduced antisocial and aggressive behaviours. | <p>There is evidence the following short-term outcomes reduce antisocial and aggressive behaviours:</p> <ul style="list-style-type: none"> ● Self-esteem and confidence - Young people with low self-esteem are more likely to engage in aggressive and antisocial behaviours over time (Donnellan et al., 2005). ● Self-control and emotional regulation - Youth with low self-control are more prone to aggression (Moffitt et al., 2011). ● Prosocial attitudes - Youth with higher prosocial attitudes generally show fewer aggressive behaviours as they develop (Obsuth et al., 2015). ● Community connectedness - Stronger community (or school) connectedness is associated with lower antisocial behaviour in adolescence (Dutra-Thome et al., 2019). ● Exposure to negative peer groups - Negative peers are predictors of aggression and antisocial behaviour (Dishion & Andrews 1995; Dishion, Andrews & Crosby 1995). |
| | Reduced substance misuse (use of alcohol, other drugs). | <p>There is evidence the following short-term outcomes reduce substance misuse:</p> <ul style="list-style-type: none"> ● Self-esteem and confidence - Higher self-esteem in early adolescence is associated with lower levels of substance use (Boden et al., 2008). ● Self-control and emotional regulation - Higher self-control in adolescence is linked to lower rates of later substance dependence and abuse (Moffitt et al., 2011). ● Community connectedness - Adolescents who feel more connected (e.g. to school) subsequently report lower levels of substance use (Mulla et al., 2020). ● Exposure to negative peer groups - Negative peers correlates with substance use (Dishion & Owen 2002). |

Longer-term outcomes

| Category | Outcomes | Mechanisms (how/why we think our short & medium-term outcomes will impact these longer-term outcomes) |
|---|---|--|
| Positive criminal justice system outcomes | Reduced offending (violent offences). | <p>YEF's <u>outcomes framework</u> (based on 30 systematic reviews and expert input) identifies the following of our short- and medium-term outcomes as primary outcomes:</p> <ul style="list-style-type: none"> • Antisocial and aggressive behaviours ('Behavioural difficulties') • Substance misuse ('Drug and alcohol use') • Prosocial behaviours • School engagement and school exclusions • Criminal/negative peers |
| | Reduced offending (non-violent offences). | <p>Primary outcomes are those with a direct link with crime and/or violence.</p> <p>Furthermore the outcomes framework identifies: self-esteem, emotion regulation, positive and prosocial identity, community connectedness, building and maintaining relationships, and ability to resolve conflicts as secondary outcomes (i.e. outcomes having an indirect or weaker link with crime and/or violence).</p> |
| Positive labour market outcomes | Increased training opportunities. | <p>There is evidence that:</p> <ul style="list-style-type: none"> • Social skills are linked to higher earnings in adulthood (Vergunst et al., 2019). • Self-regulation linked to long-term employment success (Goodman et al., 2015). • Positive peer relationships during adolescence corresponds with better economic outcomes as an adult (Conti et al., 2013). • Educational engagement correlates with improved job prospects in adulthood (Cattan, S., 2021). • Reduced antisocial or aggressive behaviours is associated with faring better in the labour market later on (Healey et al., 2004). |
| | Increased employment opportunities. | |

| | | |
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| | | <ul style="list-style-type: none"> • School retention supports higher long-term earnings and less unemployment (Madia et al., 2022). • Lower levels of substance misuse in adolescence are linked to better job quality and income in adulthood (Ringel et al., 2007). <p>Furthermore, YEF's <u>outcomes framework</u> (based on 30 systematic reviews and expert input) identifies opportunities for education, employment and training itself as a primary outcome (i.e. has a direct link with crime and/or violence).</p> |
| Positive educational outcomes | Improved academic achievement. | <p>There is evidence that:</p> <ul style="list-style-type: none"> • Prosocial skills are associated with improved academic performance (Carlo et al., 2018). • Peer relationship quality is associated with doing better in school (Shao et al., 2024). • Greater school engagement (especially consistent attendance) strongly predicts improved academic results (Department for Education, 2025). • Reducing antisocial and aggressive behaviours is linked to better educational outcomes (Vuoksimaa et al., 2021)). • Limiting school exclusions is associated with improved CYP achievement (Arcia, E., 2006). • Lower substance misuse in adolescence corresponds to better educational attainment (Kelly et al., 2015). <p>Furthermore, YEF's <u>outcomes framework</u> (based on 30 systematic reviews and expert input) identifies academic achievement itself as a primary outcome (i.e. has a direct link with crime and/or violence).</p> |

