



EVALUATION PROTOCOL – ADDENDUM

**Toward Sport – A randomised multisite trial to evaluate a sports-based intervention aiming to enhance positive outcomes for children and young people in the context of youth offending**

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# Protocol Addendum; Wellbeing Top Up

Trial Name	Toward Sport – A randomised multi-site trial to evaluate a sports-based intervention aiming to enhance positive outcomes for young people in the context of youth offending
Delivery Partner	StreetGames
Evaluation PI	Nick Spyropoulos, Alma Economics
Funding Organisation	Youth Endowment Fund
Link to Original Trial Protocol	<a href="https://youthendowmentfund.org.uk/wp-content/uploads/2024/08/Toward-Sports-Evaluation-Protocol-October-2024.pdf">https://youthendowmentfund.org.uk/wp-content/uploads/2024/08/Toward-Sports-Evaluation-Protocol-October-2024.pdf</a>
Wellbeing measures used	ONS 4 Wellbeing Questions

## About the What Works Centre for Wellbeing

The UK government has a long-lasting interest in the wellbeing of citizens, with the UK being one of the first countries to systematically measure subjective wellbeing at the population level, and to commit to using it, alongside economic data, in shaping policy decisions. The What Works Centre for Wellbeing (WWCW) was established in 2014 to help government understand how to best improve people's lives by ensuring that our policies and practices positively contribute to people's wellbeing.

The WWCW closed on 30<sup>th</sup> April 2024, following the end of multi-year grants from The National Lottery Community Fund. Between 2014 and 2024 the WWCW made a significant contribution to government, including work on methods, and specifically the Green Book guidance on wellbeing.

## About the Youth Endowment Fund

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

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

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

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

## About the Wellbeing Top-Up Fund

The WWCW Wellbeing Top Up Fund will explore the impact that policy interventions can have on people's wellbeing across a range of policy areas by funding additional wellbeing data collection on 10 existing studies. This approach will begin to develop a step change in our understanding of the wellbeing impacts of various policy interventions through a low-cost programme that can 'piggyback' on trials that are already in the field.

## Background

This efficacy trial aims to contribute to the limited evidence base on the impact of sports programmes on youth offending (Gaffney et al., 2021). Sports programmes are regularly delivered through community organisations, adapting approaches and practices to local needs and contexts. This trial is designed as a multi-site trial to: (i) leverage the large networks of Delivery Partner Organisations (DPOs) delivering sports programmes with at-risk cohorts of Children and Young People (CYP), providing sufficient sample sizes for the efficacy trial, and reflecting a delivery model consistent with widespread practice; and (ii) working with an Umbrella Organisation (StreetGames) to ensure a consistent model of delivery is being tested against business-as-usual across sites.

**Why do CYP offend?** There are many factors that influence young people's behaviour and contribute to an increased likelihood of offending. Offending is typically associated with exposure to a range of individualised 'psychosocial' risk factors, such as: family environment, including parental supervision, history of conflict and dysfunction, and domestic abuse in the home (HM Inspectorate of Probation, 2023); educational factors, such as academic performance, attendance issues, lack of engagement or interest; peer relationships, such as association with peers with anti-social behaviours, loneliness, or experience of bullying (Vaswani, 2019); behavioural and mental health factors, such as attitudes towards authority, levels of confidence and self-esteem; community factors, such as rates of gang activity and crime activity in the neighbourhood, access to recreational activities, quality of housing, availability of community support; and previous legal involvement, including prior arrests or involvement with the criminal justice system (Youth Endowment Fund, 2020). For the majority of young people, offending is transient and declines as they mature. For these young people, the best response will be minimal intervention, and engagement with diversionary activities outside the youth system that are meaningful, productive and relevant to the child's needs.

**Context and system-level factors relate to the higher rates of arrests and offending among CYP from Black, Asian, and minority ethnic backgrounds**, as observed in official statistics. These factors motivate this trial's focus on CYP from such backgrounds, including a commitment to sampling a sufficiently large proportion of CYP from such backgrounds in the evaluation, and targeting specific research questions to assessing differential experiences and efficacies in the impact evaluation and the implementation and process evaluation (IPE).

