Summary

This analysis assessed the impact on re-offending of persons who participated in the 'Being Dad' programme and Family Days activities run by the Pre-school Learning Alliance in conjunction with the Chaplaincy team at HMP YOI Stoke Heath. The one year proven re-offending rate[1] for 30 offenders who participated in the 'Being Dad' programme and the Family Days activities was 50%, compared with 51% for a matched control group of similar offenders. Statistical significance testing has shown that this difference is not significant[2]; suggesting that at this stage there is insufficient evidence to draw a conclusion about the impact of the 'Being Dad' programme and the Family Days activities on re-offending. However, the results of the analysis do not mean that the 'Being Dad' programme and the Family Days activities at HMP YOI Stoke Heath failed to impact on re-offending.

What you can say: There is insufficient evidence at this stage to draw a conclusion about the impact of participating in the 'Being Dad' programme and Family Days activities at HMP YOI Stoke Heath on re-offending.
What you cannot say: This analysis shows that participating in the 'Being Dad' programme and Family Days activities at HMP YOI Stoke Heath reduced proven re-offending by 1 percentage point, or by any other amount.

Introduction

The Pre-school Learning Alliance is an early-years educational charity and voluntary sector provider of childcare and education for young children in England. The 'Being Dad' programme and Family Day activities are delivered by the Pre-school Learning Alliance who works in conjunction with the Chaplaincy team at HMP YOI Stoke Heath.

The Pre-school Learning Alliance endeavours to fulfil many of the requirements of Care Pathway 6 - Children and Families. The Pre-school Learning Alliance provides play activities for children visiting their parents in custody, facilitates parenting courses through the 'Being Dad' programme and offers Family Day activities. The aim is to give offenders as many opportunities to strengthen and maintain family bonds

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[1] The **one year proven re-offending rate** is defined as the proportion of offenders in a cohort who commit an offence in a one year follow-up period which was proven through receipt of a court conviction, caution, reprimand or warning during the one year follow-up or in a further six month waiting period. The one year follow-up period begins when offenders leave custody or start their probation sentence.
[2] The difference was non-significant, p = 0.91. Statistical significance testing is described on page 5 of this report.

by offering visits, family days and making the visits hall a more pleasant environment. The parenting courses aim to give Fathers a better grounding in positive parenting practice, and how they can be good parents from prison.

Offenders are free to apply for the courses provided by the Pre-school Learning Alliance but they are checked for Child Protection issues or anything that may prevent them from taking part in family activities and behaviour is also noted. Family days are only given to those who have had no adjudications for at least 3 months.

This analysis relates to offenders who participated in the 'Being Dad' programme and Family Days activities provided by the Pre-school Learning Alliance between 2008 and 2010 at HMP YOI Stoke Heath.

Processing the Data

66 The Pre-school Learning Alliance sent data to the Justice Data Lab for 66 offenders who had participated in the 'Being Dad' programme and Family Days activities during 2008 to 2010.

62 62 of the 66 offenders were matched to the Police National Computer, a match rate of 94%. There was one individual where date of birth was not available and one individual where forename was not provided, which meant that it was not possible to find these people on the Police National Computer.

30 30 offenders had an identifiable custodial sentence where they were released from custody between 2008 and 2010. Analysis on the unmatched offenders revealed that they have either since been released from prison in 2011 or after where re-offending data is not yet available, or the relevant sentence could not be found on the administrative datasets used.

Creating a Matched Control Group

30 Of the 30 offender records for which re-offending data was available, all 30 could be matched to offenders with similar characteristics but who did not participate in the 'Being Dad' programme and Family Days activities at HMP YOI Stoke Heath. In total the matched control group consisted of 6,616 offender records.

The Annex provides information on the similarity between the treatment and control groups. Further data on the matching process is available upon request.

Results

The one year proven re-offending rate for 30 offenders who participated in the 'Being Dad' programme and the Family Days activities was 50%. This compares to 51% for a matched control group of similar offenders. This information is displayed in Figure 1 below.

Figure 1 below presents the 95 per cent confidence intervals for the re-offending rates of both groups, i.e. the range in which we can be 95 per cent sure that the true re-offending rate for the groups lie. For this analysis we can be confident that the true difference in re-offending between two groups is between 19 and -21 percentage points. However, because this difference crosses 0, we cannot be sure either way that participating in the 'Being Dad' programme and Family Days activities provided by the Pre-school Learning Alliance led to a reduction or an increase in re-offending and thus cannot draw a firm conclusion about its impact. It is important to show confidence intervals because both the treatment and matched control groups are samples of larger populations; the re-offending rate is therefore an estimate for each population based on a sample, rather than the actual rate.