Appendix D - Programme inputs

Following the co-design group's specification of the core activities and content of the programme, the group took an inventory of the inputs required to deliver it. These broke down into 4 main categories:

- **Physical space and infrastructure** - Facilities or venues required to host the intervention, including gyms, halls, or community centres.
- **Materials and equipment** - All physical resources used during the intervention, such as boxing gear, uniforms, or printed materials.
- **People, training and support for delivery** - Staff and the training needed to deliver the intervention effectively and safely.
- **Other inputs** - Any additional resources required to deliver the intervention,

Physical space and infrastructure

Essential:

- Affiliated England Boxing club health check requirements to be met by all DPO's as outlined in the [Gym Inspection Checklist](#)
- Open floor space w/ matted floor (for group exercises, shadowboxing, movement drills).
- Bag work area (space for sufficient number of bags for multiple participants to train at once)
- Access to water.

Desirable:

- Strength/conditioning area (space for strength training equipment, agility drills)
- Permanent boxing ring.
- Changing & hygiene facilities (space for participants to get changed)

Materials and equipment

For use by young people in sessions:

- Gloves and wraps
- Punching bags and mitts/pads
- Protective gear e.g. mouthguard, headgear, groin protectors, etc.
- Training equipment e.g. skipping ropes, agility ladders, and mats etc
- Programme-specific equipment - i.e. student booklets and medals.

For use by coaches, to support them in delivery of sessions:

- First aid equipment.
- Laptops & 'Upshot' software to track registrations and attendance.
- Programme handbook (programme-specific tutor guide and lesson plans)

People

Roles:

- 2 boxing coaches (incl. community apprentices) to deliver the new programme to a group of CYP over the 6-month period.

Qualifications:

- All coaches must have at least a Level 1 Boxing Coach qualification. For more information please read [here](#).
- When the latter stages of the programme are being delivered (the final 3 months, corresponding to the Silver, Gold and Platinum levels), a coach with a Level 2 Boxing Coach qualification must be available to provide supervision for the sparring element of the programme (for more information please read [here](#)).

Training:

- Additional training for coaches to support CYP with complex needs (mental health training/first-aid, trauma-awareness, motivational interviewing, ACES).
 - Although many coaches feel comfortable working with young people with a range of complex needs, it has been identified in prior research conducted by England Boxing that some coaches felt under-prepared in these situations (e.g. in working with young people engaged in gang activity). Given that this programme will focus on young people who, on average, will be at higher risk and more vulnerable than the general population, it was agreed that additional training should be provided to coaches delivering the programme as part of this project.
 - We are currently in the process of identifying suitable training, though we note that one of the involved clubs (Brightstar) offers a training course that combines the above.

Other inputs

- Club t-shirts and apparel.
- Transportation costs for taking CYP to shows, and for CYP who may be at risk if they travel to sessions using public transport.
- Boxing medical costs (silver awards and up require CYP completing and passing a boxing medical).

Appendix E - Target population and recruitment

Target population characteristics

Overall, the co-design group aimed to produce a specification of the target population which:

- *Was sufficiently specific* - to support a consistent application of eligibility criteria across sites and areas.
- *Focused on those most likely to benefit* - i.e. picks out those most likely to be involved in crime and violence in the absence of the programme, to focus resources on those the programme is likely to help the most, and to promote the ability to identify an effect through the impact evaluation.