**The role of sport in reducing offending:** For young people who have offended or are at risk of offending, sport can provide a twin-track approach that leads them out of the Youth Justice System and towards activities that build strengths, capacities, and potential, whilst emphasising positive behaviours and outcomes. In particular, the opportunity to engage and build relationships in and through sport, provides a valuable medium through which this twin-track approach empowers young people to develop social capital and pro-social identities. Sports, as an activity, supports development through positive influences and peer groups, leading to strengthened social skills, and physical and mental health (Mason et al., 2020). Moreover, by providing at-risk children and young people with alternative activities to spend their time, participation in sports sessions has a direct impact on the exposure to negative influences and the opportunities to undertake risky behaviours, and it can also be a platform to engage them in further helpful interventions, such as education services, counselling, and support of drug and alcohol misuse (Gaffney et al., 2021). Sport plays a useful role in developing the resilience of children and young people and enhancing protective factors against offending (Home Office, 2018). Group activities based on safety, predictability, and fun can positively contribute to trauma recovery (van der Kolk, 2005).

**There is currently positive, but low-quality evidence on the impact of sport:** Sport-based interventions have been found to have meaningful impacts on offending rates. The mean effect size in the literature suggests an approximate halving of the offending rate of youth participating in sports programmes, but the quality of the evidence is rated at 2 out of 3, based on an adapted version of the [AMSTAR](#) evidence rating, due to the small number of evaluations and high levels of variation in estimates. There is an even smaller body of high-quality evidence around the impact of sport for CYP from Black, Asian, and minority ethnic communities. While some evaluations included in the YEF toolkit on sports programmes include programmes with a high proportion of CYP from Black, Asian, and minority ethnic communities, very few of them conduct sub-group analyses by ethnicity or race. Further, in their review of the social impacts of culture and sport, Taylor et al. (2015) found that some studies identify different effects of sport for young people of different ethnicities. This indicates that more research is needed into if and how sport programmes specifically lead to positive outcomes and a reduction in reoffending for CYP from communities of colour.

**As a contribution to this evidence base, the primary aims of this trial are:**

- To estimate the impact of participation in voluntary sports programmes on youth offending rates (violent and non-violent offending).
- To estimate the impact of participation in voluntary sports programmes on secondary outcomes, such as emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and prosocial behaviour (as measured by the Strengths and

Difficulties tool), wellbeing, participation in physical activity, and transferable skills and knowledge, to assess the mechanisms underlying the efficacy of the intervention.

An additional aim of this trial is to contribute to the evidence gap (described above) on the efficacy of such positive activities on offending and reoffending for children and young people from Black, Asian, and minority ethnic backgrounds.

**The impact evaluation is designed as a multi-site trial, delivered across 5 local authority areas and 50 DPOs, with ~1,915 individual CYP randomised into treatment at referral (~1,915 offered the opportunity to participate in the sports programme) and control (~1,915 not offered the opportunity to participate in the sports programme and offered business-as-usual support) with 1,550 CYP expected to complete the sports programme and the data collection within the treatment group, based on 10% attrition from follow-up data collection, and a further 10% attrition from the sports programme.** The delivery of the evaluation will be conducted through Supporting Families teams in the local authority, with the data team in the local authority supporting data-sharing and the identification of eligible CYP, and the case worker engaging with CYP to assess interest in sports and consent to participate in the evaluation. CYP will be identified by Supporting Families teams based on eligibility criteria that are linked to the [Supporting Families Outcome Framework](#).

**Race, equity, diversity, and inclusion (REDI) considerations are central to the sampling and recruitment approach for this evaluation.** To achieve the additional aim of the trial, the target sample includes at least 30% of CYP participating in the evaluation to be from Black, Asian, and minority ethnic backgrounds. To achieve this, the team is targeting at least 35% of referrals of CYP to be from Black, Asian, and minority ethnic backgrounds.<sup>1</sup> This is to account for potentially higher rates of non-participation or attrition for such groups.<sup>2</sup> From StreetGames' past work with the [Youth Justice Sport Fund](#), working with a significant proportion of CYP from Black, Asian, and minority ethnic communities, suggests that the network, operating areas, and programme offerings are aligned with the areas and interest of CYP from Black, Asian, and minority ethnic backgrounds.

