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**TWINNING PROJECT
RESEARCH EVALUATION:**

How social bonding improves behaviour and wellbeing among people in prison

+
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“The Twinning Project offers people a way out and up; it’s great to see robust research evidencing its success!”

Ian Wright OBE

Twining Project Trustee

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Executive Summary

As prison populations increase globally, the need to reduce rates of reoffending grows ever more urgent. This research evaluation shows that football could play a critical role in tackling the global prison crisis by improving both prisoner behaviour and wellbeing. The Twinning Project is a football-based prison intervention operating in five countries and four continents at the time of writing. Our research focuses on the UK, where 70 major football clubs have been twinned with local prison or probation services since 2018 to deliver coaching, stewarding or refereeing programmes¹.

The programme offers more than typical qualification-driven interventions by actively fostering more law-abiding social identities that are sustainable in the long run. Previous research has shown that the 'football family' inspires lifelong loyalty to clubs² and that this sense of kinship is what leads fans to enact the most extreme of behaviours in the name of their group, particularly when that group has gone through a tough time together³. In this research, we sought to examine how effective the programme was in fostering social bonds that can improve behaviour and wellbeing among prisoners.

Football identities matter to many people – including those in prison. In this evaluation, we show that participating in the Twinning Project can harness those identities to have a positive impact on behaviour and wellbeing, when

compared with a control group that didn't participate in the project. Our principal measure of prison behaviour was adjudications – that is, hearings for offences committed within a prison. Adjudications are not uncommon in UK prisons and equivalents may be found in most prison systems around the world; they are arguably the most objective measure of prison behaviour available and, coupled with self-reported future orientation, provide a basis for forecasting reoffending rates associated with interventions⁴. The majority of participants joining the Twinning Project were already comparatively 'well-behaved' in prison, scoring high on measures of IEP (Incentives and Earned Privileges allocated by prisons). This no doubt reflected the enthusiasm of officers to select the 'best' candidates for the intervention. As such, participants

had near-ceiling levels of well-being and health. However, for the minority not at ceiling level, we found significant improvements. This suggests that the Twinning Project would be especially beneficial for prisoners with poorer prospects initially.

By providing potential employment opportunities and positive social identities on release, the Twinning Project can help formerly incarcerated people find opportunities to participate more fully in society in the longer run, benefiting everyone. This research, using data collected 2021-23 suggests that interventions like the Twinning Project, which offer meaningful social connections, may be one way to address the global prison crisis.

¹ Newson & Whitehouse, 2020; Swettenham et al., 2022. ² Newson et al., 2016. ³ Newson et al., 2018; 2027. ⁴ McDougall et al., 2017.

KEY FINDINGS

1. **Adjudications** (sentences administered while in prison) were significantly lower for Twinning Project participants following the intervention, compared to a control group (**Study 1**).
2. **Bonding** to the Twinning Project played a key role for those with decreased adjudications (**Study 2**).
3. **Optimism** about the future and chances to desist from crime significantly improved for those not already at ceiling levels (**Study 2**).
4. The Twinning Project had a positive impact on **participant wellbeing** (**Study 3**).
5. **Women participating** in the Twinning Project also reported a range of benefits and their experiences were found to be associated with unique needs, concerning body image and menstrual health (**Study 4**).
6. **Probation elements** of the Twinning Project appeared to encourage social bonds between participants but structural barriers such as childcare, transport and personal finances limited its success (**Study 5**).
7. **Staff** generally found the programme extremely successful, but **also identified areas for improvement in the delivery of the course** (**Study 6**).

TOOLKIT FOR SOCIALLY INFORMED PRISON INTERVENTIONS



Tool 1:

Include participants with a range of behavioural backgrounds to see the biggest potential in improvements.



Tool 6:

To improve wellbeing, support the social cure, i.e., give participants access to the group identity through access to resources and social time together outside of the course.



Tool 2:

Focus on the social groups individuals gain when participating in interventions, making this identity inclusive by giving everyone access to it through a kit or uniform and ensuring there are no competing loyalties (such as support for the neutral Twinning Project, rather than allegiance to a club).



Tool 7:

Ensure all staff working on women's programmes have trauma-informed training to best support this special population who may have unique attachment styles to staff.



Tool 3:

Run long-term programmes that offer individuals an opportunity to integrate their new social identity more deeply into their sense of self.



Tool 8:

Empower participants by having them co-design elements of future programmes, or leading peer-based initiatives.



Tool 4:

Focus on how transformative the experience is for participants and give them space to reflect on this process during and after the course, for instance peer-led groups could meet post-intervention.



Tool 9:

Adapt probation elements to maximise group numbers by reducing lead-in times, promoting the intervention in the community, and offering the training with further job opportunities.



Tool 5:

Consider the educational format of the programme and reassure participants with lower educational backgrounds at the beginning of the programme of their ability to contribute, benefit and belong to the Twinning Project.



Tool 10:

Connect with participants on release to maintain the identities forged and offer support; achieve this via strong relationships between prison, local, and nationwide charities.

State of the literature in brief

WHY WAS THIS RESEARCH NEEDED?

Recidivism has slowly increased every quarter since the research project commenced in 2018, currently at a rate of 39% for adults leaving prison with an estimated economic and social cost of over £18bn¹ (in addition to the £4.2bn costs to run UK prisons²). Central to reoffending behaviours are perpetrators’ identities: their sense of self and the groups to which they belong - or from which they are isolated³.

Prisoner behaviour is also a pressing concern, contributing to the prison climate and affecting the safety and wellbeing of both prisoners and staff⁴. Additionally, poor prison behaviour is associated with arrests post-release, as well as quicker times to re-arrest⁵. This research was therefore needed to help establish how best to improve prison behaviour in the short term and reduce rates of recidivism in the longer term.

WHY FOOTBALL?

Sports-based interventions within the justice system may be an effective tool in preventing crime and improving wellbeing, both among young people and adults⁶. However, some have cautioned against an overly optimistic assessment of the direct link between sports-based interventions and recidivism, as many studies have methodological limitations and pay too little attention to confounding micro and macro level factors⁷. Nonetheless, the proposed reasons for the general effectiveness of sports-based interventions are threefold.

First, and most obviously, sport is a safe and constructive activity for at-risk individuals who could otherwise engage in less safe, deviant or criminal activities⁸. Second, sports interventions provide an opportunity for physical activity, with associated positive effects on dopamine, mood regulation, sustained concentration, and a host of physical and mental wellbeing factors likely to play into desistance behaviours⁹. Third, sports can provide a potentially unparalleled locus for much-needed social connections.

For instance, one British study found that access to community resources and social support for people engaged in with the justice system was mostly through sport (both for people in prison and their family members)¹⁰. Simultaneously, from the perspective of the receiving community, the powerful emotional ties associated with football, as well as the normative values associated with mainstream football cultures at a cognitive level, may help ‘sell’ probation to the public¹¹.

However, previous research is limited in explaining precisely what factors make such programmes work, an understanding of which is crucial for their successful large-scale implementation¹². Here we focus on the social identity factor and propose that sport facilitates social connections, which in turn offer a platform from which confidence and self-esteem can grow, job or educational opportunities can be discussed and supported, and access to community resources including finances can be tapped. Fundamentally, sport has the potential to create an experience of inclusion and social acceptance and to divert people from socially transgressive towards socially acceptable objectives and behaviour¹³. Through the social networks emerging from shared physical exercise, participants gain a sense of belonging and, with this, feelings of purpose and meaning¹⁴.

Football clubs, which foster strong feelings of commitment and loyalty to the group, are uniquely placed to help formerly incarcerated people enter mainstream society, and help receiving communities accept them¹⁵. Football-based interventions are naturally positioned to facilitate engagement with informal institutions and access to positive influences in the community based on three factors:

1. Despite the globalisation of football as an entertainment product, local clubs remain at the centre of their communities, highly respected and deeply integrated into the social, economic, and cultural fabric of their area. Thus, the successful completion of one of their programmes via an accredited qualification reflects a high status and easily recognisable achievement, from which participants can benefit.

2. The coaches employed by Community Club Organisations who are involved in such interventions are highly respected and typically well-known and well-connected in the community. Coaches tend to reflect a prototype of a trusted positive influence, both by virtue of their relational and mentoring profession¹⁶, as well as their association with the club.

3. In contrast to the typical use of uniforms in community sentence programmes, football-based interventions give potential access to a uniform evocative of pride, community, and success: the kit or club strip. Football itself is a symbol of community, with the kit epitomising themes within football that are also highly relevant to desistance: co-operation, loyalty, good decision-making, punctuality, respect, and self-esteem¹⁷. Our objective was to investigate how football, utilising its standing and associated values, could help to bridge the gap between community and paths to desistance.

WOMEN IN PRISON

While trauma appears to be highly pervasive in the personal histories of both female and male offenders and incarcerated populations¹⁸, it appears to be overwhelmingly prevalent in female incarcerated populations¹⁹. Research in England, for example, has shown that while 37% of incarcerated men are diagnosed with depression, this rises to 65% for imprisoned women. Additionally, data shows that women account for 23% of self-harm incidents in prisons, despite comprising just 5% of the overall prison population²⁰. Female prisoners’ conditions are aggravated by the fact that, women are often (and this is usually the case in the UK) held in facilities designed for men or young offenders, not tailored to women’s specific needs. Women inmates are also subjected to prison regimes which have often been designed for more serious male offenders²¹. The increased vulnerability of women in prison, often stemming

from shared experiences of physical or mental trauma, highlights the necessity for a gender-specific approach.

Due to their multiple traumatic experiences, many women inmates live in a perpetual state of fight or flight—a self-protective mechanism inherent in all human beings. This heightened state, accompanied by physiological changes, becomes their norm. Consequently, trauma survivors continuously and often unconsciously scan their environment for threats, interpreting all events and interactions as potentially unsafe and menacing. Regaining a sense of safety and relaxation is immensely challenging for them²². Under these challenging circumstances, the way staff members engage with women inmates can significantly impact their psychological and physiological well-being. Positive interactions can potentially enhance stability and a sense of safety, while negative interactions may exacerbate dysregulation and instability²³. Thus, the role of staff is exceptionally important for women prisoners. Mistrust of others and expectations that approach behaviours will lead to abuse or rejection are typical in these women and characteristic of their predominantly insecure attachment styles²⁴.

A formal step, towards a gender-specific approach to prisoners needs, was made with the Kyiv Declaration, put forth in 2009 by the United Nations Office on Drugs and Crime. The document offers recommendations for evaluating policies and services to better meet the requirements of incarcerated women, with the purpose to ensure that women’s specific circumstances are considered when designing and implementing prison-related measures. Trauma informed approaches and trauma informed cultures are being promoted for mental health in prison, increasingly so in women correctional facilities. For example, in England and Wales, becoming trauma-informed training for Prison Officers was carried out in all 12 women’s prisons during 2015–2017 and began in the long-term high-secure male estate from May 2018²⁵.

¹MoJ, 2024; Newton, 2019. ²Webster, 2024. ³Tajfel, 1982; Monahan, 2017. ⁴Palmen et al., 2022; van Ginneken et al., 2020. ⁵Walters, 2020. ⁶Kelly, 2013; Jugl et al., 2023. ⁷Chamberlain, 2013. ⁸Hartmann & Depro, 2006. ⁹Meek & Lewis, 2014. ¹⁰Best et al., 2018. ¹¹Maruna & King, 2008. ¹²Jugl et al., 2023. ¹³cf. Abrams & Christian, 2007; Abrams, Hogg & Marques, 2005. ¹⁴Davis et al., 2015; Cohen et al., 2023. ¹⁵Newson, 2019; Whitehouse & Fitzgerald, 2020. ¹⁶Potrac et al., 2016. ¹⁷Wilde, 2004. ¹⁸Crisanti & Frueh, 2011. ¹⁹DeHart et al., 2014. ²⁰Public Health England, 2018. ²¹Bartlett & Hollins., 2012; DeHart et al., 2014. ²²Jewkes et al., 2019. ²³Benedict, 2014. ²⁴Borelli et al., 2010; Harris, 2017. ²⁵Auty et al., 2023.