The following was agreed:

- *Age* - The co-design group discussed at length the best age range to specify for the young people who would be eligible for this project. Overall, the group agreed that to be included in the programme and evaluation, young people **should be between the ages of 14 and 18** at the point they would be expected to begin the programme (should they be randomised to the treatment group).
 - The group noted that targeting those in their mid- to late-teens had the following benefits:
 1. *It simplifies delivery* - A broader age range may require the programme to be delivered to separate age-groups (e.g. juniors, youths), and may require different coaching styles and content.
 2. *It simplifies evaluation* - It can be challenging to find survey-based measures that are as suitable for 10 year olds as they are for 18 year olds, and it would likely require different versions of key documentation/tools (i.e. information sheets, consent forms).
 3. *It improves our ability to make a difference on our primary outcome of reducing offending* - Young people are significantly more likely to commit crimes between the ages of 14 and 18 than between 10 and 13 in the absence of intervention. Focusing on these young people improves our chances of reducing offending and identifying an impact within the main timeframe of the evaluation.
 - However, it is worth noting that the co-design group made this decision with hesitation and without full consensus. The group agreed we should acknowledge the potential disadvantages of this approach relative to a less targeted specification (i.e. delivering to 10 to 18 year olds) in materials submitted to YEF. Specifically, the group noted concerns around:
 1. *Recruitment* - Restricting eligible young people in terms of age will make recruiting target numbers more challenging.

2. *Value of prevention* - Some group members expressed disappointment that the project would risk not intervening early and addressing problems before they become more serious and potentially entrenched.

- *Risk characteristics* - To be included in the programme and evaluation, young people **should** have one or more of the following characteristics:
 - Has been **excluded from school** (two or more fixed term exclusions in the last 3 years or ever permanently excluded).
 - Has been referred to **alternative education provision** (PRUs, other relevant educational settings)
 - Is identified as **engaging in violent/challenging/antisocial behaviours** at home, school, or in community.
 - Is connected to peer groups or environments where involvement in criminal activity is present.
 - Is known to engage in **substance misuse**.
 - Is known to have been exposed to **domestic abuse** in the home.
 - Is believed to be at risk of or currently experiencing **criminal exploitation** (**guidance on how this will be defined to be provided**).
 - Is navigating the emotional, social, or practical effects of having a sibling or family member involved in the criminal justice system
 - Referrer can produce a **compelling justification (on other grounds)** that they are at risk of involvement in crime, violence or antisocial behaviour.
- *Exclusion criteria* - To be included in the programme and evaluation, young people **shouldn't** have any of the following characteristics:
 - Be **planning to move out of the local area** within the delivery timeframe (otherwise they're likely to drop-out).
 - Be known to have participated in **criminal or problematic sexual behaviour** (because this could pose a danger to other club members, and other services may be more appropriate).
 - Be actively **homicidal, suicidal or experiencing psychosis** (because this would prevent meaningful engagement and other services would be more appropriate).
 - Have **participated in structured boxing training or classes for an extended period of time** (more than 8 sessions) in the past (because if participants aren't 'new learners', this will diminish our ability to demonstrate impact).
 - Be known to have **active conflicts or rivalries** with other participants (because this could pose a danger to them, other club members and to staff).

Practical detail on when and how eligibility criteria will be assessed can be found in the Process & User Journey Map.

Key REDI considerations for the target population are addressed in the 'Race equity and inclusion considerations in co-design and programme delivery' section of this Shared Practice Model, and in an equivalent section of the Evaluation Plan.

Referral sources and approach to recruitment

The co-design group also aimed to produce a list of key referral sources that England Boxing and Welsh Boxing would engage to generate referrals and drive recruitment for the project. We organised these into 3 categories:

- *Youth development and prevention services* - Agencies, settings and services that support young people's wellbeing, education, and positive development before problems escalate, such as schools, youth clubs, or early help teams.
- *Criminal justice and high-risk intervention services* - Agencies, settings and services that work with young people already involved in, or at significant risk of, offending or serious harm.
- *Informal referrals* - Referrals made by individuals in the young person's network, outside of formal agencies, settings and services.

| Youth development and prevention services | Criminal justice and high-risk intervention services | Informal referrals |
|--|---|--|
| <ul style="list-style-type: none">• Schools and colleges.• Youth services (local authority youth workers, youth clubs, local mentoring programmes)• Family & community support services (social services, safeguarding teams). | <ul style="list-style-type: none">• Alternative provision (PRUs)• Youth Offending Teams• Violence Reduction Units• Police (incl. Safer Schools Officers, Community Safety Units)• Probation Services• Charities & outreach teams working with high-risk youth. | <ul style="list-style-type: none">• Young people themselves• Carers, parents or other family members• Community members and leaders referring someone they're concerned about. |