Part of achieving the representativeness of CYP from minority ethnic backgrounds also relates to recruiting DPOs with leadership from Black, Asian, and minority ethnic backgrounds. Through the Ministry of Justice Youth Sport Programme, 50% of the smaller community organisations (with an income between £10,000 and £200,000) engaged by StreetGames identified as having 50% of their leadership as Black, Asian, or minority ethnic, meaning that additional recruitment of DPOs with Black, Asian, or minority ethnic leadership will be required. StreetGames conducts regular [network surveys](#) and has strong relationships with a large range of community organisations to support more targeted recruitment efforts.

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<sup>1</sup> Our definition of minority ethnic includes anyone who identifies as Black, Asian, Arab, Gypsy or Irish Traveller, Roma, and from Mixed or multiple ethnic groups. We will collect data on the sub-groups and our study will also focus on the differences in experiences across race, comparing CYP from white backgrounds with those from Black, Asian, Arab, and mixed groups.

<sup>2</sup> We use the most conservative assumption so that our final sample has the highest chance to achieve the 30% target. We model attrition rates that are double for Black, Asian and minority ethnic CYP, which is conservative relative to the 40%-higher rate observed in Henneberger et al. (2023).

**50 DPOs will be recruited across 5 local authorities<sup>3</sup>, with StreetGames leveraging their [network](#) of community organisations** and a system of expressions-of-interest, similar to the process used in the [Youth Justice Sport Fund](#) programme to recruit eligible DPOs and a distribution that ensures that at least 60% of DPOs are led by individuals from Black, Asian, and minority ethnic backgrounds. This targeted recruitment will ensure that a large proportion of Black, Asian, and minority ethnic-led DPOs are included in the impact evaluation and the resulting contribution to the evidence base and improves the range and quality of support offerings for CYP from diverse backgrounds. In addition, this DPO recruitment strategy is an important component of increasing participation and retention of CYP from Black, Asian, and minority ethnic backgrounds in the evaluation. The DPOs will agree to implement sports sessions with a set of agreed core elements, as set out in the Shared Practice Model detailed in the section 'Intervention', to ensure a level of consistent intervention (treatment) across sites but allowing DPOs the flexibility to tailor certain components to the local needs and interests of CYP. DPOs will be provided support by StreetGames and by the evaluation team to ensure that they have the information, understanding, and resources that they need to meet the requirements of the evaluation and delivery model.

**With these sample sizes, for the estimate of the efficacy of Toward Sport on offending, we will be able to detect standardised effect sizes of at least 0.13 in terms of Cohen's d ([Cohen, 1988](#)).** The large sample recruited for the evaluation allows us to detect a smaller effect size than what is found in previous literature, including the YEF Sports Programme Toolkit, which estimates a 52% reduction in offending. The sports programme lasts 24 weeks. Data on CYP outcomes will be collected at three points in time: at baseline, at the end of the 24-week period, and 6 months after the 24-week period (24 weeks plus 6 months after referral). The primary outcome of the impact evaluation is the rate of youth offending (violent and non-violent), which will be collected through local police force data and PNC data (we are pursuing both sources of data for the primary outcome: we have applied for access to the PNC data and have indications that we will also be able to access local police force data through Supporting Families teams). The secondary outcomes are emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and prosocial behaviour (as measured by the Strengths and Difficulties questionnaire), wellbeing (as measured by the ONS 4), participation in physical activity<sup>4</sup>, and transferable skills and knowledge<sup>5</sup>, which will be collected through one-to-one, face-to-face surveys administered by Supporting Families case workers.

**To support the design of the full impact evaluation, an internal pilot trial will be implemented between July 2024 and March 2025, with a review point in January of 2025 to assess lessons and inform the delivery of the full efficacy trial.** The pilot trial will take place in one local authority with a target of up to 5 DPOs and 80 CYP recruited (40

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<sup>3</sup> The five sites where delivery is expected are: Manchester, Greater Manchester; Bradford, West Yorkshire; Leicester, East Midlands; Birmingham, West Midlands; Plymouth, Devon.

<sup>4</sup> As measured by the single item questionnaire in Milton et al. (2011).

