

Paths to social bonding, improved prison behaviour, and reduced recidivism



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**TWINNING
PROJECT**

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UK Research
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Background

Recidivism is one of the greatest socio-economic burdens the UK currently faces. At a total estimated economic and social cost of £18.1 billion a year ¹, re-entering prison places a substantial burden on the economy. Central to reoffending behaviours are perpetrators' identities: their sense of self and the groups to which they belong (or from which they are isolated) ^{2,3}. We know that positive identities are critical to reducing reoffending ². New insights into the science of social cohesion point to how powerful pro-social changes in behaviour are rooted in tight-knit bonds to groups. We call this identity fusion ⁴⁻⁶. Equally important to reducing recidivism is a need to establish host communities that show commitment to former prisoners, supporting and encouraging their efforts to conform to societally positive values and behaviours ⁷.

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 them ^{5,7}. Gaining employment outside of prison depends, in part, on the development of employable social identities that do not conflict with a previously incarcerated person's self-narrative. Indeed, lack of employment appears to be a fundamental driver of the largest reoffending category – theft (double that of the next largest reoffending category, violence) ¹. We know that strong group identities lead people to act for the benefit of their groups, even if this carries costs: from hardcore football fans travelling the globe for a game, to gang members having each other's backs. Can the love of group that motivates potentially violent expressions of group loyalty be redirected into more positive outcomes for wider communities of largely law-abiding football fans and for formerly incarcerated people seeking to desist from crime?

Pilot results

To explore these issues, we gathered some initial data with participants on the Twinning Project – a partnership between HMPPS and professional football clubs to use football-based programmes to help formerly incarcerated people desist from crime after custodial and community sentences. Our research is based on the idea that 'identity fusion' produced by the Project could help bond participants to law-abiding groups and values, thus reducing rates of recidivism. In a pilot study with five sites (2018-19), we found significant increases in fusion to the Twinning Project (n=40). Higher fusion at T2 (immediately after the programme) was associated with positive case notes and higher job attendance. There were no significant changes in fusion to other targets (family, football club, or community) or changes in group identification to any target. A quarter of the sample saw an additional target: 'other criminals' and, for this group, fusion significantly decreased, though the sample size was too small to be statistically meaningful.

People in prison pose a unique population for interventions and research. In the words of David Dein who established the Twinning Project, they are a 'captive audience'. Although people serving community sentences seem to have a slightly better chance at not reoffending than people serving custodial sentences⁸, they also have their own unique set of challenges when it comes to interventions. Attrition for programmes is high and in our pilot study with two clubs, we found that participants did not show up on the first day for an array of reasons (e.g., hospitalisation, left the area, recalled to prison, problems with public transport, found a job, couldn't get childcare). However, 100% of the participants who showed up on the first day completed the programme, which appeared to be unusually high.

Main study

Research areas

(1) Changes to group alignment before and after the Twinning Project

Generally considered irrevocable⁹, we will investigate whether trait fusion changes during the Twinning Project. The process of becoming personally transformed and permanently bonded to a group, which we believe is needed to affect long-term changes to reoffending rates, takes time^{10, 11}. As participants for the Twinning Project are recruited with less than 12 months of their sentence left to serve, we have a short timeframe to collect survey responses, as some participants may leave prison just three months after the programme finishes. Even then, we expect some participants to have completed their sentences, but we deem this attrition cost justifiable to measure emerging trait fusion with this valuable population. We expect changes to fusion after three months to be smaller than they would be over a longer time period. Nonetheless, we predict that changes in fusion will be trending in the right direction for associations with our behavioural outcomes. As part of the hydraulic nature of de-fusing from one group in association with fusing to another¹², we predict that fusion to criminal groups will decrease, especially where fusion to alternative groups increases. We investigate three causal pathways to explain social bonding, which are well supported in the literature:

- 1) Divergent paths to fusion and identification: personal transformation and shared acquired traits;
- 2) Attachment and phenotypic matching;
- 3) Ritual impact and reduced impulsivity.