The co-design group agreed that England Boxing and Welsh Boxing (and a team of coordinators they will establish if the project continues) should be the ‘front door’ to the project. This means that they - rather than boxing clubs - will take ownership over establishing relationships with these local referral partners, promoting the project, and handling initial recruitment and eligibility assessment of young people. The benefits of this approach are:

- *Reducing burden to clubs* - There is variation from club-to-club in terms of ability to take on significant administrative tasks on top of delivering their current offer and additional YEF-funded programme delivery.
- *Preserving club reputation* - Some clubs expressed concern about randomisation and the idea of not being able to support every young person referred to them. They take pride in being able to support every young person who needs it, and felt the project could damage their hard-won reputations with local referrers. Having another organisation as the front door to the project was reassuring mitigation for some clubs in response to this potential problem.
- *Preserving integrity of randomisation* - If the front door to the project is the boxing club itself, CYP may be exposed to individuals at the club and the club itself. This risks young people developing some attachment to their local club and to boxing itself, and seeking out boxing via other means even if they are randomised to the control group. Similarly, this increases the risk that community-spirited clubs with a desire to help everyone within their communities are put in an awkward position if CYP assigned to the control group attempt to access their standard sessions.

To maximise the chances of delivering a robust assessment of the impact of this programme, we also intend to run rolling recruitment with progression straight from pilot to efficacy without pause. In practice what this means is that all young people who are enrolled in the programme during the first two months will be considered as the sample for the pilot, and everyone enrolled after that period will be the sample for efficacy study. Young people randomised to the treatment arm will start receiving the intervention as soon as there is a space available in a suitable class. Young people will leave the programme after 6 months and will no longer be able to attend the YEF funded class (to create space for new joiners), although they are of course free to continue participating in boxing and to take part in other sessions on offer at the club. Overall we think the key advantages of this approach are:

- This best replicates what boxing clubs currently offer, where young people join and leave at different times and coaches are experienced at running classes with young people at different stages of development.
- It maximises the chances that young people can take up the intervention quickly, rather than having to wait until a new class begins.
- It avoids a pause between pilot phase ending and the efficacy stage beginning. Experience tells us that these delays can be very problematic for recruitment as

there is a significant loss in momentum as referral agencies lose faith in the intervention and stop offering it to the young people they work with. It is for this reason that YEF has agreed to this approach on the trial of MultiDimensional Therapy.

The drawback to this approach is that should YEF decide not to progress to efficacy (for example because crucial progression criteria have not been met), then there would already be young people enrolled in the efficacy trial. This would mean that whilst all new recruitment could be paused, YEF would be obliged to continue funding delivery up until the point where all those already enrolled had the opportunity to complete their 6 months. Whilst this does pose a financial risk to YEF, our view is that this is preferable to the loss of momentum which would result from pausing and restarting recruitment. We should also point out that progression straight to efficacy would only apply to the 10 clubs involved in the pilot, whilst the remaining c30 clubs who will participate in the efficacy phase only will not be onboarded until formal approval for progression has been received, reducing the financial risk to YEF.

Appendix F - Process and user journey map

- We propose the following user journey for children and young people interacting with this project.
- This journey map brings together key elements from the delivery and evaluation plan. It describes facilitators/barriers to success in terms of CYP's possible thoughts and feelings as well as broader or contextual facilitators/barriers.
- We draw on key insights from ClearView's youth participatory panel.
- In our initial design of the user journey, we attempt to design a streamlined process where CYP have a single point of contact and where touchpoints are minimised.

| Stage | Main owner | Objectives | England/Welsh boxing activities | Evaluator activities | CYP activities | Facilitators/barriers to success |
|---|-----------------------|---|---|----------------------|---|---|
| 1. Awareness and generating interest | England /Welsh Boxing | To encourage referrals through 2 routes: i) professional referral, and ii) CYP self-referral. | EB & WB Project Leads and Project Managers will build relationships with referral partners (i.e. local police, Youth Offending Teams, Pupil Referral Units, schools etc...), and develop, implement, cascade promotional information in pilot areas throughout the mobilisation period. | - | Hears about opportunity to participate in project via professional, peer, online, or elsewhere. | Broader/contextual: <ul style="list-style-type: none"> + Strong promotional approach using social media, targeting local/community spaces, and drawing on local clubs' pre-existing networks of referrers. + ClearView research suggests that promotion direct to CYP should be short, visual, and led by trusted messengers. Co-designing youth-informed promotional materials would be beneficial. |