<sup>5</sup> As measured by the National Citizen Service Evaluation by DCMS or the Youth Rating of Socio-emotional Skills.

in the treatment group and 40 in control). The pilot will allow each implementation step in the trial to be piloted, assessed through data and qualitative research, and revised for the full evaluation. The pilot will be an opportunity to assess the appropriateness and perceptions of the evaluation and the intervention for CYP from minoritised backgrounds. Key learnings from the pilot will be drawn into the discussions and the training to be provided to Supporting Families and DPO teams. These detailed discussions, clear requirements, training sessions, and further ongoing support during the trial will mitigate against the expected variation in operations across local authorities.

**There are clear progress criteria linked to the pilot trial**, related to referral numbers and participation by CYP from Black, Asian, and minority ethnic backgrounds, randomisation fidelity, participation rates in the baseline survey, attendance rates in the first sports session, attendance rates and dosage received during the pilot period, the percentage of baseline survey questions containing missing values and data issues, the percentage of treatment group participants for which attendance and engagement data is received, DPO fidelity to the Shared Practice Model, attendance to the evaluation training by DPOs and Supporting Families staff, and access to offending data.

**There will be an implementation and process evaluation (IPE) for the pilot evaluation and the full efficacy trial.** For the pilot, data will be collected from: interviews with Supporting Families case workers and local authority-level staff; interviews with DPO leaders and coaches; focus groups with participating CYP; and specific focus groups with CYP from minoritised backgrounds. For the full evaluation, data will be collected from: interviews with Supporting Families case workers and local authority-level staff; interviews with DPO leaders and coaches; focus groups with participating CYP; specific focus groups with CYP from minoritised backgrounds; case studies with ethnographic observations; and participatory research sessions with CYP.

## About the intervention

**The Shared Practice Model, detailed below, was developed in collaboration between the evaluation team and the project team.** The model has been designed to ensure sufficient consistency across sites to allow for a trial of a consistent intervention (ensuring sufficient sample sizes), but that will not significantly interrupt DPOs' usual practice (allowing some flexibility to tailor the programme to the local context and needs). The shared practice model was developed through a targeted review of the literature, in conjunction with in-depth conversations with StreetGames throughout several workshops, leveraging past programmes and learnings.

**The five sites where delivery is expected are Manchester, Greater Manchester; Bradford, West Yorkshire; Leicester, East Midlands; Birmingham, West Midlands; and Plymouth, Devon.**

**The core components of the Shared Practice Model are summarised below;** these components have been designed to align with evidence-based practice on sports-based interventions and with operational feasibility for the DPOs in mind.

- The programme will be available for 24 weeks for each participating young person.

- Weekly sessions lasting two hours.
- Adult coaches who are paid (rather than volunteers) and recruited by the DPO.
- Group-based sessions fostering pro-social relationships with other young people and opportunities for reflection.
- Voluntary participation of young people.
- CYP aged 10-17 years old within the secondary and tertiary level of need will be eligible for this programme.
- Agreed minimum and maximum CYP per session.
- DPOs already working with vulnerable or at-risk children aged 10-17 years old with advanced safeguarding practices and risk assessments in place, or familiar with embedding them.
- Delivery staff will have specified skills, qualifications and experience for the coaches leading the sessions.
- Delivery staff will have a young person-centred approach to sports delivery.
- DPO staff will have a good awareness of the value of an evidence-based approach and be committed to supporting the successful implementation of the evaluation.
- DPOs will ensure sustained delivery over the intervention period (i.e. to include school holidays and adequate provision for inclement weather if outdoor facilities are utilised).
- Activities will take a child-first approach – being inclusive, participatory, and child-centred.
- Activity sessions are supervised and ‘structured’, in terms of being coach-led, with set start and finish times, clear rules and boundaries.
- Delivery staff will have experience engaging CYP from minoritised communities and be trained for cultural sensitivity and race equity.

The components that are expected to differ across sites (non-core) include:

***DPO-specific implementation choices:***

- The venue where delivery takes place – this will be a safe, accessible community setting (not open access such as a park) but the setting ‘type’ may vary between sites.
- DPO type (e.g., whether the DPO is a Community Interest Company), the turnover and size of the DPO, the capacity and workforce of the DPO.
- The time of day and day of week of the sessions.
- Whether the sessions are single-gender or mixed-gender.
- The gender of the staff.