A Typical Programme

Treatment cohorts are self-selecting, i.e., participants apply to take part in the Twinning Project, which is advertised and tends to be well known in the prison gym and in other areas of the prison. Applications are assessed by prison staff, then the club delivering the programme. There is usually a waiting list to take part in a programme. Participants must have no more than 12-18 months left to serve and participants with sexual offences are not admitted on to the programme. Among the Twinning Project participants identified within the research period between September 2021 and March 2023, the average initial cohort size was 13.30 participants (SD = 3.60; Range 6 – 24) and the average programme length was 6.14 weeks (SD = 3.28, Range = 1 – 19).

For probation, the programme draws on the community as its physical setting in the form of a stadium and associated buildings like classrooms and training grounds, but also on community resources (both formal and informal), indirectly promoting social cohesion. Community programmes are typically up to 12 weeks of half-day weekly sessions with around seven participants, with an upper limit of 16 participants, though sessions typically comprise fewer participants. Sessions comprise interactive classroom work, physical activity and opportunities for role-playing the new skills learned (e.g., coaching peers).

HOW THE PROGRAMME WORKS



1. Twinning Project advertised



2. Applications assessed collaboratively between club and prison



3. Those not selected added to waiting list for next cohort – 3 cohorts per year in each prison



4. Participants must have no more than 12-18 months left to serve



5. Programme is 36 hours, typically delivered over 6 weeks in our sample

(Twinning Project aims for a 12 week programme)



6. No sex offenders or terrorists are admitted



7. Probation courses delivered in community run for 12 weeks

Research Aims

Our research framework investigates eight key areas:



1.
Prison Behaviour



2.
Social Connections



3.
Future Orientation



4.
Health & Wellbeing



5.
Gender



6.
Probation



7.
Staff Experiences



8.
Reoffending
(data available from 2026)

PRIMARY AIM

To evaluate pathways to effective interventions to improve prison behaviour and wellbeing.

KEY RESEARCH QUESTIONS

1. Does the Twinning Project improve prison behaviour over time and compared to a control group?
2. Is the Twinning Project associated with increased optimism about job prospects and chances to desist from crime?
3. Does social bonding to the Twinning Project increase over time and are these bonds associated with changes to behaviour and optimism?
4. Does wellbeing improve over time?
5. How do women experience the Twinning Project and do the effects differ from the men?
6. What effects does the Twinning Project have on participants in a community setting (probation element)?

Method

OVERVIEW

We designed a unique experiment, contrasting prisoner behaviour between Twinning Project participants and a control group in the UK, for which we contrast adjudications between the two samples using data shared by HMPPS (Study 1). Adjudications refer to offences in prison that require an official hearing and are considered to be an objective measure of behaviour, as well as a relatively good predictor of future reoffending²⁶.

We further examine the treatment group’s social bonds and future orientation over a 5-8 month period (Study 2). Optimism about desistance from crime is a well-established factor of reoffending in the criminological literature²⁷, providing this research with a tentative assessment of the extent to which participation in the Twinning Project might positively impact reoffending rates.

We next examine health and psychological well-being in an additional self-reported survey conducted with a sub-sample of participants (Study 3). On analysing the data, we observed that women’s responses were different from the men’s so we conducted analyses with just the women to better understand that

population, with follow-up interviews on women’s reproductive health in prison and how that may interact with their experiences of sport (Study 4). Finally, we report the results of interviews with people serving probation sentences who engaged with the Twinning Project in the West Midlands (Study 5).

Our research is ethically approved by the University of Oxford and the National Research Committee. The research complies with open science practices and pre-registration documents with analytic plans, code, and data are added to the project’s Open Science Framework file as they become available.

Detailed methodologies can be found in Appendix A.

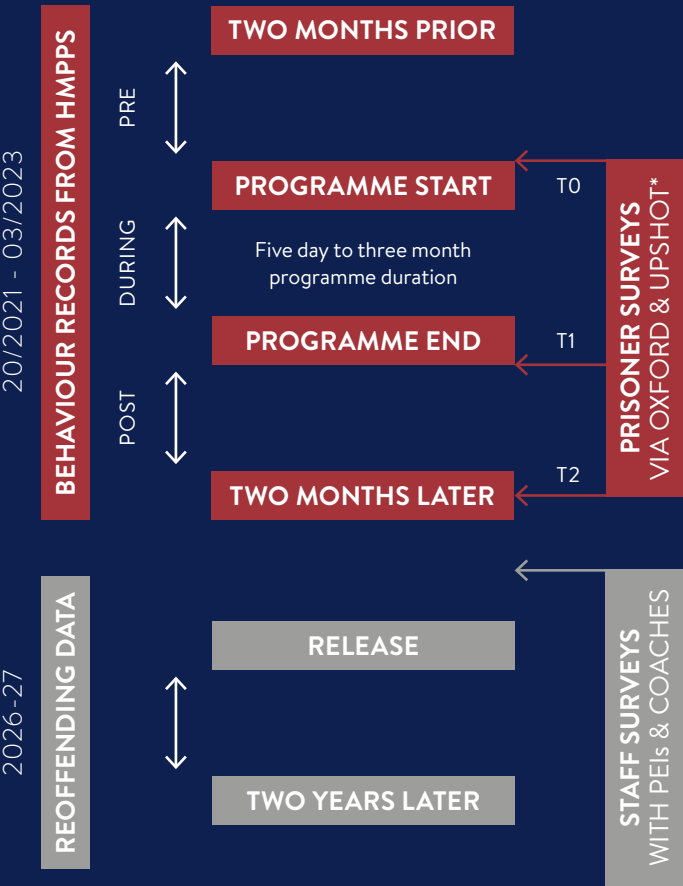
TIMELINE

We collected survey data with Twinning Project participants from September 2021 - March 2023 (n = 454). We obtained behavioural data from HMPPS for these participants for the two months prior to and following their programme. HMPPS shared further data, for the majority of Twinning Project participants who completed the programme during the research period (n = 927).

Once the research period was over, in early 2023, we administered staff surveys with all football coaches and PEI staff who were involved in delivering Twinning Project programmes and conducted additional interviews with women who had completed the programme. Once all participants are released, we will wait for two years before obtaining their reoffending data (one year for release and a further year for any possible judicial processes and their data to enter the Police National Computer).

²⁶McDougall et al., 2017. ²⁷Kazemian & Maruna, 2009; Villman, 2021.

Fig. 1
Project Timeline



SAMPLE

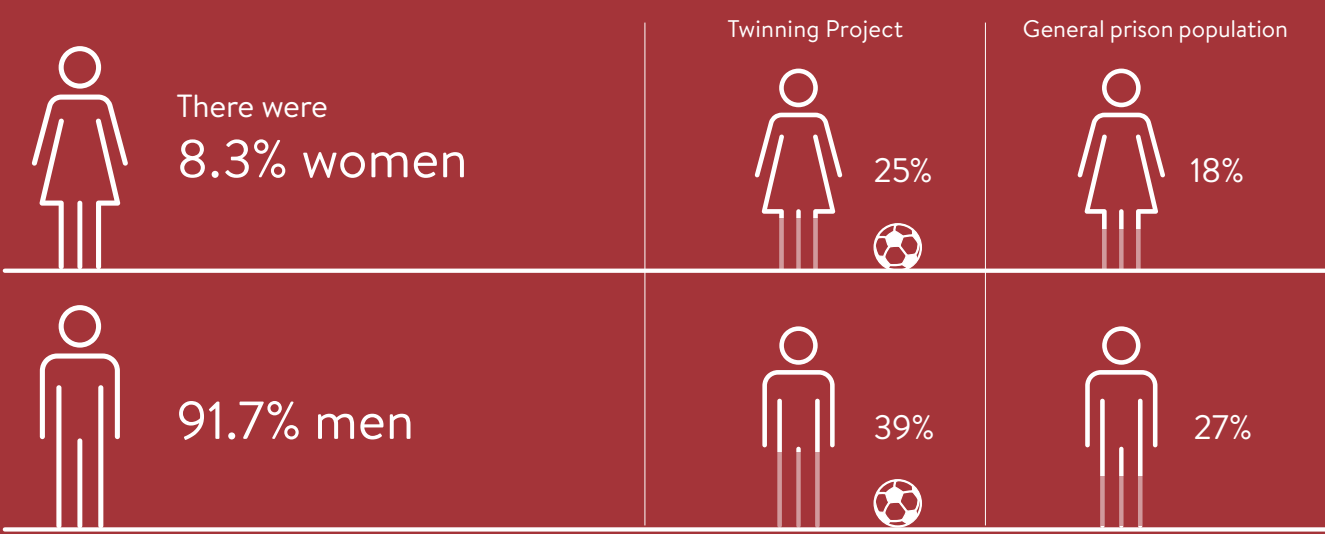
A total of 44 clubs were included in behavioural analyses with 18 of these clubs (working at 20 sites) chosen for longitudinal surveys. These clubs were selected to be geographically and establishment diverse. A full list of participating clubs and prisons can be found in Appendix B.

In addition to Twinning Project participants, we also obtained behavioural data from HMPPS for a control group, matched for demographics and criminal justice background. For the main analyses of prison behaviour, participants from private institutions had to be excluded due to differences in data recording procedures, such that records of case-notes were not fully available.

The share of ethnic minority prisoners in Twinning Project cohorts was higher than in the average prison population in England and Wales for both men and women. Fig. 2 right.

The Average age for a Twinning Project participant engaged in the research = 30.95 (min 18 – max 63).

Fig. 2 - Representation in the Twinning Project



These results are shared from the following report: His Majesty’s Prison and Probation Service Offender Equalities Annual Report. MoJ. (2024, January 25). https://assets.publishing.service.gov.uk/media/65d720932197b201e57fa6fe/HMPPS_Offender_Equalities_2022-23_Report.pdf

MATERIALS - SURVEYS

Prison behaviour and criminal career indicators

We used data observed and reported by HMPPS correction officers available on the prison system ‘PNomis’. We differentiate between indicators of positive prison behaviour (i.e., positive case notes) and negative prison behaviour (i.e., negative case notes, proven adjudications, self-harm incidents). Instances of the respective behaviours are counted during a two-month period before and after the Twinning Project. We also obtained activity/job-attendance data, but this was excluded due to data quality concerns, i.e., data was missing with non-random patterns, making attendance rates unreliable between the treatment and control dataset).

To match the treatment and control group, we also obtained basic demographic information (age, ethnicity) as well as detailed criminal history data about each case. This includes data on the COPAS rate, which is a widely used measure of an individual’s criminal career density and strongly relates to poor behaviour in prison and future reoffending²⁸. This was calculated with the following formula: $\log((\text{number of court appearances} + 1) / (\text{length of criminal career in years} + 10))$. We also obtained data on the index offence category (the type of crime someone was imprisoned for), and the time they had left to serve at the time of the intervention start.

Cognitive surveys with people in prison

Participants at 20 sites selected for being geographically representative across a range of prison types were invited to complete three longitudinal surveys (see Appendix B for the list of prisons). Participants were invited to report on their feelings about their future, their social bonding, football fandom, impulsivity, feelings of transformation, attachment to the coach, and demographics.