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| 2. Referral and sign-up | Referrers | To acquire referrals and gather the information required to assess eligibility. | EB & WB Project Leads and Project Managers will support referrers to comply with the referral process, including sharing information about the project, the referral form, and guidance on how to complete it. | - | Referrers talk CYP through the project information sheet. The referrer and the CYP complete an online form (asking for identifying and contact info, and info required to make eligibility assessments). As part of the same online form, CYP consent for that information to be shared with EBWB and the Lab and for EBWB to make contact. For self-referral, CYP access the online form via a link (e.g. social media, poster) and complete the form and consent | CYP: <ul style="list-style-type: none"> + Interest in improving general fitness. + Boxing is attractive to young people and is a high-status activity. ClearView research suggests most participants viewed boxing as a beneficial activity, associating it with fitness, discipline, self-defence, and emotional well-being. + Supportive adult assisting around referral. + Emphasising the team-like, welcoming and friendly aspects of boxing in materials. ClearView research suggests debunking common myths about boxing (e.g. that it is only for people who like fighting) and instead focusing on its benefits to mental and physical health would help increase uptake by a wider variety of young people. - May lack trust, confidence, or |
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| | | | | | themselves. understanding of what's involved in the project. - May feel forced by referrer in a way that negatively predisposes them to being involved. - Idea of potentially participating in the boxing condition might be intimidating for some young people, including those who feel they might not be fit enough. ClearView research suggests some participants were less enthusiastic and preferred other sports, or expressed discomfort with boxing altogether. - Self-referral CYP may drop out if unclear or overwhelmed. Broader/contextual: + Building strong partnerships and trust and credibility around the project. Demonstrate safety and safeguarding credentials around the programme and its potential impact. Regular meetings with organisations. |
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| | | | | | | <ul style="list-style-type: none"> + Develop a clear and easy referral process, easy-to-use online, with minimal bureaucracy. - Referrers may be worried about injuries, safeguarding concerns, and potential unintended outcomes (perception that boxing is too aggressive rather than a positive outlet). May have concerns that not appropriate for CYP with complex behavioural needs. - It's possible some orgs/agencies will have many intervention options and won't prioritise boxing over other strategies. |
| 3. Eligibility assessment | England /Welsh Boxing | To ensure we only include CYP who stand to benefit the most from the programme | EB & WB assesses referral forms against eligibility criteria and contact CYP with outcome. This will be supported with clear guidance jointly developed between | Lab will quality assure a subset of eligibility assessments to ensure that the partnership is aligned on understanding | Waits to hear back; receives message if eligible/ineligible. | <p>CYP:</p> <ul style="list-style-type: none"> - May feel anxious waiting. - Ineligible CYP may feel disappointed or confused. |

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| | | <p>in terms of our key outcomes.</p> <p>EB, WB and the Lab, based on the outcomes of the co-design process.</p> <p>Ineligible CYP signposted to other opportunities where possible.</p> | <p>and implementation of criteria.</p> | | | |
| 4. Further information, consent and recruitment | England /Welsh Boxing (with support from Lab) | <p>To ensure that CYP are participating with informed consent and understand the project and evaluation.</p> | <p>England Boxing and Welsh Boxing will onboard CYP onto the project. This will involve communicating the key points of the project (its aims, the steps involved, how randomisation works, and what data will be collected and why), and seeking their consent to be involved.</p> | <p>The Lab will support coordinators/managers by scripting these initial contacts, putting together a list of FAQs we expect from young people along with answers (based on experiences from similar projects), and being available to quickly</p> | <p>Reads detailed info, decides whether to take part, and is talked through the process (live call, in-person meeting or video) before providing formal consent.</p> | <p>CYP:</p> <ul style="list-style-type: none"> + CYP provided with support in understanding research involvement. - CYP may not really understand the evaluation or who the researchers are and what they do in a way that creates anxiety or reluctance to engage. - CYP may feel nervous about giving consent for the project team to access Local Police Data about them. |