***Site-specific operational variants:***

- Group size and CYP to staff ratio (within the minimum and maximum bounds set out in the Shared Practice Model).
- The support offered as part of business-as-usual, which is discussed in further detail in the section ‘Control group and business-as-usual’
- The type of sport activities offered to CYP.



## Support provided to Supporting Families teams

The evaluation team will develop two joint training sessions with the project team for the Supporting Families teams. The sessions will be an online training offered to all Supporting Families teams within the local authority and will be recorded for staff to revisit if needed. One session will include Supporting Families teams at the local authority level, including the data teams, and another session will be targeted at the case workers. The trainings will cover: the value of rigorous evaluations and Randomised Control Trials (RCTs); the consent and randomisation procedures; the data-collection activities and timelines; and the roles of the different teams (project and evaluation teams) and of the Supporting Families team members (e.g., the data lead and the case workers). The training will cover the important role of the Supporting Families teams in implementing and adhering to the evaluation protocol and communicating with the evaluation team any concerns or information on deviations from intended operating models. The sessions will also include information on racially equitable approaches and considerations, including support on adaptation of evaluation materials, language support, discussing the sensitivity of obtaining consent for using police data or asking about behavioural and demographic topics in the survey. The training materials will be informed by our Ethnically Diverse CYP Engagement Experts, Teswal White and Cheryl White. The training will also include a lengthy Q&A session to ensure everyone is fully informed and address any concerns.

At the end of the training sessions, the Supporting Families teams will receive information on the weekly online drop-in sessions to discuss any training content (or other items of concern). There will also be a designated inbox for Supporting Families teams to reach out to the evaluation team anytime.

## Support provided to DPOs

DPOs will be supported by StreetGames Area Teams throughout the delivery period. Additional resources and support will be made available in the form of training, guides, and videos. DPOs will be invited to attend regular networking, information sharing, and community of learning events.

The evaluation team will develop a joint training session with the project team for the DPOs on the value of rigorous evaluations and RCTs. This session will be an online training offered to all DPOs and will be recorded for DPO staff to revisit if needed. The training will cover the important role of the DPOs in adhering to the evaluation protocol and communicating with the evaluation team with any concerns or information on deviations from intended operating models or potential concerns related to CYP participation and engagement. This training will also include information on racially equitable approaches, cultural sensitivity considerations, and the evaluation's focus on racial equity, diversity and inclusion. Topics will include adapting activities and approaches, considering and providing language support, recording and sharing engagement data and perceptions of the programme with the evaluation team. The training materials will be informed by our Ethnically Diverse CYP Engagement Experts, Teswal White and Cheryl White. The training will also include a lengthy Q&A session to ensure everyone is fully informed and address any concerns.

DPOs, in collaboration with StreetGames, will be provided with clear guidance and assistance in relation to monitoring data requirements and will be asked to contribute to the collection of primary data on children and young people, and to support the recruitment of children and young people for interviews and workshops at various stages of the evaluation. The evaluation team and the project team will develop the materials and provide support for the DPOs jointly. At the end of the training sessions, the DPO teams will receive information on the weekly online drop-in sessions to discuss any of the training content (or other items of concern). There will also be a designated inbox for teams to reach out to the evaluation team anytime.

## Control group and business-as-usual

Services delivered as part of the Supporting Families programme will be our business-as-usual. These are likely to vary across eligible individuals' levels of need and across sites as well. The approach is designed to ensure that business-as-usual does not include sports-related activities. This requirement is to ensure that the treatment group is not being compared to control group CYP that would be participating in sports (diluting the measured effect of Toward Sport). CYP in the control group will not be offered business-as-usual supports that include a sports component. Caseworkers will also receive training informing them of the rationale and importance of this condition for the trial. Children and young people in the treatment group (offered Toward Sport sessions) will be provided with the same support programmes as those under business-as-usual, with the only difference between CYP in the treatment group and the control group being that those in the treatment group will have access to Toward Sport in addition.

Support for families and CYP within these complex groups of risk and vulnerability requires a tailored response. The number of different interventions and length of interventions provided through business-as-usual support will, therefore, vary depending on the needs of the young person when considered within the wider family's context. There are a wide range of awareness programmes, skill development programmes, programmes with mentoring, empowerment, self-identity, and other support offers; each is tailored to the 10 headline outcomes of the Supporting Families programme (see the [Supporting Families Outcomes Framework](#)). Examples of interventions as part of business-as-usual will vary widely, depending on local need and each local authority's available budget and services. The evidence base that supports practitioners working on this programme can be found [here](#).