Figure 1: The best estimates for the one year proven re-offending rate for offenders who participated in the 'Being Dad' programme and the Family Days activities provided by the Pre-school Learning Alliance at HMP YOI Stoke Heath.
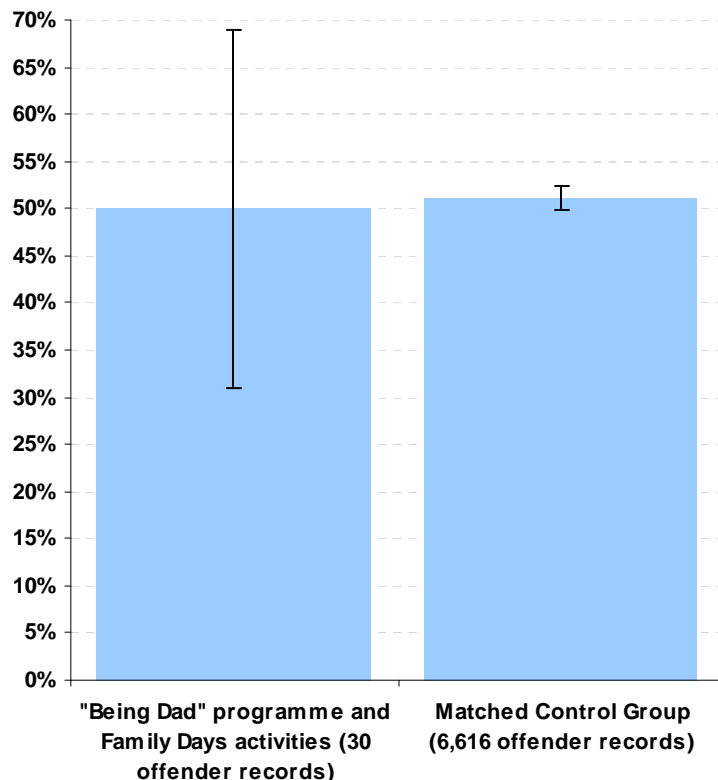
In this case the confidence intervals are particularly wide; this is to be expected when the size of the treatment group (in this case, 'Being Dad' programme and Family Days activities at HMP YOI Stoke Heath) is very small. The precision of this estimate could be improved if the size of the offender group used in the analysis was increased. It is recommended that the analysis is repeated on a larger sample, including previous years of information, and when additional years of data become available.

Caveats and Limitations

The statistical methods used in this analysis are based on data collected for administrative purposes. It should be noted that it has only been possible to control for a limited amount of information about the offenders who are included within this analysis. While these include details of each offender's previous criminal, benefit and employment history alongside more basic offender characteristics such as age, gender and ethnicity, it is possible that other important contextual information that may help explain the results has not been accounted for. In particular, we have been unable to statistically control for whether the individuals have children and the quality of these relationships. Additionally, we have been unable to statistically control for adjudications in prisons, as in this case the Family Days activities were only available to those who had no adjudications for at least 3 months in this analysis. The control group against which re-offending rates for those participating in the 'Being Dad' programme and the Family Days activities have been compared will therefore include offenders both with and without the specific family needs that the Pre-School Learning Alliance are seeking to address.

It is also possible that there are additional underlying characteristics about the individuals included in the analysis which were not captured by the data, for example attendance on other interventions targeted at offenders, that may have impacted re-offending behaviour.

Many organisations that work with offenders will look to target specific needs of individuals; for example improving housing, or employability. However, how the organisations select those individuals to work with could lead to selection bias, which can impact on the direction of the results. For example; individuals may self select into a service, because they are highly motivated to address one or more of their needs. This would result in a positive selection bias, meaning that for these persons we would generally expect a better re-offending outcome as they are more motivated. Alternatively, some organisations might specifically target persons who are known to have more complex needs and whose attitudes to addressing their needs are more challenging. This would result in a negative selection bias, meaning that for these persons we would generally expect a poorer re-offending outcome as they are not motivated. However, factors which would lead to selection bias in either direction are not represented in our underlying data, and cannot be reflected in our modelling. This means that all results should be interpreted with care, as selection bias cannot be accounted for in analyses.