(2) Outcomes

We predict that higher levels of identity fusion to the Twinning Project will be associated with:

- 1) More future orientation (i.e., perceived life chances and future employment);
- 2) Behavioural outcomes;
 - a. Improved prison / probation behaviours;
 - b. Reduced recidivism.

Similarly, we predict that those who fuse or identify with criminal groups will be more likely to engage in societally negative behaviours.

Positive and negative prison behaviours: Positive and negative behaviours captured and handled by HMPPS will be analysed (Table 1). We will compare cumulative behavioural data three months pre-programme and three months post-programme, looking for increases in positive behaviours and decreases in negative behaviours. We may also compare participants' behaviour *during* the programme, compared to before or after. We may categorise prison/probation behaviours into binary variables, i.e., improvement vs deterioration.

Table 1. *Analysing behaviour via HMPPS data*

Sample	Value	Items
Prison	Positive	Positive case notes; activity attendance; visit attendance
	Negative	Negative case notes; adjudications
Probation	Positive	Positive case notes; work attendance; further training, appointment attendance.
	Negative	Negative case notes; breaches

Recidivism: Reoffending data captured by the Police National Computer (PNC) and administered by the MoJ (Ministry of Justice) will be used for analyses. Data captured 12 and 24 months after release will be analysed. A simply binary reoffending variable will be used, as well as changes to severity of crime compared to index crime, and time-lapsed since reconviction. This data will be linked to survey data for the subset who completed surveys. A wider analysis of all Twinning Project participants who completed the programme in a 12-month period will also be conducted by the Justice Data Lab (see 'Control Groups' below).

Significance

This research seeks to understand not only whether the Twinning Project can help formerly incarcerated people to stay out of prison, but how. This will enable us to not only increase its effectiveness for diverse custodial and community populations, but to pave the way for similar interventions working with a wider range of team sports and at-risk populations.