Health and wellbeing data

Participants completed two longitudinal health and wellbeing surveys, with additional measures of social bonding at sites selected by HMPPS.

Coaching styles survey with club and prison staff

All coaches and PEIs on programmes in the survey sites were invited to complete surveys reflecting on their approach, experience, and connection to the cohorts. A shortened version of the survey focusing on general qualitative feedback was also made available to club staff who were not involved in delivering programmes.

²⁸Copas & Marshall, 1998; Howard et al., 2009.



Results

KEY FINDINGS

In line with our **research framework**, the results comprise seven key areas:

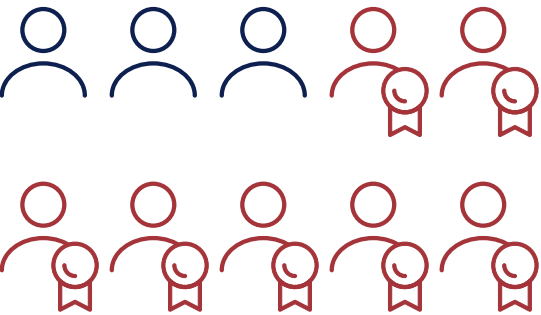
1. Prison Behaviour
2. Social Connections
3. Future Orientation
4. Health & Wellbeing
5. Gender
6. Probation
7. Staff Experience



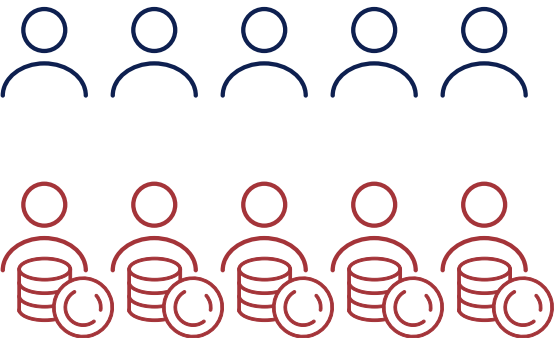
DEMOGRAPHICS

A total of 1,327 people were identified as Twinning Project participants during the research period (September 2021 – March 2023). For 927 of them, custodial data was made available for the research. Of these, 438 completed cognitive surveys administered by the University of Oxford with assistance from football coaches and prison officers.

Nearly a third of participants (30.3%) had never received any formal qualifications before the Twinning Project



Less than half had ever experienced regular employment (46.8%).



A break down of demographics for each data source can be found in Appendix C.



PRISON BEHAVIOUR
STUDY 1

Key findings

- On average, Twinning Project participants' behaviour did not significantly change over time, likely due to extremely low levels of adjudications, self-harm incidents and positive case-note balances (significantly more positive than negative case notes).
- However, the number of adjudications after the programme was significantly lower compared to a well-matched control group, meaning that Twinning Project effectively inoculated participants against negative behaviour.
- Participants who had records of adjudications before the programme, showed significant behavioural improvements, indicating the potential of the programme for less well-behaved prison populations.



Tool 1:

Include participants with a range of behavioural backgrounds to see the biggest potential in improvements.

In-depth

We analysed behavioural data from a cohort of people serving custodial sentences in 44 UK prisons who were enrolled on a novel intervention designed to reduce reoffending via sports-based programmes with the prison's local major football club (Studies 1 & 2). Participants attended 5-12 regular sessions with a coach from the club, often the biggest brand in the region, which led to an accredited qualification on completion of the programme.

At first glance, average levels of prison behaviour (as measured via adjudications, case-notes and self-harm incidents) remained stable at desirable levels for the entire sample, i.e., low levels of adjudications, low levels of self-harm incidents, and more positive than negative case notes (Fig. 3). This likely reflects the fact that Twinning Project participants are often the most 'well-behaved' prisoners. However, among those with at least one proven adjudication before the intervention (i.e., 9.7% of the sample), significant improvements were observed (Fig. 4).

We further compared indicators of prison behaviour in a 2 month period after the programme between intervention participants and a control group, which allows us to contextualise the average levels of behaviour in contrast to a population which is highly similar to the Twinning Project cohorts but did not receive the "treatment". The control group was carefully matched for demographics (age, ethnicity) criminal history (index offence, COPAS rate), incarceration details (prison category, prison behaviour assessment/ IEP-level) and pre-treatment prison behaviour (adjudications, case notes, self-harm). We found that participation in the programme predicted significantly fewer proven adjudications (offences committed in prison) even when including matching parameters as covariates (Fig. 5).

Fig. 3

Mean behaviours before and after the programme among all Twinning Project participants

	Adjudications	Case note balance	Self-harm
Before programme	0.13	0.66	0.01
After programme	0.15	0.45	0.02

Fig. 4

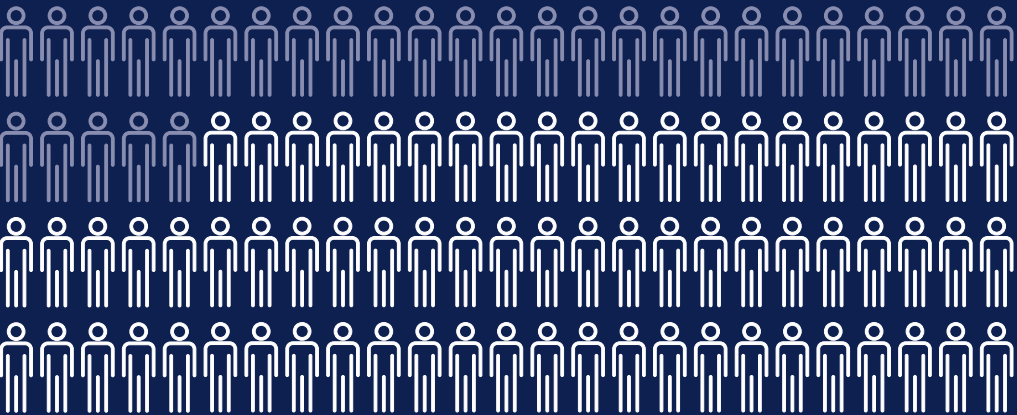
Mean adjudications before and after the programme among Twinning Project participants with at least one adjudication before the programme

	Adjudications
Before programme	1.3
After programme	0.45

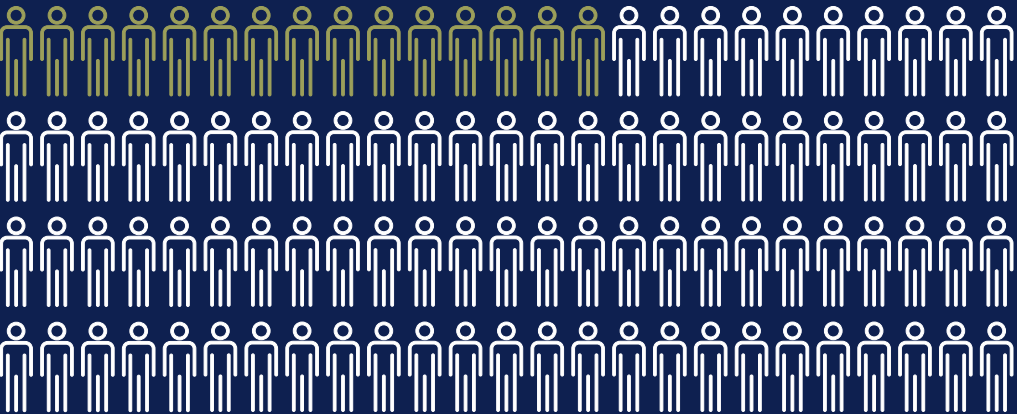
Fig. 5

Average number of adjudications received per 100 prisoners in the 2 months after the programme between the control group (top) and the treatment group (bottom)

Control group



Treatment group



Other significant predictors of adjudications included more pre-treatment adjudications and self-harm incidents; more dense criminal histories; and drug offences. We found no significant treatment effects on other indicators of prison behaviour made available to us (i.e., case notes and self-harm incidents). We provide a detailed description of the matching procedure and treatment effect analyses, as well as extensive sensitivity analyses, throughout which the findings were robust, in Supplementary files that are submitted in peer review papers.

These results are shared from the following peer-reviewed article: Newson, M., Peitz, L., Cunliffe, J., & Whitehouse, H. (2024). Social cohesion may be the antidote to global prison crisis. Nature Human Behaviour.



SOCIAL BONDING AND FUTURE ORIENTATION STUDY 2

Key findings

- Identification with the Twinning Project increased over time and was significantly associated with greater behavioural improvements.
- Identity fusion with the Twinning Project increased but was not maintained and was not associated with behavioural improvements.
- Future orientation improved significantly among those who were not already highly optimistic about their future at the beginning of the programme, and improvements were linked to social bonding.
- Feelings of transformation and attachment to coaches were significant pathways to fusion, especially feeling transformed by the programme.
- Literacy problems made participants more hesitant to consider themselves part of Twinning Project to begin with.



Tool 2:

Focus on the social groups individuals gain when participating on interventions, making this identity inclusive by giving everyone access to it through a kit or uniform and ensuring there are no competing loyalties (such as support for the neutral Twinning Project, rather than allegiance to a club).



Tool 3:

Run long-term programmes that offer individuals an opportunity to more deeply integrate their new social identity into their sense of self.



In-depth

Social connections increase over time and predict improved prison behaviour and future orientation

To further understand how the programme worked, we examined the interplay of social-psychological and behavioural changes among intervention participants, drawing on longitudinal survey data from 19 prisons selected to be representative of regions in the UK and the categories of prisons involved in the programme (n = 388). The survey captured, among other things, participants' social bonding with different target groups and their optimism to succeed after release.

First, we tested if bonding to the Twinning Project developed over the course of the programme. Levels of identification with the Twinning Project showed a small but significant increase, and this increase remained significant at a follow-up two months later. Fig. 6 shows results.

Next, we examined changes to adjudications. Using logistic regression analysis, we found that positive changes to identification with the Twinning Project correlated significantly with improved behaviour (i.e., decreased number of adjudications post-treatment), even after controlling for baseline prison behaviours, age, prison type, Copas rate and time until release. The bigger the increase in

identification, the more likely participants showed improved behaviour.

Examining participants' future orientation about their employability and chances to desist, we found that, similar to prison behaviour, optimism across the entire sample was either stable or showed small improvements at very desirable (i.e., high) level. Among participants whose baseline levels were not already at the ceiling level, we observed significant boosts to optimism regarding both outcomes by the end of the programme and until the follow-up survey. Fig. 7 shows results. Increased optimism about one's capacity to find employment and stay out of trouble also correlated with increased bonding to the Twinning Project.