The Supporting Families teams at the local authority level will have detailed information on the support offered to and taken up by the CYP as part of the programme. What business-as-usual supports are provided to CYP consenting to participate in the evaluation, and what agencies they are referred to for support are collected qualitatively by the caseworkers. Data on the support each child received can be shared with the evaluation team. Sensitivity analysis taking into account different business-as-usual conditions will be subject to the quality and structure of the data received.

## Trial design

**Table 1: Trial design**

Trial design, including number of arms		<i>Efficacy trial. Two-armed multi-site trial with randomisation at the individual (CYP) level. Within each local authority, CYP are randomised after referral, when they have provided their consent to participate in the evaluation. The randomisation occurs on a rolling basis after the eligible CYP is referred to the Supporting Families programme, engages with the case worker, and provides their consent.</i>
Unit of randomisation		<i>Individual CYP level, within local authorities on a rolling basis, on a 50-50 treatment-control basis to maximise power</i>
Stratification variables (if applicable)		<i>Randomisation will take place within local authorities (stratification at the local authority level). Within local authorities, randomisation will occur on a rolling basis at the CYP level.</i>
Primary outcome (Baseline and follow-ups)	variable	<i>Binary variable if an offence (violent and non-violent) occurs in the data. At baseline this variable is equal to one if any offence occurs prior to baseline; at follow-up this is equal to one if any offence occurs between baseline and follow-up (true for both follow-ups).</i>
	measure (instrument, scale, source)	<i>Number of recorded incidents to date, 0 upwards, PNC and local police force data.</i>
Secondary outcome(s) (Baseline and follow-ups)	variable(s)	<i>Emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and prosocial behaviour</i>
	measure(s) (instrument, scale, source)	<p><i>Strengths and Difficulties questionnaire (one-sided self-rated SDQ for 11-17-year-olds), response scale is Not True/Somewhat True/Certainly True, scoring follows the <u>SDQ scoring</u> approach, administered via 1-to-1 face-to-face survey by the Supporting Families case worker. The measure will be the total score, as well as each of the following subscales:</i></p> <ul style="list-style-type: none"> <li>• <i>Emotional symptoms subscale.</i></li> <li>• <i>Conduct problems subscale.</i></li> <li>• <i>Hyperactivity/inattention subscale.</i></li> <li>• <i>Peer relationships problem subscale.</i></li> <li>• <i>Prosocial behaviour subscale.</i></li> </ul> <p><i>For those aged 10 in the study sample, the case worker will use the one-sided SDQ for parents or teachers of 4-17 year olds, found on the SDQ tool site <a href="#">here</a>.</i></p>
Secondary outcome(s) (Baseline and follow-ups)	variable(s)	<i>ONS4 Wellbeing</i>
	measure(s) (instrument, scale, source)	<i>ONS4 Wellbeing Questions, Scale 0-10, administered via 1-to-1 face-to-face survey by the Supporting Families case worker</i>
Secondary outcome(s) (Baseline and follow-ups)	variable(s)	<i>Physical Activity</i>
	measure(s) (instrument, scale, source)	<i>Milton et al (2011) single-item physical activity measure, Scale 0-7, administered via 1-to-1 face-to-face survey by the Supporting Families case worker</i>

Secondary outcome(s) (Baseline and follow-ups)	variable(s)	<i>Transferable skills and knowledge</i>
	measure(s) (instrument, scale, source)	<i>Transferable skills and knowledge questions used in <u>DCMS evaluation of National Citizen Service</u>, Scale very confident/confident/neither confident nor not confident/not at all confident</i>

## Wellbeing measurement

Secondary outcomes of programme participation include improved emotional symptoms, conduct problems, hyperactivity/inattention, peer-relationship problems, prosocial behaviour, wellbeing, participation in physical activity, and transferable skills and knowledge. The data-collection tools consist of: the Strengths and Difficulties Questionnaire<sup>6</sup> for the 11-17 age group; the ONS 4 Wellbeing questions<sup>7</sup>; the single item measure for physical activity (Milton et al., 2011).

