

Justice Data Lab Re-offending Analysis: Family Man – Safe Ground

Summary

This analysis assessed the impact on re-offending of attending the Family Man programme run by the organisation Safe Ground. The one year proven re-offending rate¹ for 83 offenders attending the Family Man programme was 39%, compared with 47% for a matched control group of similar offenders. Statistical significance testing has shown that this difference in the re-offending rates is not statistically significant²; suggesting that at this stage there is insufficient evidence to draw a conclusion about the impact of the Family Man programme on re-offending. However, the results of the analysis do not mean that attending the Family Man programme 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 attending the Family Man programme run by Safe Ground on reoffending.

What you cannot say: This analysis shows that the Family Man programme reduced re-offending by 8 percentage points or any other amount.

Introduction

Safe Ground is a charity working with offenders on a range of projects both in prison and in the community with the aim of reducing re-offending by developing relationship skills. This analysis relates to offenders who completed the Family Man programme between 2005 and 2011 in HMP Belmarsh, HMP Birmingham, HMP Bristol, HMP Highpoint, HMP Leeds and HMP Wandsworth. Family Man is a programme about family relationships, which uses drama and group work to develop offenders' relationship skills and challenge attitudes, thinking and behaviour. All programme participants were male.

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.

²The difference was non-significant, p=0.12. Statistical significance testing is described on page 4 of this report.

Processing the Data

333

Safe Ground sent data to the Justice Data Lab for 333 offenders who had completed the Family Man programme whilst in HMP Belmarsh, HMP Birmingham, HMP Bristol, HMP Highpoint, HMP Leeds or HMP Wandsworth between 2005 and 2011.

291

291 of the 333 offenders were matched to the Police National Computer, a match rate of 87%. Dates of birth were not provided for 23 (6.9%) of the unmatched offenders and forenames were not provided for 2 (0.6%) of the unmatched offenders; they could not be matched as date of birth and forename are requirements for matching.

83

83 offenders had an identifiable custodial sentence with a release date from prison before 2011. Analysis on the unmatched offenders revealed that they have either since been released from prison (2011 or after where re-offending data is not yet available), or have not yet been released (i.e. a number were serving long custodial sentences), or the relevant sentence could not be found on the administrative datasets used.

Creating a Matched Control Group



Of the 83 offender records for which re-offending data was available, all 83 could be matched to offenders with similar characteristics but who did not attend the Family Man programme. In total the matched control group consisted of 75,688 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.

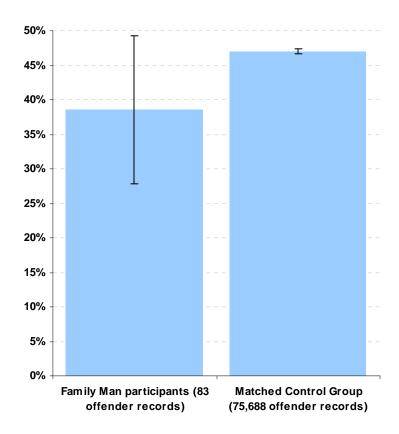
Results

The one year proven re-offending rate for 83 offenders on the Family Man programme was 39%. This compares to 47% for a matched control group of similar offenders. This information is displayed in Figure 1 on the next page.

Figure 1 on the next page 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 2 groups is between 3 and -19 percentage points. However, because this difference crosses 0, we cannot be sure either way that attending the Family Man programme 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 attending the Family Man programme and a matched control group.



The precision of this estimate could be improved if the size of the Family Man programme 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 family relationships in this analysis. The control group against which re-offending rates for those participating in the Family Man programme have been compared will therefore include offenders both with and without the specific family needs that Safe Ground are seeking to address.

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 83 of the 333 offenders on the Family Man programme 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 have been attended the Family Man programme. 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 reoffending.

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 Family Man participants who 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

Table 1. Characteristics of offenders in the			
	Treatment Group	Matched Control Group	Standardised Difference
Number in group	83	75,688	
Ethnicity			
White	55%	55%	2
Black	37%	39%	-3
Asian	7%	6%	3
Nationality			
UK Citizen	96%	97%	-1
Foreign National	4%	3%	1
Gender			
Proportion that were male	100%	100%	0
Age			
Mean age at Index Offence	31	31	1
Mean age at first contact with CJS	16	16	2
Index Offence ¹			
Violent offences including robbery	37%	37%	0
Burglary	27%	26%	0
Theft and handling	10%	10%	-1
Motoring offences, including theft of and from Vehicles	8%	9%	-2
Drugs	14%	14%	2
Other	4%	4%	0
Length of Custodial Sentence			
6 months or less	5%	6%	-6
6 months to 12 months	8%	8%	1
12 months to 4 years	59%	58%	2
4 years to 10 years	28%	28%	0
Criminal History ²			
Mean Copas Rate	-0.72	-0.70	-3
Mean total previous offences	36	36	-2
Mean previous criminal convictions	13	14	-2
Mean previous custodial sentences	5	5	-2
Mean previous court orders	3	3	-1
Employment and Benefit History			
In P45 employment (year prior to conviction)	24%	24%	1
In P45 employment (month prior to conviction)	11%	11%	0
Claiming Out of Work Benefits (year prior to conviction) 3	65%	65%	0
Claiming Job Seekers Allowance (year prior to conviction)	45%	44%	1
Claiming Incapacity Benefit (year prior to conviction)	29%	29%	-1
Claiming Income Support (year prior to conviction)	23%	23%	-1
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 on the previous page shows that the two groups were well matched on all but one variable found to have associations with receiving treatment and/or reoffending. Nearly all of the standardised mean differences are highlighted green because they were between -5% and 5%, indicating close matches on these characteristics. The variable "6 months or less" is not as well balanced in the treatment and control groups in this instance, but overall the groups were still well balanced on the vast majority of characteristics.

Contact Points

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General information about the official statistics system of the United Kingdom is available from www.statistics.gov.uk

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