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| | | | | respond to questions coordinators/managers have as they onboard young people. By exception (owing to the aim of giving CYP one single point of contact), Lab staff will be available to have conversations with young people directly if these are requested or felt to be required. | | |
| 5. Baseline data collection | England /Welsh Boxing (with support from | To collect data that will be important in assessing impact and | On a rolling basis, as young people are onboarded, England Boxing and Welsh boxing Project Leads and Project Managers | The Lab will support coordinators/managers by scripting these contacts, putting | CYP receives phonecall/Whatsapp/email from Lab setting them up with the survey. | CYP: + Incentives may support completion. - May need help with |

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| | Lab) | answering other key research questions. | will provide young people with the means to complete the baseline survey and support in doing so. This will be part of the same interaction as the previous step (4). Participants will be asked to complete an online survey which will consist of multiple-choice questions about their lives, drawn from a combination of pre-existing surveys. They may complete the survey independently or with additional support depending on the needs of the young person (this could be via a phonecall or text/Whatsapp messaging with their point of contact). | together a list of FAQs we expect from young people along with answers (based on experiences from similar projects), and being available to quickly respond to questions | CYP completes multiple choice survey online at a time of their choice over a 1-2 week window. CYP may request a phonecall with a researcher to assist them (or otherwise text/email clarificatory questions). | access/understanding - May find questions intrusive or upsetting. |
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| | | | | people directly if these are requested or felt to be required. | | |
| 6. Randomisation | EYV Lab | To enable a high-quality impact evaluation capable of robustly estimating impact. | - | The Lab will use individual-level stratified randomisation to randomise young people (who have passed eligibility and completed baseline assessment) on an ongoing basis during the trial period. England Boxing and Welsh Boxing will be notified who has been randomised to each group | - | - |

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| 7. Communication of outcome | England /Welsh Boxing & ClearVie w Research. | To prepare CYP to receive the boxing programme, and to handle the control group carefully so they are likely to be retained in the evaluation. | From this point onwards, CYP will be interacting with a single point of contact (a Project Lead or Project Manager from England Boxing / Welsh Boxing). EB & WB Project Leads and Project Managers contact treatment group CYP and inform them of the outcome of randomisation. Clubs are informed of which CYP they will be working with. Trusted Guides from ClearView will contact the control group CYP. | - | Receives message or phonecall. Those assigned to treatment group will be provided with an initial set of information, including time/date/location of the initial session. Those assigned to the control group will be provided with a gym voucher and be reminded of future data collection engagements. | CYP: <ul style="list-style-type: none"> + May feel pleased that they will receive boxing or a gym membership for free. - Treatment group may feel nervous, unsure they'll fit in at the boxing club. - May start to worry about whether travel to the club is feasible and whether they'll need kit. - Control group may feel disappointed about not being assigned to boxing. This may lead to reluctance to engage with future evaluation, or motivation to seek out boxing by other means. |
| 8. Delivery - Settling in and progressing | Boxing clubs and ClearVie | To deliver an impactful boxing | Control group CYP are contacted every two months by Trusted Guides to keep them | - | CYP attends first sessions, meets coaches, begins engaging with club | CYP: <ul style="list-style-type: none"> + CYP starts to build confidence, |