Fig. 6

Levels of identification

Identification among all participants

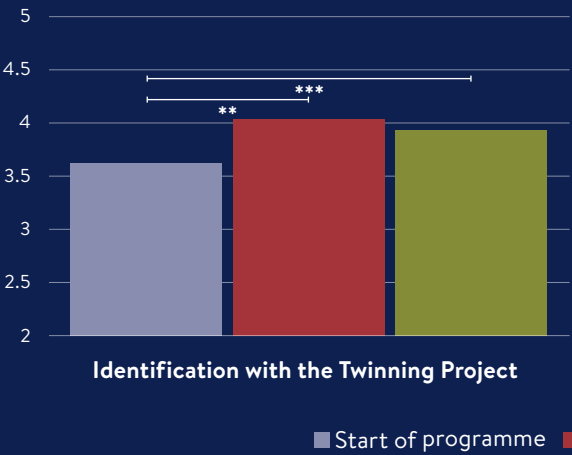
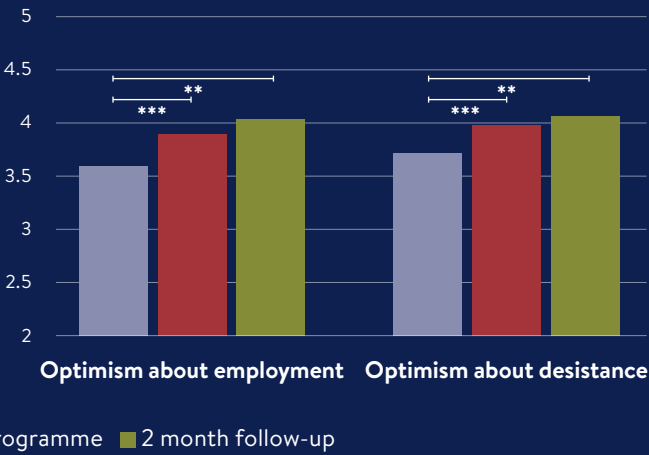


Fig. 7

Optimism about employability

Future optimism among participants who scored below ceiling level at the start of the programme



These results are shared from the following peer-reviewed articles: Newson, M., Peitz, L., Cunliffe, J., & Whitehouse, H. (2024). Social cohesion may be the antidote to global prison crisis. Nature Human Behaviour. Newson, M., Cunliffe, J., Peitz, L., & Whitehouse, H. (under review). Forging positive identities in prison: the transformative role of football coaching.

Paths to bonding

Next, we investigated the predictors of social bonding experiences among Twinning Project participants. We considered participants' feelings of being transformed by the Twinning Project, and their attachment to the coaches. We also consider more practical factors, such as the experience of staff delivering the programme, and participants' capacity to engage with course content.

We found that both transformativeness and attachment did indeed have positive effects on participants in the Twinning Project; but in different ways and with different trajectories over time. The results confirmed our original hypothesis that participants who experienced their participation in the Project as personally transformative became more fused as a result. This finding was in line with previous research demonstrating the role of transformative shared experiences in driving fusion²⁹.

Attachment to the coaches was also associated with fusion but only the transformative pathway appeared to have a lasting effect in that respect. For attachment, directionality was unclear and the effect of attachment on fusion seemed to disappear in the two months following the programme, taken over by the effects of transformation. In a similar vein, studies focusing on the relationship between attachment and reoffending have also found (contrary to the researchers' expectations) that while social bonds forged in later adolescence can reduce reoffending, they do not mitigate the statistical effects of early trauma on reoffending³⁰. This suggests that the most enduringly important psychological impact of participation in the Twinning Project is that it fuses inmates to a group associated with more positive identities, attitudes, and behaviours. In the long run, this appears to be more important than attachment to role models, despite the fact that the latter may seem to be more intuitively plausible as an agent for change and is certainly more widely utilized in prison interventions.

²⁹Jong et al., 2015; Newson et al., 2016, 2021. ³⁰Craig et al., 2017



Tool 4:

Focus on how transformative the experience is for participants and give them space to reflect on this process during and after the course, for instance peer-led groups could meet post-intervention.

Staff experience

Based on responses to the staff survey, we were also able to show that participants' baseline levels of social bonding was associated with staff experience. Coaches who had more experience working in their capacity as a coach both within and outside of prison settings and those with more direct experience delivering Twinning Project cohorts elicited more identity fusion from their participants.

Literacy

Although social bonding experiences in the Twinning Project were not linked to participants' demographic or criminal background, those who reported problems in following Twinning Project content due to literacy issues were more hesitant to consider themselves part of the project at the start of the programme. (Fig. 8 below).

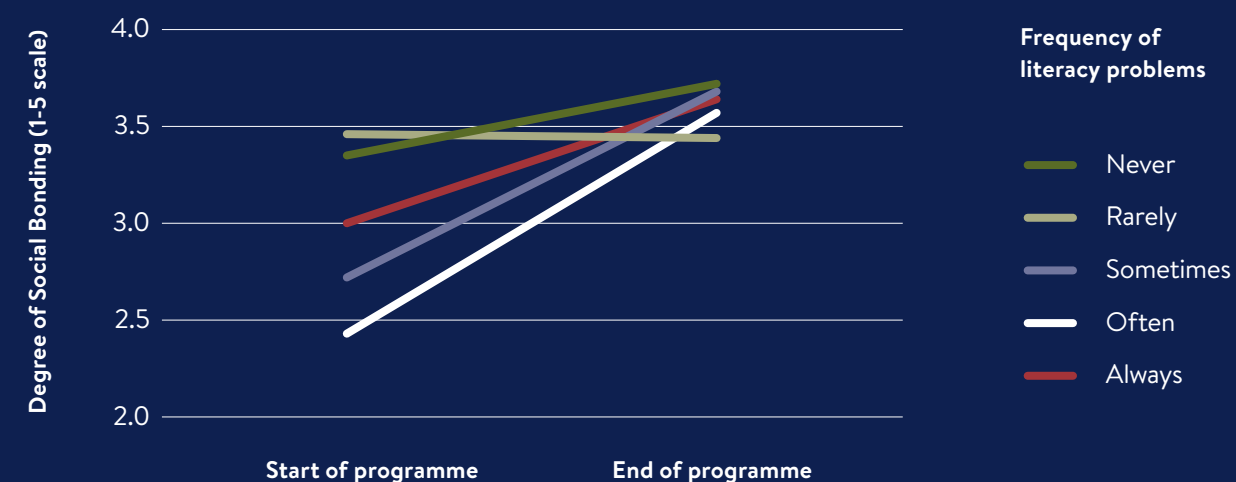


Tool 5:

Consider the educational format of the programme and reassure participants with lower educational backgrounds at the beginning of the programme of their ability to contribute, benefit and belong to the Twinning Project.

Fig. 8

Increases in social bonding are more apparent for those with lower literacy levels





HEALTH & WELLBEING STUDY 3

Key findings

- Wellbeing significantly increased, despite being already at highly desirable levels at the beginning of the programme.
- Bonding to the Twinning Project was associated with these improvements.



Tool 6:

To improve wellbeing, support the social cure, i.e., give participants access to the group identity through access to resources and social time together outside of the course.

Sample

Wellbeing data was provided by HMPS via Upshot. The data was collected within the research period, but due to missing unique identifiers it could not be reliably linked with the other data sources and therefore is evaluated separately.

In-depth

The Upshot survey measured indicators of health (general physical health, physical activity frequency (days in past week)) emotions (anxiety and happiness), psychological needs satisfaction (including relatedness or purpose, resilience and control), life attitudes (life satisfaction, future orientation and personal efficacy) custodial attitudes (e.g., motivation to work on offending behaviour) and social relations (bonding with the Twinning Project and with other criminals, social relations with prison officers, and other prisoners).

An initial observation of the data distribution showed that baseline levels of almost all measures were significantly skewed towards the favourable end of the scales, pointing to ceiling effects among the available sample. Nevertheless, participants showed significantly higher levels of psychological need satisfaction after the programme, as well as higher levels of life satisfaction, and self-efficacy beliefs. Importantly, identification with the programme also increased significantly, whereas identification with other criminals did not change, Fig. 9. Levels of identity fusion, a more intense form of social bonding, remained stable, as did relations with prison officers and other prisoners, as well as custodial attitudes.

We also found evidence for the social cure hypothesis, such that feelings of closeness to the Twinning Project was associated with improvements to life satisfaction, personal efficacy and higher levels of future orientation and happiness after the programme ended, via increased psychological need satisfaction (Fig. 10).

Fig. 9

Changes to Wellbeing, Life Attitudes and Identification Among Twinning Project Participants

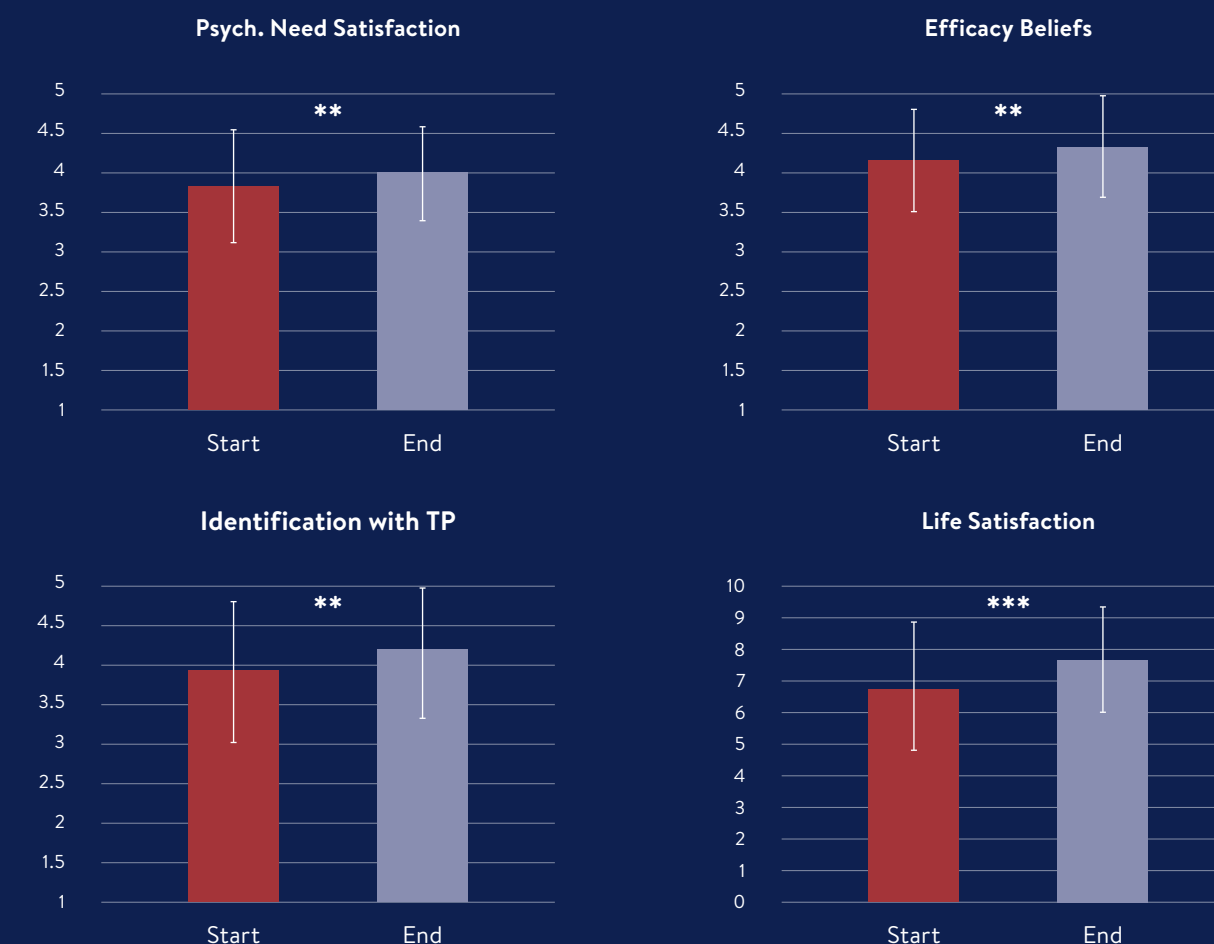


Fig. 10

Summary of Significant Indirect Effects of Identification Change on Desirable Post Treatment/Change Outcomes via Psychological Need Change



These results are shared from the following peer-reviewed article: Peitz, L., & Newson, M. (under review). Sport-based interventions and health in prisons: The impact of Twinning Project on Prisoner Wellbeing and Attitudes. Journal of Health Psychology.