Furthermore, only 30 of the 66 offenders originally shared with the MoJ were in the final treatment group. The section "Processing the Data" outlines key steps taken to obtain the final group used in the analysis. In many analyses, the creation of matched control group will mean that some individuals, who will usually have particular characteristics – for example a particular ethnicity, or have committed a certain type of offence, will need to be removed to ensure that the modelling will work. Steps will always be taken at this stage to preserve as many individuals as possible, but due to the intricacies of statistical modelling some attrition at this stage will often result. As such, the final treatment group may not be representative of all offenders who participated in the 'Being Dad' programme and the Family Days activities provided by Pre-school Learning Alliance at HMP YOI Stoke Heath. In all analyses from the Justice Data Lab, persons who have ever been convicted of sex offences will be removed, as these individuals are known to have very different patterns of re-offending.

The re-offending rates included in this analysis **should not** be compared to the national average, nor any other reports or publications which include re-offending rates – including those assessing the impact of other interventions. The re-offending rates included in this report are specific to the characteristics of those persons who participated in the 'Being Dad' programme and the Family Days activities, and could be matched. Any other comparison would not be comparing like for like.

For a full description of the methodology, including the matching process, see www.justice.gov.uk/downloads/justice-data-lab/justice-data-lab-methodology.pdf.

Assessing Statistical Significance

This analysis uses statistical testing to assess whether any differences in the observed re-offending rates are due to chance, or if the intervention is likely to have led to a real change in behaviour. The outcome of the statistical testing is a value between 0 and 1, called a 'p-value', indicating the certainty that a real difference in re-offending between the two groups has been observed. A value closer to 0 indicates that the difference in the observed re-offending rates is not merely due to chance. For example, a p-value of 0.01 suggests there is only a 1 per cent likelihood that any observed difference in re-offending has been caused by chance.

For the purposes of the analysis presented in this report, we have taken a p-value of up to 0.05 as indicative of a real difference in re-offending rates between the treatment and control groups.

The confidence intervals in the figure are helpful in judging whether something is significant at the 0.05 level. If the confidence intervals for the two groups do not overlap, this indicates that there is a real difference between the re-offending rates.

Annex

Table 1: Characteristics of offenders in the treatment and control groups

	Treatment Group	Matched Control Group	Standardised Difference
Number in group	**30**	**6,616**	
Ethnicity			
White	87%	87%	0
Black	13%	13%	0
Nationality			
UK Citizen	100%	100%	0
Gender			
Proportion that were male	100%	100%	0
Age			
Mean age at Index Offence	20	20	-2
Mean age at first contact with CJS	13	13	2
Index Offence[1]			
Violent offences including robbery	57%	59%	-4
Burglary	17%	15%	5
Theft, handling and criminal damage	13%	14%	-2
Drugs	13%	12%	3
Length of Custodial Sentence			
12 months to 4 years	100%	100%	0
Criminal History[2]			
Mean Copas Rate	-0.79	-0.81	3
Mean total previous offences	17	17	4
Mean previous criminal convictions	7	7	3
Mean previous custodial sentences	2	2	4
Mean previous court orders	3	3	-3
Employment and Benefit History			
In P45 employment (year prior to conviction)	27%	28%	-4
In P45 employment (month prior to conviction)	3%	4%	-1
Claiming Out of Work Benefits (year prior to conviction) [3]	70%	68%	5
Claiming Job Seekers Allowance (year prior to conviction)	67%	65%	3
Claiming Incapacity Benefit (year prior to conviction)	10%	12%	-5
Claiming Income Support (year prior to conviction)	0%	0%	0
Notes:			
1 Index Offence is based on OGRS categories. Further details on make-up of categories available upon request. 2 All excluding Penalty Notices for Disorder. All prior to Index Offence. 3 Out of Work Benefits include people on Jobseeker's Allowance (JSA), Employment and Support Allowance (ESA), Incapacity Benefits (IB) and Income Support (IS) but it does not count people whose primary benefit is Carer's Allowance (CA).			
All figures (except mean copas rate) are rounded to the nearest whole number, this may mean that percentages do not sum to 100%.			
Standardised Difference Key			
Green - the two groups were well matched on this variable (-5% to 5%)			
Amber - the two groups were reasonably matched on this variable (6% to 10% or -6% to -10%)			
Red - the two groups were poorly matched on this variable (greater than 10% or less than -10%)			

Table 1 shows that the two groups were well matched on all variables found to have associations with receiving treatment and/or re-offending. All of the standardised mean differences are highlighted green because they were between -5% and 5%, indicating close matches on these characteristics.

Contact Points

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