We have also proposed to collect data on the transferable skills and knowledge obtained by the CYP. The items that we have included have been used in the [National Citizen Service Evaluation](#) by DCMS. We have also explored the [Youth Rating of Socio-emotional Skills](#) instrument (see [questionnaire](#)) on CYP's mental and behavioural skills. We propose using the pilot period to assess the extent to which the additional modules on physical activity and transferable skills and knowledge add burden on the responding CYP and impact response rates. We will also test for the potential existence of ceiling and floor effects during the pilot.

The survey items included within the ONS 4 Wellbeing questions, and used with children and young people are:

### ONS 4 Wellbeing Questions

1. Overall, how happy did you feel yesterday? (on a scale from 0 to 10)

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2. Overall, how satisfied are you with your life nowadays? (on a scale from 0 to 10)

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3. Overall, to what extent do you feel that the things you do in your life are worthwhile? (on a scale from 0 to 10)

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<sup>6</sup> For those aged 10 in the study sample, the case worker will use the one-sided SDQ for parents or teachers of 4-17 year olds, found on the SDQ tool site [here](#).

## Analytical approach

The analysis of the data will be on an intention-to-treat basis. The intention-to-treat parameter will be estimated based on a regression of the follow-up outcome on the treatment indicator, the baseline level of the outcome, demographic characteristics, and local authority (strata) fixed effects. This approach follows the YEF 'Conditional inference' guidance (Youth Endowment Fund, 2021). The confidence intervals will be based on heteroskedasticity-robust standard errors at the individual level. We will convert this estimate into the relative risk ratio, comparing the control mean probability of offending (adjusted for strata weights) with the control mean plus the estimated treatment effect. We will estimate the continuous variables of the secondary outcomes with the same regression specification, just changing the outcome variable. The estimates will be converted into Hedge's  $g$ .

To explore the impact of the following variables as mediating factors in the efficacy of the intervention on the primary and secondary outcomes, we will run the same regression specification as above, but interacting the following variables (de-meaned) with the treatment indicator:

- An indicator for whether the CYP identifies as Black, Asian, or minority ethnic (including CYP from Gypsy or Irish Traveller and Roma backgrounds)
- An indicator for whether the CYP identifies as Black, Asian, Arab, and mixed backgrounds
- An indicator for whether the CYP is the same sex as the coach of the sports sessions
- An indicator for whether the CYP is the same ethnicity as the coach of the sports sessions
- An indicator for whether the CYP is male
- An indicator for whether the CYP has a tertiary level of risk
- An indicator for whether the CYP has special education needs

In addition, we will interact local authority fixed effects and DPO fixed effects with the treatment indicator to explore whether there is evidence of variation in impacts across areas and organisations.

We will also replace the treatment indicator with a variable for the number of weeks that the CYP attended for to assess the extent to which efficacy varies by duration of attendance. If we identify evidence of variation in the potential efficacy of the intervention across areas or DPOs, we will run secondary regression analysis to explore whether any of the following could be driving those differences:

- Characteristics of the local authority (e.g., the number of case workers; the ratio of case workers to eligible CYP; average demographic characteristics in the local authority; offending rates in the local authority)
- Characteristics of DPO leaders
- Characteristics of DPO coaches
- Profile of other CYP attending the DPO (demographics)
- Characteristics of sessions (session numbers, profiles of other CYP)
- Attrition rates
- Delivery quality/fidelity as defined above

## Longitudinal follow-ups

Data for both the treatment and control participants will be collected at the following intervals, through the Supporting Families teams:

- Baseline (at the stage of referral, after the CYP consents to participate in the evaluation.)
  - This will include collection of demographic data and data necessary for data archiving
- At the end of the 24-week timeframe, consistent with programme duration.
- 6 months after the 24-week timeframe has ended (accounting for a lag in the PNC outcomes data of up to 6 months).

Additional monitoring data will also be collected (with the support of StreetGames) from DPOs. This includes data on the number of individual young people engaged within the Toward Sport programme, as well as demographic information; sessional attendance, including the number of sessions and hours provided, the types of activities provided by each DPO, each DPO's attendance rates, and participant engagement levels using an Engagement Matrix to record participant engagement levels every 8 weeks or at least twice during the programme.

## References

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