GENDER STUDY 4

Key findings

- In a series of interviews, women expressed that they enjoyed the programme, regardless of prior levels of engagement with football, and many reported improved social support networks, confidence and skills from the programme.
- The quantitative data (capturing custodial behaviour and psychological developments) did not provide evidence for behavioural improvements.
- Interview data further highlighted the role of women's menstrual health, which presents barriers to full participation and women clearly had entrenched problems with being unseen and unheard by the systems they are embedded in.
- Women particularly wanted permanent, or at least longer-term programmes.

As the women's sample was much smaller than the men's, we were not able to conduct the same statistical tests and could not replicate the findings for improved behaviour among the men. Nonetheless, we analysed the survey data for women. We found similar trends for pathways to social bonding, i.e., the more women felt transformed by the programme or more attached to staff, the more bonded they felt to the Twinning Project. Interestingly, we also found that women on longer programmes reported higher levels of bonding to the Twinning Project 2 months later, suggesting that programme duration plays a role.



Tool 7:

Ensure all staff working on women's programmes have trauma-informed training to best support this special population who may have unique attachment styles to staff.



Tool 8:

Empower participants by having them co-design elements of future programmes, or leading peer-based initiatives.



To better understand women's experiences, we conducted interviews with 11 female participants across 3 institutions. The interviews were semi-structured, enquiring about participants' experiences on the Twinning Project, potential barriers to engagement and the role of women's health.

A thematic analysis identified three key areas of interest: (1) benefits of the programme, (2) factors enabling engagement and success and (3) barriers to engaging/benefiting.

1. Benefits of the programme

All interviewees emphasised that they really enjoyed taking part, some of them because of their interest in football, and some despite not having been interested in football before. Participants mentioned boosts to their confidence, learning useful skills, and how the programme served as a welcomed distraction from everyday life in prison.

"It was good. Yeah, cause you feel good about yourself then because it builds your confidence."

"I like the Twinning Project...they're not like the rest of the prison. There is more of a freedom here."

2. Factors enabling engagement and success

Good chemistry in the cohorts was often the first thing participants mentioned when asked what made them enjoy the programme.

"You wouldn't normally mix certain girls in the jail. But, you've been brought together for this Twinning Project and you just crack on with things and make new friends and I think it's important in this community."

The great value of social connections was emphasised in an interview where a participant observed that the limitations of her programme were down to the lack of commitment as a group (her cohort was during Winter, with an outdoors pitch).

“I feel like I would want to do it again because I didn’t get the full experience...The people that I was on course with, a lot of them didn’t show up...it affected everyone’s mood...it bears negative energies...Even the graduation I was the only one that showed up for the graduation. Yeh it was so shit.”

Those who were not drawn to Twinning Project in the first place gave credit to their friends for signing them up or convincing them to apply, but there were also those who saw football as a major motivator.

“My friend signed me up and I was just like, I can’t play football at all...But then literally the first day I come here, I was so glad. Best thing I’ve ever done in prison.”

“I used to play football when I was younger, that was my outlet to take out my anger, if I’m angry or

something it will calm me down. And that was the one positive thing in my life growing up is football.”

“It’s nice that they’re finally doing it in a women’s prison. You know what I mean? Because there’s a lot of women that, er, they like the football...And it’s always, they always go for the men because they automatically think men. They don’t think ‘oh women like this’. Do you know what I mean? So, it’s nice to get recognized.”

Most participants praised the staff for making Twinning Project accessible and providing a pleasant learning environment, while treating them with respect and care.

[...] They just make you feel so comfortable. It’s just like, like they’ve known you for like years.”

“I remember I was angry one time and they just told me ‘it’s not worth it, let it go’ and I didn’t want to let it go and they were like ‘it’s not worth it’ and they’ll talk you down. They were good people. I mean, they taught us about coaching little kids. They played football with us, the coaches. I enjoyed tackling some of them.”

3. Barriers to engaging

Factors that could be addressed to improve engagement with the women’s cohorts broadly fall into two categories; changes to programme design and better acknowledgement of women’s health issues. Participants particularly emphasised a desire for longer programmes.

“I think the course should be a little bit longer, though, because you just speed through it, like because it is such a short time and they’ve got other stuff going on and that.”

“I would have a few more weeks to it. Just so you could develop some of the skills and maybe have it all day not half a day.”

Issues related to women’s health were also mentioned as potential barriers. Though participants all stressed that they themselves hadn’t been hindered on the Twinning Project due to their reproductive health, they reported that period pains and bleeding were major issues within prison. These barriers were often

mentioned in reference to broader issues with women’s health care in prison, inadequate supplies of painkillers or free sanitary products.

“There’s times where I feel like I’m going to pass out... I think sometimes that [medication] helps. But then sometimes it’s just like, nothing helps, I can pop pills and nothing’s helping ...I wouldn’t go. I’d stay in bed.”

“I know how much [my period] stopped me from doing things I want to do. If doing football for the Twinning Project it is going to be a headache because you’ve got to come back constantly to go toilet. It depends as well, like, have they got the stuff [menstrual products] in the toilet, like it’s embarrassing innit. Like as much as everyone says it’s not when you’ve got a lot of male officers, they make you feel like it’s a big taboo to talk about it...it’s embarrassing.”

“So if you if you wearing say, for instance, leggings, they [free sanitary products] shift and then if you’re heavy you’ll leak and that will hinder some women and maybe that’s stopping them coming to a session.”





PROBATION BEHAVIOUR STUDY 5

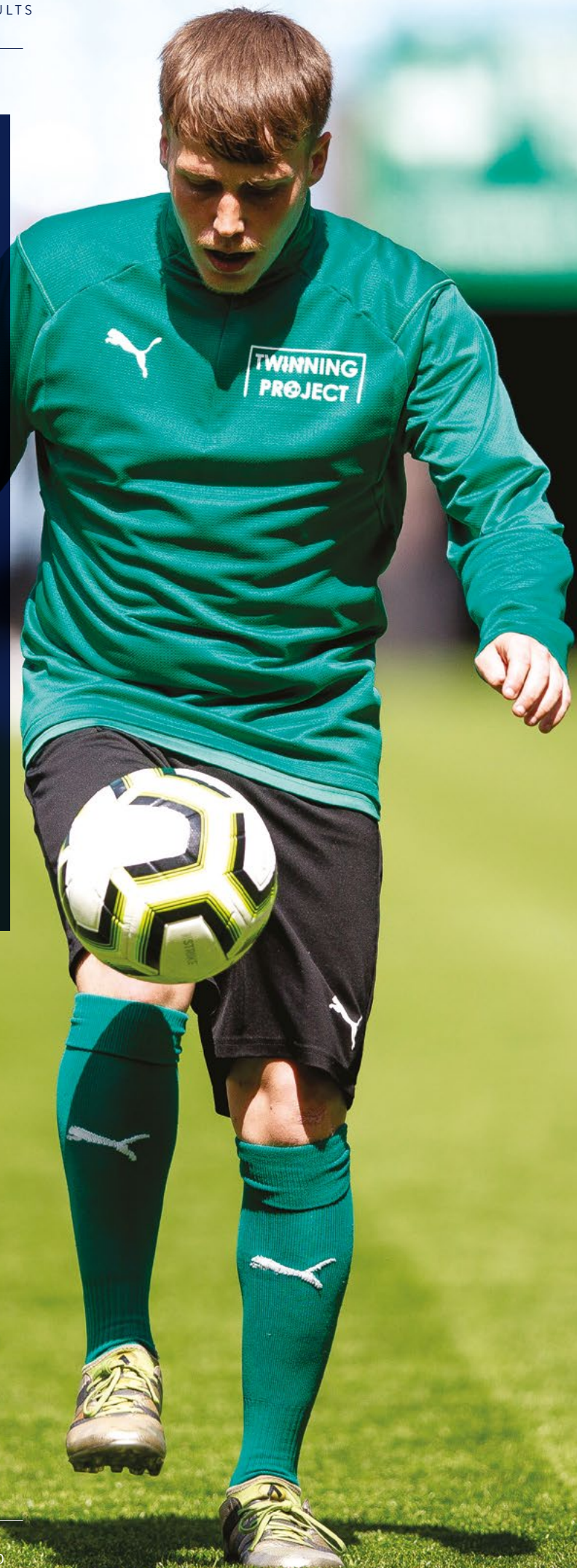
Key findings

- Thematic analysis revealed four themes:
 - (1) gaps in social support;
 - (2) coach as a role model;
 - (3) increased future orientation; and
 - (4) new ways forward.
- These themes evidenced the struggles people often face before entering the justice system, as well as the capacity of high-level coaching around a meaningful shared social identity to reduce the salience of these hurdles and elicit a sense of optimism toward the future.



Tool 9:

Adapt probation elements to maximise group numbers by reducing lead-in times, promoting the intervention in the community, and offering the training with further job opportunities.



In-depth

After analysing interviews using a reflexive, realist approach, we categorised the results into four themes to help understand whether the programme had benefits for participants, how, and areas for improvement.

1. 'Shit happens': Gaps in social support

All but one participant alluded to having little support in their lives beyond their family and several participants did not have family support at all.

Rahim: 'I'm not really part of my family. I've been independent from a young age. When school ended, I didn't have friends in the same way. They just didn't bother'.

Evan: 'I'm not close to my family, my friends live far away. I used to have friends and family, but shit happens'.

For some service users, particularly at the Championship club, with its tight-knit fans who were enrolled on the programme, the Twinning Project group had already become a primary social group.

Charlie commented on how different he was with the Twinning Project group: 'with these lads [gestures to the whole group, including the coach and probation officer], I'm different, yeah, it's great, [I'm] more confident'.

Habib: 'I've got friends and family. I'm close with my family. But the Twinning Project is a good start to my day. My probation officer used to be on my case, she told me I should be in prison. Now she only calls me once a month because I'm doing so well since [it started]'.

Coaches and probation officers also recognised the strong social ties between service users on the programme.

Probation officer 1: 'There is more of a bond between them...[They have gone] from shy and nervous to very comfortable, all giving each other fist bumps, all chatty...'

Coach 1: 'The Twinning Project has a presence in the community. It can reach them. It supports everyone'.

Coach 2: '[They have become more] social, each of them. Then there's family support, it going back to the family and seeing them through.'

2. 'That's what I want to be like as a coach':

Coach as a role model

Most service users reported feeling more socially supported as the programme progressed, especially by the coach – but also by one of the probation officers who was actively involved on the programme (participating in the warmups and activities alongside the service users).

Evan: 'I genuinely feel like they [the coaches] are trying to help. He [coach] can have fun but can be serious, he is trying to teach. That's what I want to be like as a coach'.

Habib: '[Coach and probation officer] have been helpful, they speak to me like a proper person... [Coach] told me to bring my friends and tell them about the opportunities, that's made me want to take it [Twining Project] serious'.

Ryan: '[Coach] has really helped... [Coach and probation officer] are good teachers.'

One coach said that the service users had 'opened up' during the programme. Not only did this facilitate a strong rapport between participants and the coaches, but also gave the coach an opportunity to act as a source of social support:

Coach 2: 'Ryan had personal stuff going on one week [and] phoned me to tell me why he couldn't come [to the session]'.

The positive relations between the coaches and service users were also commented on by a probation officer:

Probation officer 1: 'There's an atmosphere of respect. Not one of relying on [the coaches but one of] mutual respect.'