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| | w Research h. | programme to young people, and to try to build a sense of belonging in the club and commitment to participation . | engaged and 'warm' to the project. Discussing gym membership and renewing it for an additional month may be a strong pretext for these contacts. | | and peers. Begins to develop as a boxer and works way through preliminary, standard and bronze awards. | <p>skills, and routine; begins to feel part of a team or community. Achievement is recognised by awards/medals.</p> <p>+ Clearview research suggests staff approach and programme atmosphere are critical to retention. Young people consistently said that what kept them returning to a programme was not just the activity itself but the environment and relationships. They valued staff who were encouraging, consistent, and checked in with them individually. A welcoming, inclusive atmosphere was also key.</p> <p>- CYP may disengage if they find sessions overly repetitive.</p> <p>- May disengage if they feel they're not progressing quickly enough.</p> <p>- May face external pressures (e.g. peers, transport, school exclusion) that disrupt</p> |
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| | | | | | | attendance. |
| 9. Programme mid-point data collection - Observations | CEI | To collect data that will be important in assessing fidelity, and the acceptability and deliverability of the programme for young people. | - | <p>CEI researchers will conduct the observation sessions with the clubs.</p> <p>There is opportunity for CEI researchers to attend club introduction sessions prior to the trial taking place. This will allow DPO leaders to become familiar with the researchers, which will aid communication of observation purpose to CYP.</p> | <p>CYP are informed that an observation will take place during the session.</p> <p>CYP understand what will happen during the observation, and what part the observation has in the wider project.</p> | <p>CYP:</p> <ul style="list-style-type: none"> - CYP may disengage in the session if they feel their ability is being judged. - CYP may have distrust in those conducting the observation, and feel they are being monitored. - CYP may act differently due to awareness of the observation. |

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| 10. Programme end point data collection | CEI | To collect data that will be important in assessing acceptability of the programme for young people. | - | Survey will be administered to young people during the final sessions of programme delivery. | CYP receives phonecall/Whatsapp/email from CEI setting them up with the survey. CYP completes short likert scale and open response survey online, at a time of their choice over a 1-2 week window. CYP may request a phonecall with a researcher to assist them (or otherwise text/email clarificatory questions). | CYP: + Incentives may support completion. - May need help with survey access. - May need help with survey understanding |
| | CEI | To gain in-depth insights into the accessibility and | - | CEI researchers to conduct interviews. | CYP receives phonecall/Whatsapp/email from CEI inviting them to interview. | CYP: - May need help with understanding interview questions. |

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| | | feasibility of the programme for young people, including barriers and facilitators to active engagement. | | | CYP reads participant information sheet, and is talked through the interview process before providing formal consent. CYP takes part in a short semi-structured interview with a CEI researcher. | - May find questions intrusive or upsetting. |
| 11. Delivery - Completion | Boxing Clubs | To deliver an impactful boxing programme to young people, and to lay the groundwork for lasting impact on young people. | Control group CYP are contacted monthly to keep them engaged and 'warm' to the project. Discussing gym membership and renewing it for an additional month may be a strong pretext for these contacts. | - | CYP considers initiation of semi-contact boxing. Works way through silver, gold and platinum awards. Is given more responsibility within the club. | <p>CYP:</p> <ul style="list-style-type: none"> + CYP experiences a sense of achievement and status; increased motivation to stay involved or progress further. Opportunity to develop leadership, mentoring, or ambassadorial roles. - CYP may disengage if they find sessions overly repetitive. - May disengage if they feel |

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| | | | | | | <p>they're not progressing quickly enough.</p> <ul style="list-style-type: none"> - May face external pressures (e.g. peers, transport, school exclusion) that disrupt attendance. - May worry about the programme coming to an end. |
| 12. Post programme data collection | England /Welsh Boxing and ClearView Research (with support from Lab) | To collect survey data that will be important in assessing impact and answering other key research questions. | Processes followed as outlined for baseline data collection. We expect coaches (for treatment group CYP), and youth engagement researchers (for control group CYP) to take an active role in reminding CYP who are initially nonresponsive. | Processes followed as outlined for baseline data collection. | Processes followed as outlined for baseline data collection. | <p>CYP:</p> <ul style="list-style-type: none"> + Incentives may support completion. - May need help with access/understanding - May find questions intrusive or upsetting. |
| | CEI | To gain in-depth | - | CEI researchers to conduct interviews. | Processes followed as outline for | <p>CYP:</p> <ul style="list-style-type: none"> - May need help with |

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| | | <p>insights into the accessibility and feasibility of the programme for young people, including barriers and facilitators to active engagement. To gain insight into mechanisms of change and sustainment post-trial.</p> | | <p>A sample of CYP will be contacted by CEI researchers from one-month post trial, with the intention to begin conducting interviews 2-6 months post-trial. This time frame is flexible to consider the availability of CYP, with an end timeframe in line with post-trial impact data collection.</p> | <p>programme end point data collection.</p> | <p>understanding interview questions.</p> <ul style="list-style-type: none"> - May find questions intrusive or upsetting. - May not be able to remember in detail elements of the programme, and may then have difficulty in answering questions. |
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Throughout the process and the key steps outlined above:

- **Ways of working with clubs** - England Boxing are experienced in working with their membership on projects and funding awards. This includes the recruitment of clubs from our membership, the application and award process, implementing grant agreements, upskilling clubs with training opportunities, and the monitoring, evaluation, and learning from projects. A recent example of this is the distribution of Sport England's Together Fund with approx. £250k being awarded to 84 clubs by England Boxing.
<https://www.englandboxing.org/case-studies/>
- **Police data** - We will establish contact and agreements with local police forces during the mobilisation stage of the project and indicate in advance when we expect to make data sharing requests. We aim to capture arrests over the 12-month period following randomisation.

Appendix G - Power calculations

| | Children who had been cautioned or arrested for an offence | | | | | | Children who had been cautioned or arrested for a serious violence offence | | | | | |
|---------------------------------|--|----------|----------------|----------|---------|-------------|--|----------|----------------|----------|---------|-------------|
| | Cohen's H | Baseline | Treatment Prop | % change | Total N | N per group | Cohen's H | Baseline | Treatment Prop | % change | Total N | N per group |
| Any persistent absence | 0.02 | 9% | 8.42% | 0.58% | 74,206 | 37,103 | 0.02 | 2% | 1.71% | 0.29% | 67,694 | 33,982 |
| | 0.1 | 9% | 5.94% | 3.06% | 2,316 | 1,158 | 0.1 | 2% | 0.36% | 1.64% | 1,360 | 680 |
| | 0.2 | 9% | 2.50% | 6.50% | 402 | 201 | 0.2 | 2% | -% | 3.74% | - | - |
| | 0.25 | 9% | 0.65% | 8.35% | 206 | 103 | 0.25 | 2% | -% | 4.96% | - | - |
| Permanently excluded | 0.02 | 55% | 54.01% | 0.99% | 79,430 | 39,715 | 0.02 | 21% | 20.18% | 0.82% | 76,364 | 38,171 |
| | 0.1 | 55% | 50.06% | 4.94% | 3,206 | 1,603 | 0.1 | 21% | 16.79% | 4.21% | 2,714 | 1,357 |
| | 0.2 | 55% | 45.22% | 9.78% | 820 | 410 | 0.2 | 21% | 12.33% | 8.67% | 578 | 289 |
| | 0.25 | 55% | 42.85% | 12.15% | 530 | 265 | 0.25 | 21% | 10.02% | 10.98% | 340 | 170 |
| Suspended | 0.02 | 20% | 19.19% | 0.81% | 75,390 | 37,695 | 0.02 | 6% | 5.52% | 0.48% | 73,966 | 36,983 |
| | 0.1 | 20% | 15.86% | 4.14% | 2,694 | 1,347 | 0.1 | 6% | 3.41% | 2.59% | 2,098 | 1,049 |
| | 0.2 | 20% | 11.46% | 8.54% | 570 | 285 | 0.2 | 6% | 0.40% | 5.60% | 308 | 154 |
| | 0.25 | 20% | 9.62% | 10.38% | 366 | 183 | 0.25 | 6% | -% | 7.24% | - | - |
| Attended alternative provisions | 0.02 | 41% | 40.01% | 0.99% | 77,192 | 38,596 | 0.02 | 14% | 13.30% | 0.70% | 75,520 | 37,760 |
| | 0.1 | 41% | 36.04% | 4.96% | 3,020 | 1,510 | 0.1 | 14% | 10.36% | 3.64% | 2,534 | 1,267 |
| | 0.2 | 41% | 31.05% | 9.95% | 730 | 365 | 0.2 | 14% | 6.39% | 7.61% | 494 | 247 |

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| | 0.25 | 41% | 28.55% | 12.45% | 458 | 229 | 0.25 | 14% | 4.30% | 9.70% | 276 | 138 |
|--|------|-----|--------|--------|-----|-----|------|-----|-------|-------|-----|-----|



Impetus



Home Office



youthendowmentfund.org.uk



hello@youthendowmentfund.org.uk



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