Design and sampling plan

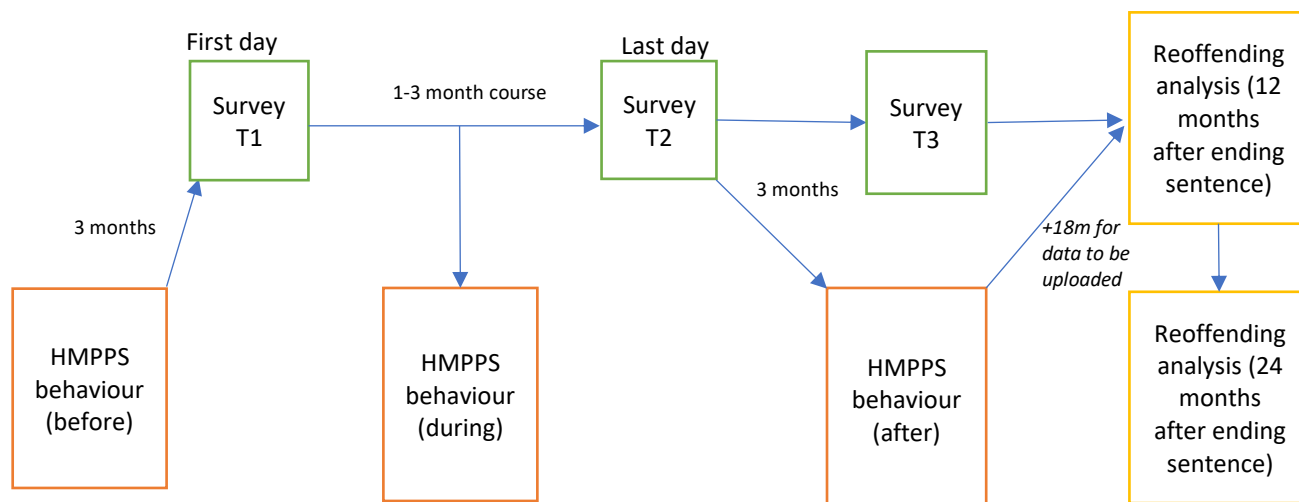
Prison

Around 1,800 participants will be completing the Twinning Project across 60 UK prisons (men and women) over a 12-month period (October 2021-October 2022). Participants must have a maximum time left to serve of 12 months and participants with sexual offences are not admitted on to the programme. Generally, cohorts are self-selecting: 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 Twinning Project programmes. Participants will complete HMPPS' Upshot standard gym survey on wellbeing and physical health.

During the 12-month period, the research will have access to participants' prison behavioural and reoffending data. At 11 sites, which have been selected for being regionally and category diverse, participants will also complete our longitudinal questionnaire. All participants enrolled on identified cohorts will be eligible to participate. Each site will collect data from at least three cohorts over the 12-month period, garnering approximately 330 responses. Each survey will be completed at T1 (at the start of the first day of the course), T2 (end of the last day of the course), and T3 (three months after the course, completed in their cell), see Figure 1. Coaches and prison staff will receive research training prior to data collection. Only cohorts in adult prisons (age 18+) are included in the design. Participation in the research is optional.

All survey data will be linked with HMPPS' behaviour records (see Table 1). Most remarkably, we will link survey data with reoffending data at 12 and 24 months after release. Even if formerly incarcerated people who enrolled on the Twinning Project do reoffend, we can establish whether those fused with the Twinning Project are committing less severe crimes in relation to their index crime, or manage to stay out of prison longer, than those who do not form a bond with the Twinning Project. We can also explain the mechanisms underlying these social bonds.

Figure 1 *Timeline for data collection points*



Probation

Around 75 participants will complete the Twinning Project with football clubs in community. Cohorts are self-selecting and apply following advertisements at probation offices or via recommendations from their offender manager. Participants must have a maximum time left to serve of 12-months and participants with sexual offences are not admitted on to the programme. All participants aged 18+ enrolled on identified cohorts will be eligible to participate. These participants will also be invited to complete our surveys at T1 and T2, led by coaches, as well as a follow up survey via a link sent to their phone, if they agree to supply us their contact details at T2. This survey data will be linked with probation and reoffending behaviours, as per the prison component (see Table 1). Overall attendance and retention will be compared with similar regional programmes. It is possible that the probation programme, which is being piloted, does not reach the minimum threshold of participants required for statistical analyses ($n = 30$) or has substantially variable course content, in which case we will exclude probation participants from analyses.

Control groups

For both the prison and probation samples, control groups will be identified. Most people in prison on 'good' behaviour are enrolled in some form of intervention or programme, usually several programmes, which often vary regionally. Due to the high-profile nature of the Twinning Project's football clubs, it is challenging to find a well-matched control programme that also offers the nationwide scope of the Twinning Project. As such, the control group will be handpicked by HMPPS staff who have access to prison/probation records. Participants will be matched by site, age, and behaviour level. The HMPPS staff selecting participants for the control group will not personally know individuals in the Twinning Project or the control groups. Wider analyses of reoffending rates will also be conducted by the Justice Data Lab, using propensity score matching.

Sample size

We used the software program G*Power to conduct a power analysis. Our goal was to obtain .95 power to detect a medium effect size of .25 at the standard .05 alpha error probability. A minimum of 220 participants is necessary for Chi-squared tests with 5 *DF*, 129 people for regression analyses with up to 4 predictors, and 210 people is determined necessary for within subject *t*-tests.

We thus wanted to recruit a minimum of 320 participants in prison, considering that some might drop out and that the people in the probation study might not complete T3 at all. A further 320 participants will be in the control sample so that the two are equally weighted.

In addition, we will aim to recruit 130 participants on probation, enough for regression analyses as a separate sample from the prison population, although some analyses may be combined (prison + probation samples, controlling for sample if necessary).

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