These results are shared from the following peer-reviewed article: Newson, M., Peitz, L., Gitsham, H., Imada, H., & Abrams, D. (2023). 'We need community': Bridging the path to desistance from crime with community football. *Journal of Community & Applied Social Psychology*, 34, e2757. <https://doi.org/10.1002/casp.2757>

3. *‘Getting here is helping me get up’:*
Extended future orientation

Nearly all service users gave examples of harsh or challenging environments when they were growing up and reported finding it hard to imagine themselves reaching old age. However, most service users noted a change in themselves, either prior to joining the programme (which consequently enabled them to commit to the programme) or whilst on it. These changes regarded more positive social networks, a focus on the future, and approaching life more slowly rather than engaging in fast-paced or risky lifestyle choices. Several service users pointed to new opportunities related to their experience on the Twinning Project, particularly regionally in relation to the development of a railway project that the coach had connections to offering stable and secure work.

The experience of playing on the club’s actual pitch was profound for Charlie: ‘It’s a once in a lifetime opportunity. I’ll carry that with me for the rest of my life...Just because I’m 32, doesn’t mean my dreams all just disappear’.

At 21, Habib felt that he was aware of his own mortality and said: ‘by the end of my 20s I want to live healthier, I want to be active. I started going to the gym’.

Ryan: ‘It’s [the Twinning Project] helping me. Getting here is getting me up.’

A change in service users’ orientation toward the future was also noted by the coaches delivering the programme.

Coach 1: ‘Their eyes have been opened to the opportunities available to them, not just in football. Their aspirations have risen; now, they want a life outside of prison. Their mental well-being has improved, confidence has increased, [they’re] more hopeful.’

Coach 2 said that service users’ aspirations for the future since joining the programme included ‘plans to go on to the Railway programme [a much sought after local skills and work option], become a personal trainer or football coach or go back to college to be qualified to work at [the football club or Railway].’

4. *‘More camaraderie, more people to learn from’:*
New ways forward

Several opportunities to improve the programme were identified by service users, probation officers, and coaches. These can be broken down into problems with:

- 1. The programme’s small group size;**
all but one participant reported the small group being problematic, which was partially due to low uptake, and early dropouts.
- 2. Interest in the programme;**
a minority mentioned that a lack of interest and a rigid course structure might deter participants.
- 3. Long term outcomes;**
a majority pointed to a lack of clear incentives and the limited time on the programme as a possible shortcoming of the Twinning Project.
- 4. Community awareness of the programme;**
most interviewees said that few people in the community are aware of Twinning Project, and that increased publicity could boost engagement and interest in the programme.

Issues identified through interviews are expanded upon in Appendix D.

RESULTS SUMMARY:
KEY TAKEAWAYS

- 1. Adjudications** (sentences administered while in prison) were significantly lower for Twinning Project participants following the intervention, compared to a control group (**Study 1**).
- 2. Bonding** to the Twinning Project was a key factor in decreased adjudications (**Study 2**).
- 3. Optimism** about the future and chances to desist from crime significantly improved for those not already at ceiling levels (**Study 2**).
- 4.** The Twinning Project had a positive impact on **participant wellbeing** (**Study 3**).
- 5. Women participating** in the Twinning Project were found to have unique needs (**Study 4**).
- 6. Probation elements** of the Twinning Project appeared to encourage social bonds between participants but structural barriers limited its success (**Study 5**).



FEEDBACK FROM TWINNING PROJECT STAFF STUDY 6

Key findings

- Across clubs and prisons, most staff considered the project a success.
- Participants' wellbeing and transferable skills were notable benefits, as well as the programme's capacity to engage and connect people.
- Success was commonly attributed to the attraction of football clubs and dedicated personnel.
- The most commonly identified areas for improvement included calls for more flexibility in adjusting course content to specific participant needs, allowing broader recruitment criteria, and providing more post-release support.



Tool 10:

Connect with participants on release to maintain the identities forged and offer support; achieve this via strong relationships between prison, local, and nationwide charities.

Sample

Surveys were distributed to 144 institutions involved in the Twinning Project. 113 individuals from 83 clubs and prisons responded to our survey, including 68% staff actively delivering Twinning Project programmes (34% Physical Education Instructors, 34% football coaches) and 32% staff otherwise involved in the Twinning Project, including club staff, governors, and prison managers.

In-depth

We provide an overview of the issues that were most frequently reported. Given the relatively low response rate and the anonymity of the data collection, we do not claim that the feedback here is representative of all club and prison staff.

What worked and why



90%

of respondents indicated their belief that Twinning Project worked as intended.

A break down of the demographics of different prisons, including prisons who did particularly well at recruiting challenging populations and retaining participants can be found in Appendix E.



"The Twinning Project has been very successful. It's very popular amongst young people here. It helps them grow in confidence helps in providing leadership qualities and also improves fitness and wellbeing"

Prison Officer

"[Twinning Project] provides a course of skills for prisoners through their interest of sport, building in some discipline whilst keeping things fun"

Governor

"You see prisoners break down boundaries between each other, staff and outside visitors. The prisoners take part in group discussions with people they would not normally associate with"

Prison Officer

"The feedback from the students has been really impactful around building self-esteem, building confidence to try new things, and also the opportunity to complete a qualification they might never had done before."

Football Coach



What worked and why

The reasons for success were varied, including the football brands, personal development, and the dynamics between coaches and prison officers. Importantly, there were a minority of negative comments from prison officers who felt that the programme encroached on to their domain, presenting a conflict within some prisons – similarly a coach noted that the intervention works best when prison officers support the programme.

Prison Manager: “[Twinning Project] is successful because the brand name of the twinned football club is a ‘hook’ to encourage prisoners to engage. Outside agencies, especially local professional football clubs act as a huge incentive for prisoners.”

Prison Manager: “The buy in of the programme from the PE staff is key, if they are positive about the programme (we are very fortunate that ours are) then this encourages prisoners to be interested and excited about the programme and opportunities too.”

Prison Officer: “PE Staff within the prison are more than capable to running the course themselves... Give the PE staff the chance to do their job and not outside clubs who have little or no knowledge of prison life and challenges.”

A small group of respondents was sceptical of Twinning Project’s success, mainly raising questions about the long-term impact of the course and whether employability targets can be reached.

Coach: “I would like to see a bigger outcome, upon release or when the probation service sessions end. How do we engaging these participants when they return back into normal life? We have plans leading up to and during the project, but no real support/ plans, when I personally think we can have the biggest impact and stop the participants reoffending is upon release.”

Prison Officer: “The project is popular but to be successful requires feedback from those that have been released back into the community.”

Areas for improvement

Respondents mentioned that more flexibility around course design and delivery could be beneficial in various aspects of the programme (e.g., longer or shorter programme length). Many respondents also advocated to extend the offering, to include safeguarding courses, or to allow for more advanced coaching qualifications to be delivered if the clubs and prisons have the capacity to do so.

Prison Officer: “It would be beneficial to tailor the content more to a prison environment rather than an actual level 1 qual. There should be more information provided about how to make coaching successful for them, as well as more practical experience in delivering sessions.”

The other major theme was the need for more through-the-gate support.

Coach: “Realistically if the individual does not have the support ‘through’ the gate then ultimately things will fizzle away. If each Football Club/HMP had an Adult Interventions Coordinator to follow up or continuously visit whilst the individual(s) inside then all practice could be put to good use. Not all Football Clubs have the resources to give the time and effort it takes to support the inmates. It’s back to their day to day jobs and responsibilities.”

Club Staff: “More time, funding and maybe a day release programme so we can bring participants into our environment once to see what it’s like, this may increase the chance of someone continuing with us on release.”

While the programme was described as popular and commonly well-known among prisoners, respondents mentioned challenges in observing the eligibility criteria and ensuring that participants stayed on.

Prison Manager: “The criteria for eligible prisoners that the project desired, was a huge barrier for us in the High Security Estate. We could not fulfil our quota of prisoners without some bargaining.”

Coach: “As the course is optional, [participants] think they can do multiple courses as well as ours and if it overlaps then they sometimes don’t prioritise Twinning Project...if the participants don’t meet the criteria of the written workbook and coaching practical delivery then they cannot get the certificate. This has been a hindrance to some participants who see it as they can just turn up a few times and get the certificate as that’s what they do on other courses.”

KEY RECOMMENDATIONS

1. Diversify participant pools to see a bigger increase in behavioural and wellbeing improvements

At times, the Twinning Project has been used as an incentive within prisons. While this application may have a role to play, we would encourage more recruitment of participants who are typically regarded as ‘challenging’, e.g., those on lower levels of ‘Incentives and Earned Privileges’. The programme’s high level of social cohesion may drive improvements to behaviour even for these participants; those who are arguably most in need of powerful interventions.



2. Continue to run the programme for people with less than 12-24 months to serve.

Currently 28% have 12-24 months left to serve and 24% have 24+ months left to serve, meaning that effects on reoffending rates will be limited.



3. Offer longer programmes that enable participants to process the transformative element of the programme.

- a. The additional time may help participants to bond ever more strongly to the programme. This could be particularly useful for sites recruiting more problematic participants.
- b. Continue to run short programmes at remand sites, where participants are not held for long.



4. Consider permanent fixtures, such as peer-facilitated training and matches, focusing on prison behaviour improvements and wellbeing.

This will offer further opportunities to bond, maintain identities, and gain life skills and was found to be particularly needed for women.



5. Specialise the programme for women.

- a. Women pose a unique population in the justice system, making up around 4% of prisoners but demonstrating high levels of trauma. In addition to the kits tailored for women, give women options to wear jogging bottoms instead of shorts, make it clear that they can sit out or go to the loo whenever they need to if their menstrual cycle makes participation challenging.
- b. It is strongly recommended to include trauma-informed training for coaches working in the women’s estate and/or include additional mentoring after the programme that is trauma-informed.



Discussion

Twinning Project had a significant positive impact on participants’ behaviour and attitudes. Regarding the most robust indicator of prison behaviour, proven adjudications, we found that Twinning Project predicted fewer adjudications compared to a control group.

Among those participants with room for improvement (i.e., with records of adjudications prior to the programme) we observed significant improvements over time. Importantly, these improvements were partially explained by participants’ increased levels of bonding to the Twinning Project (Study 1).

A similar picture emerged for participants’ attitudes. Optimism about the future and one’s chances to desist from crime significantly improved among those who were not already highly optimistic at the start of the programme (Study 2). Likewise, we found that Twinning Project contributed to the satisfaction of key psychological needs, general life satisfaction and prisoners’ efficacy beliefs. These effects were again partially attributed to the increased sense of bonding with the programme (Study 3).

In interviews, women from the Twinning Project reported enjoying the program and noted enhanced social networks, confidence, and skills (Study 4). While quantitative data didn’t show behavioural improvements, interviews revealed the barriers women faced due to menstrual health issues and feeling unseen in the system. They desired longer-term programs, which would be best supported via trauma-informed training for staff and co-designing programs with women’s input.

A qualitative investigation into the experiences of participants and staff taking part in the probation elements of the Twinning Project, echoed some of the findings in the prison population. Despite structural barriers limiting the rollout of the programme, participants contrasted their experiences in the

programme with general gaps in their social support networks. The football coaches were perceived as role models, boosting participants’ confidence to and positive outlook on future challenges (Study 5).

Finally, surveys from 144 institutions revealed positive staff feedback, citing football club attraction and personal development as paths to wellbeing and confidence (Study 6). Suggestions include adapting content to prison environments and enhancing through-the-gate support. Some scepticism exists about long-term impact and employability outcomes.

Novelty of the research

To our knowledge, this is one of the most comprehensive evaluations of a sport-based intervention (SBI) to date³¹ and speaks to many of the potential benefits associated with well-designed SBIs recently outlined by an international expert panel³². Although Twinning Project was primarily designed to boost employability after release, the unique access to longitudinal cognitive, health, custodial and reoffending data provides us with important insights into how such a high-profile intervention benefits participants on a variety of outcomes which are often studied in isolation of one another. The possibility to combine custodial and reoffending data will also enable us to explore whether and how such “preliminary” outcomes link to the ultimate goals of improving employability and law-abiding behaviour. By understanding these mechanisms, the psychology underlying the Twinning Project’s success can potentially be reapplied to other prison interventions.

³¹Jugl et al. 2023 - for the most recent meta-analysis. ³²Murray, Coyle, Morgan, et al., 2024.

FUTURE DIRECTIONS

1. Explore paths to bond Twinning Project participants

Results indicated that social identification, rather than the more intense form of bonding termed identity fusion, was associated with decreased adjudications in prison. Relatedly, identification increased during the intervention and fusion remained relatively stable. Social identification is clearly powerful and plays a role in creating cohesive social structures among large groups of depersonalised individuals³³. However, we propose that the intervention is a critical first step in creating longer-term changes; by investing in more in-depth programmes that have space for participants to integrate emergent fusion with one another and the project, there may be opportunities to improve associated behaviours further. For instance, we found that fusion did increase following the programme, but that this change had reverted to baseline two months after the programme. Relatedly, programmes that encourage particularly transformative experiences may give participants the opportunity not only to identify with the Twinning Project, but to fuse to the group³⁴.

2. Investigate post-release outcomes

We anticipate that the present findings will equate to reduced reoffending rates for Twinning Project participants, data which will be analysed after the current cohort has been released (i.e., 2026-27). This is partially based on the findings that Twinning Project had a significant impact on adjudications. While measures of prison misconduct are by no means perfect and open to various biases, they are nevertheless routinely associated with reoffending behaviour³⁵. As part of the reoffending data, we aim to obtain housing data within the first two years of release. We anticipate that Twinning Project participants will show lower rates of unemployment and homelessness compared to the control group. Housing and employment outcomes are typically linked to reoffending, and the design of Twinning Project to teach tangible transferable skills is expected to boost their chances to find jobs after leaving prison.

3. Work with receiving communities to reintegrate formerly incarcerated people.

The allure of major sports clubs and brands to solve global crises lies not only in the billions of pounds in revenue they may contribute to social issues, but in their billions of loyal fans. Football fandom remains a relatively untapped resource for prosocial action and a means of overcoming the identity-based exclusion of marginalised groups on an unprecedented scale.

Researchers have long appreciated that the prospects of rehabilitation and reduced rates of recidivism are heavily influenced by the response of the receiving community, including the willingness of employers to offer 'second chances' to applicants with criminal records³⁶. Law-abiding groups could be encouraged to play a greater role in helping formerly incarcerated individuals to become re-established in the community as a result of interventions aimed at fostering fusion in ways that motivate support for reintegration efforts. The football 'family' may offer the ideal platform to engage with communities in a meaningful way.

Salacious media reporting of violent crimes can inflate perceptions of public risk and increase demand for punitive public policy and increased incarceration rates, even when the evidence suggests that this is not the most effective way to reduce crime³⁷. What is lacking is research into the kinds of media reporting that could foster higher rates of fusion towards those currently ensnared in preventable cycles of criminal activity, in ways that motivate more effective and lasting reintegration programmes. Marshall (1999) argues that a fully restorative justice resolution involves the offender, victim and, crucially, the community – however difficult that can be to define.

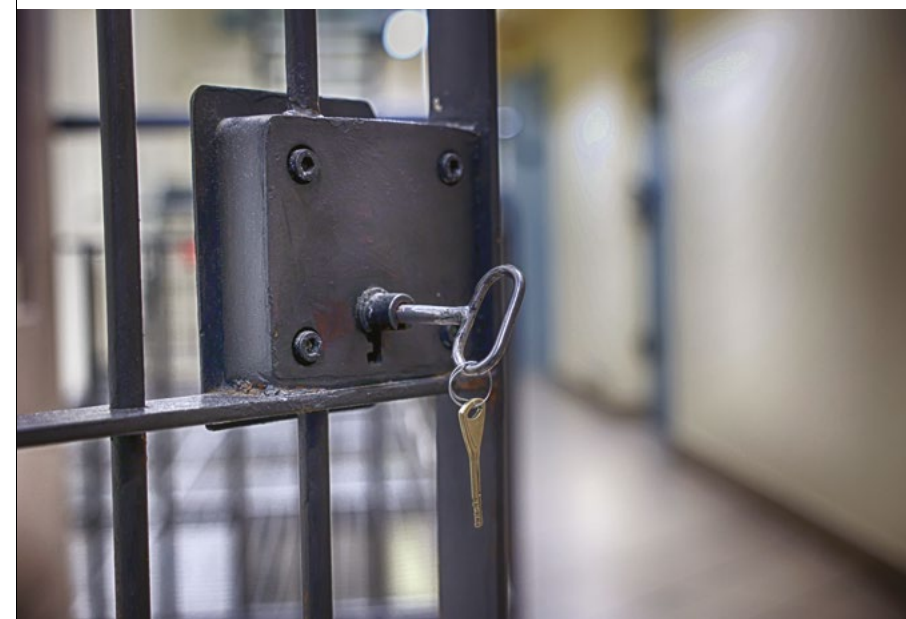
4. Connect participants for through the gate support

In addition to the promising immediate and prospective impact on participants' wellbeing and behaviour, the research conducted here also raises some important questions for the future use of sport-based programmes. While the Twinning Project is already active among people on serving community sentences, feedback from staff and participants alike pointed to the

potential to further improve the programme by offering tailored content and support with post-release challenges in mind. One way to address this would be to empower institutions and clubs to deliver content that builds on prisoners' advanced capacities, or that reflects the unique lived experiences of women in the criminal justice system. Another salient point is the potential for Twinning Project be a central figure in a post-release network that can facilitate through-the-gate support across clubs nationwide, or even internationally. Given that participants increasingly identify with the programme, it would be well-situated as an initial contact point, particularly when individuals are released to a different area, where Twinning Project could act as a reference to establish contact to the nearest affiliated club. The organisation could further contribute to maintaining the positive group identity, by facilitating contact among alumni informally, providing opportunities for knowledge exchange, and peer-support as part of organised events or other communication channels.

5. International extensions

A second question relates to potential of football based programmes across national contexts. Like football itself, Twinning Project started in the United Kingdom, and the evidence presented here can only speak to the impact and experiences among those involved in UK-based institutions and organisations. As Twinning Project continues to expand geographically, corresponding evaluations can improve our understanding of football as a vehicle to deliver meaningful change and promote pro-social values across national and cultural contexts.



LIMITATIONS

This research entails several limitations that must be considered when using our recommendations.

First, recruitment for the Twinning Project favoured relatively 'well-behaved' participants, with the result that opportunities for behavioural improvement were limited in our sample. Participants for the Twinning Project self-nominate and are then selected by prison officers and clubs. When we started the research, only those with the highest IEP (Incentive & Earned Privilege) level tended to be selected, i.e., those who were regarded positively within the prison system. This means that our results faced a ceiling effect - with only the best-behaved people in prison participating, there was not much room for improvement for many participants. With more diverse cohorts that reflect the true composition of prison populations, there could be an opportunity for much greater improvements in observed behaviours.

Second, we note that our prison study was conducted shortly after Covid-19 ceased to be a national emergency in the UK, which may have biased results. The speed of return to full in-person programme deliveries might have differed between prisons, depending on availability of staff and resources, and it is possible that better staffed and equipped sites were more likely to contribute data to this study. Similarly, the impact of Covid restrictions on prisoner health and wellbeing might have further compounded the selection bias, as a bias towards highly motivated, well-behaved and healthy participants could have unknowingly made prisoners affected by covid ineligible for participation.

³³Abrams & Hogg, 1990; Hogg, 2001. ³⁴Swann et al., 2012. ³⁵McDougall et al., 2017; Cochran et al., 2014; Heil et al., 2009.

³⁶Reich et al., (under review). ³⁷Enns, 2014; Garland, 2002; Matthews, 2005; Newburn, 2007.

KEY TWINNING PROJECT RECOMMENDATIONS
AND SUGGESTED ACTIONS

RECOMMENDATION	HOW TO IMPLEMENT IT
Diversify participant pools, including people with more challenging behaviour.	<ul style="list-style-type: none">• Pilot at successful sites by recruiting those with lower IEP levels, mix participants with lower and higher IEP.• Incentivise prisons who adopt this approach, rather than the 'programme as a reward' approach.
Continue to run the programme for people with less than 24 months left to serve. Currently, 24% of participants have 24+ months left to serve, meaning that effects on reoffending rates will be limited.	<ul style="list-style-type: none">• Reporting on cohort demographics to be shared by prisons for regular internal evaluation.• Provide more information to Governors and prison staff on the required time left to serve.
Offer longer programmes to encourage feelings of personal transformation and identity fusion. The additional time will help participants bond, which may be particularly useful for sites recruiting more challenging cohorts.	<ul style="list-style-type: none">• Encourage existing sites to aim for at least a 12-week programme.• Pilot longer-term programmes at successful sites.• Continue running short programmes (6 weeks or less) at remand sites, where participants are not held for long.
Create permanent opportunities to engage with the Twinning Project within prison.	<p>This could include:</p> <ol style="list-style-type: none">1. Peer-led sessions playing football informally.2. Follow-up visits from coaches.3. Advanced training or qualifications.
Specialise the programme for women.	<ul style="list-style-type: none">• Offer women the opportunity to wear bottoms other than shorts, which can feel too exposed.• Remind women that they can rest or go to the toilet whenever they need to.• Have trauma-informed training for coaches and/or offer peer-led sessions with a trauma-informed facilitator after the programme.• Have female staff present for all sessions (e.g., a coach or prison officer).

The Team



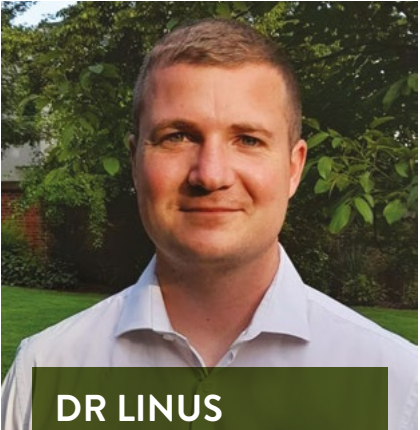
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Appendices

APPENDIX A METHODOLOGICAL DETAILS

Appendix A contains substantial research details, which are hosted online and largely relate to published and planned academic papers.

Ethics

Data collection

Samples

- Prison Behaviour (Study 1)
- Social Connections & Future Orientation (Studies 2 & 4)
- Health & Wellbeing (Study 3)

Materials

- Prison behaviour (Study 1)
- Social Connections & Future Orientation (Study 2)
- Health & Wellbeing (Study 3)
- Staff Survey

Design and Analysis

Probation design

- Sample
- Data collection procedures
- Data analysis

APPENDIX B PARTICIPATING CLUBS AND PRISONS

The following pairings provided either prison behaviour or cognitive data within the research period.

PRISON	CLUB	TOTAL ELIGIBLE CASES IDENTIFIED	PRISON BEHAVIOUR DATA	COGNITIVE DATA	HEALTH & WELLBEING DATA**
HMP Belmarsh	Charlton Athletic FC*	12	12	NA	NA
HMP Birmingham	Aston Villa	31	13	18	NA
HMP Brinsford	Wolverhampton Wanderers FC	19	17	NA	NA
HMP Bronzefield	Brentford FC*	14	8	14	NA
HMP Bullingdon	Oxford United FC	14	14	NA	NA
HMP Chelmsford	West Ham United FC	20	20	10	NA
HMP Coldingley	AFC Wimbledon	40	40	NA	NA
HMP Cookham Wood	Charlton Athletic FC*	1	1	NA	NA
HMP Deerbolt	Hartlepool United FC*	13	13	NA	11
HMP Doncaster	Doncaster Rovers FC	47	18	31	NA
HMP Dovegate	Stoke City FC*	24	22	24	NA
HMP Downview	Crystal Palace FC*	24	23	23	NA
HMP Drake Hall	Port Vale FC	17	16	15	NA
HMP Durham	Sunderland AFC*	12	3	NA	11
HMP Eastwood Park	Refereeing course	12	12	NA	NA
HMP Exeter	Exeter City FC	23	23	NA	19
HMP Featherstone	Walsall FC	18	18	NA	NA
HMP Feltham	Brentford FC*	13	1	NA	NA
HMP Forest Bank	Bolton Wanderers	53	53	51	NA
HMP Guys Marsh	AFC Bournemouth	14	1	NA	NA
HMP Hatfield	Sheffield Wednesday FC	36	7	NA	NA
HMP Hewell	Coventry City FC	30	6	NA	14
HMP High Down	Crystal Palace FC*	9	8	8	NA
HMP Hollesley Bay	Ipswich Town FC*	43	7	NA	NA
HMP Holme House	Hartlepool United FC*	30	30	30	9
HMP Humber	Scunthorpe United FC	28	28	NA	NA
HMP Isis	Millwall FC	40	3	NA	NA
HMP Kirklevington Grange	Middlesbrough FC	39	39	14	29

APPENDIX B CONTINUED
PARTICIPATING CLUBS AND PRISONS

HMP Lancaster Farms	Morecambe FC	14	2	NA	NA
HMP Leeds	Leeds United FC	14	13	NA	NA
HMP Lewes	Brighton and Hove Albion	12	2	NA	NA
HMP Lincoln	Lincoln City FC	46	26	21	NA
HMP Low Newton	Sunderland AFC*	12	12	NA	NA
HMP Moorlands	Sheffield United FC	14	12	14	NA
HMP New Hall	Huddersfield Town AFC	16	13	14	NA
HMP Northumberland	Newcastle United FC	22	22	NA	NA
HMP Nottingham	Notts County FC	26	26	26	NA
HMP Oakwood	Birmingham City*	34	17	7	NA
HMP Peterborough	Peterborough United FC	34	34	NA	NA
HMP Prescoed	Newport County AFC	28	4	NA	NA
HMP Risley	Salford City FC	55	32	28	31
HMP Rochester	Gillingham FC	28	28	NA	NA
HMP Stocken	Leicester City FC	56	39	38	21
HMP Stoke Heath	Stoke City FC*	34	4	NA	NA
HMP Styal	Manchester United FC	9	1	NA	NA
HMP Sudbury	Burton Albion FC; Derby County FC	24; 36	24; 36	NA; 36	NA
HMP Thorn Cross	Wigan Athletic FC	48	43	NA	NA
HMP Warren Hill	Ipswich Town FC*	24	22	NA	NA
HMP Wealstun	Harrogate Town AFC	8	8	NA	NA
HMP Werrington	Birmingham City*	1	NA	1	NA
HMP Wetherby	Leeds United FC*	9	6	NA	NA
HMP Wormwood Scrubs	Queens Park Rangers FC	47	45	47	NA
TOTAL		1327	927	454	164

Note
*Clubs twinned with more than one prison. **Health and Wellbeing data was collected independently from the pre-registered research period. Cases here could overlap with behaviour and cognitive data, but it was not possible to reliably match the datasets. The following institutions are also provided Health & Wellbeing data: HMP Aylesbury (6), HMP Liverpool (6). The following institutions responded to the staff survey but did not provide other types of data within the research period; HMP Altcourse, HMP Dartmoor, HMP Hindley, HMP Lindholm, HMP Springhill, HMP The Mount, AFC Fylde, Burnley FC, Everton FC, Hereford FC, Milton Keynes Dons FC, Plymouth Argyle FC, Southampton FC, Swansea City AFC, Tottenham Hotspur FC, York City FC.

APPENDIX C
DEMOGRAPHICS OF DIFFERENT DATA SOURCES

DATA TYPE (SOURCE)	SAMPLES	AGE	ETHNICITY
Prison Behaviour (HMPPS – Pnomis)	All (N = 2,937)		
	Men (Twinning Project, n = 834*) Men (control, n = 1,874)	30.95 (min 18 – max 62; 45.5% < 30 y/o) 34.49	60.3 % White, 21.2% Black, 7.6% Asian, 8.8% Mixed, 0.7% Other, 1.4% Unknown 73% White, 11% Black, 8% Asian, 5% Mixed, 1% Other
	Women (Twinning Project, n = 93) Women (control, n = 136)	31.76 (min 19 – max 52, 48% < 30 y/o) 37.53 (min 19 – max 63; 18.4% < 30 y/o)	77.4% White, 8.6% Black, 2.2% Asian, 11.8% Mixed 82.4% White, 8.8% Black, 4.4% Asian, 3.7% Mixed, 0.7% Other
	Wellbeing surveys (HMPPS – UPSHOT)	Men only (N = 164)	31.38 (min 20 – max 63; 45.3% < 30 y/o)
Cognitive surveys (University of Oxford)	All (N = 454)		
	Men (n = 388)	30.20 (min 18 – max 60; 47.5% < 30 y/o)	59.8% White, 19.3% Black, 9% Asian, 10.3% Mixed, 1.5% Other
	Women (n = 66)	30.89 (min 19 – max 52, 51.5% < 30 y/o)	66.7 % White, 12.1% Black, 6.1% Asian, 15.2% Mixed
Staff surveys (University of Oxford)	Men & Women (N = 72**)	40.93 (min 23 – max 63)	88.9% White, 5.6% Black, 1.4% Asian, 2.8% Mixed, 1.4% Unknown 93.1% male, 4.2% female, 2.8% Unknown
Interviews (University of Oxford)	Women only (N = 11)	NA	NA
Interviews, probation (University of Oxford)	7 participants; 5 staff	NA	NA
Reoffending data (Ministry of Justice)	Men & Women (Twinning Project, N = 927***; control group, N = 17,000)	-	-


Notes: *The main analyses of prison behaviour were conducted with a smaller sample of n = 676, excluding participants from privately run institutions. **An additional 42 staff who are not involved in delivering programmes completed a short version of the survey which did not capture demographic characteristics. ***Linking reoffending data from different sources can results in a loss of data, we anticipate a minimum sample of n = 700 to be available for analyses.

APPENDIX D
ISSUES IDENTIFIED IN THE PROBATION ELEMENT
ON THE TWINNING PROJECT IN COMMUNITY (STUDY 5)


ISSUE	HOW MUCH OF A CONCERN?	REASON	SOLUTIONS
Small group size	All but one participant reported the small group being problematic	Low uptake (small cohort to select from)	<ul style="list-style-type: none">• Increase promotional materials in all probation officers, on round robins, in the community, and anywhere that service users or offender managers regularly encounter.• Due to covid, most probation work was remote at the time of the interviews, which was felt to limit how naturally TP would have come up in offender managers' already long checklists with service users.
		Service users dropping out before programme commences	<ul style="list-style-type: none">• Shorter lead in time liaised between clubs and probation officers.• Reach out to service users as football fans specifically (as opposed to those interested in health and fitness more generally).
		Service users dropping out during the programme	<ul style="list-style-type: none">• Check service user availability prior to selection.• Aim for afternoon sessions which may be more suitable for young people and those living further away.• Stick to start dates and times, which changed for one club (important for service users' planning and for developing trust).
Long term outcomes	Majority	Lack of clear incentives	<ul style="list-style-type: none">• Offer paid or voluntary work after the programme, e.g., within the club or via the wider fan base or Twinning Project network (voluntary positions that don't affect universal credit are desirable).
		Limited time on the programme	<ul style="list-style-type: none">• Possibilities for extension (e.g., via paid/voluntary work).• Options for a follow up 'Level 2' course with further qualifications.• Or options to return as a peer mentor in future Twinning programmes.• Add a further day each week as so much can change in a service user's life in a short time.
Interest in programme	Minority	Service users not fully engaging	Ensure all participants have an active interest in football as the programme is heavily football-based.
		Rigid programme structure	In contrast to prison-based programmes where participants may just welcome the distraction, community programmes need more flexibility to respond to participant interests.
Community awareness	Majority	Interest in programme	<ul style="list-style-type: none">• Publicise Twinning Project in the community more widely to generate enthusiasm and/or competition to enrol.• Add features on the programme to club social media news feeds.

APPENDIX E
INSTITUTIONAL DEMOGRAPHICS

	WOMEN	MEN
Number of individual cohorts during research period	12	97
Average course duration (in weeks)	7.39	6.02
Average dropout per cohort*	9.18%	6.63%
Average number of participants signed up per cohort	10.1	13.6

DETAILS OF THE RECRUITS	TWINNING PROJECT (840)	HMPS POPULATION**
Incentives and Earned Privileges (IEPs)		
Average IEP-level	2.72	2.43
% Basic	1%	1%
% Standard	26%	46%
% Enhanced	73%	50%
Institutions that recruited participants with significantly lower IEP levels compared to most institutions****	 HMP Doncaster	
	HMP Risley	
	HMP Peterborough	

TIME LEFT TO SERVE	TWINNING PROJECT (767)
Average number of months left to serve	18.96
% <6m	27.1%
% 6-12m	20.6%
% 1-2 years	27.5%
% 2+ years	24.6%

Institutions whose participants had on average less than 12 months left to serve****	 HMP Peterborough	HMP Holme House
	HMP Eastwood Park	HMP Humber
	HMP New Hall	HMP Whetherby
	HMP Bronzefield	HMP Moorlands
	HMP Hatfield	HMP Wealstun
	HMP Northumberland	HMP Bullingdon

APPENDIX E CONTINUED
INSTITUTIONAL DEMOGRAPHICS

AGE***	TWINNING PROJECT (1276)	HMPs POPULATION
Average age	30.65	
Min – Max	19 – 62	
% <25	24.1%	13.4%
% 25-29	23.5%	15.5%
%30-39	39.9%	33.2%
%40-49	10.5%	20%
% 50+	2%	17.4%
EMPLOYMENT HISTORY	TWINNING PROJECT (433)	
% never worked	18.9%	
Institutions that recruited over 25% of participants without previous employment history****	HMP Doncaster	
	HMP Holme House	
	HMP Stocken	
	HMP Risley	
EDUCATION HISTORY	TWINNING PROJECT (420)	
% no formal education	30.5%	
Institutions that recruited over 50% of participants without formal education****	HMP Birmingham	
	HMP Moorlands	
	HMP High Down	

Notes:
* We did not have complete access to all dropout data (via club’s participant lists) and the estimates here are likely underestimating dropout.
** Based on HMPPS Offender Equalities Annual Report 2022/23 and the Offender management statistics quarterly.
*** No prisoners under 18 were included in the research reported here.
****Only sites with available data from >5 cases were included in this analysis.

“The Twinning Project academic partnership with Dr Martha Newson and Professor Harvey Whitehouse at Oxford University is of immeasurable value. As a charitable organisation, operating in the challenging criminal justice eco-system measuring the impact of what we do and the outcomes of our philanthropic provision is what will sustain our delivery. The academic evaluation is essential in supporting our fundraising initiatives as well as ensuring we have the buy-in from all stakeholders and partners.”

Hilton Freund
CEO of the Twinning Project



*“Don’t look down on
someone, unless you
are helping them up.”*

Jesse Jackson



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