



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 131 offenders attending the Family Man programme was 37%, compared with 44% 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.

Statistical significance testing has also shown that individuals attending the Family Man programme run by Safe Ground experienced a real reduction in the frequency of re-offending of 0.33 offences per individual. Please refer to the Additional proven re-offending measures section of this report for more information.

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 re-offending.

What you cannot say: This analysis shows that the Family Man programme decreased proven re-offending by 7 percentage points, or by 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. Family Man is a family relationships programme, delivered 4 days per week over 7 weeks, which uses group work, drama and role play in combination with written work to engage learners who tend to struggle in a more traditional classroom environment. The programme also incorporates working with an adult family supporter (nominated by each student - usually a partner or relative but occasionally a friend, volunteer or offender manager), who work with the student towards a bespoke action plan with targeted, achievable goals. The programme

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, $p=0.13$. Statistical significance testing is described on page 6 of this report.

includes a 'What Next' day (a resettlement event bringing together internal and external support services) and a family presentation day. The programme is taught by two full-time tutors (usually prison education staff or officers) and a part-time family support worker.

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, HMP Parc and HMP Wandsworth. This analysis includes individuals from the two previous Safe Ground requests published in October and November 2013.

Processing the Data

164 Safe Ground sent data to the Justice Data Lab for 164 offenders who had completed the Family Man programme whilst in HMP Belmarsh, HMP Birmingham, HMP Bristol, HMP Highpoint, HMP Leeds, HMP Parc or HMP Wandsworth between 2005 and 2011. 83 of the 164 offenders are those that were matched in the previous Safe Ground request published in November 2013. These records were kept in agreement with Safe Ground for subsequent analysis when further years of data became available as recommended in previous reports.

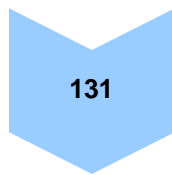
160 160 of the 164 offenders were matched to the Police National Computer, a match rate of 98%.

131 131 offenders had an identifiable custodial sentence with a release date from prison before 2012.

Analysis of the unmatched data revealed the following:

- There were 17 individuals that started attending the Family Man programme in 2012. These offenders would have been released from prison in 2012 or after, where re-offending data is not currently available.
- There were 3 individuals that could not be included in the analysis as they had a previous sexual offence.
- The remaining 9 individuals appear to have been released from prison before the intervention end dates provided by Safe Ground according to the MoJ administrative records.

Creating a Matched Control Group



Of the 131 offender records for which re-offending data was available, all 131 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 79,067 offender records.

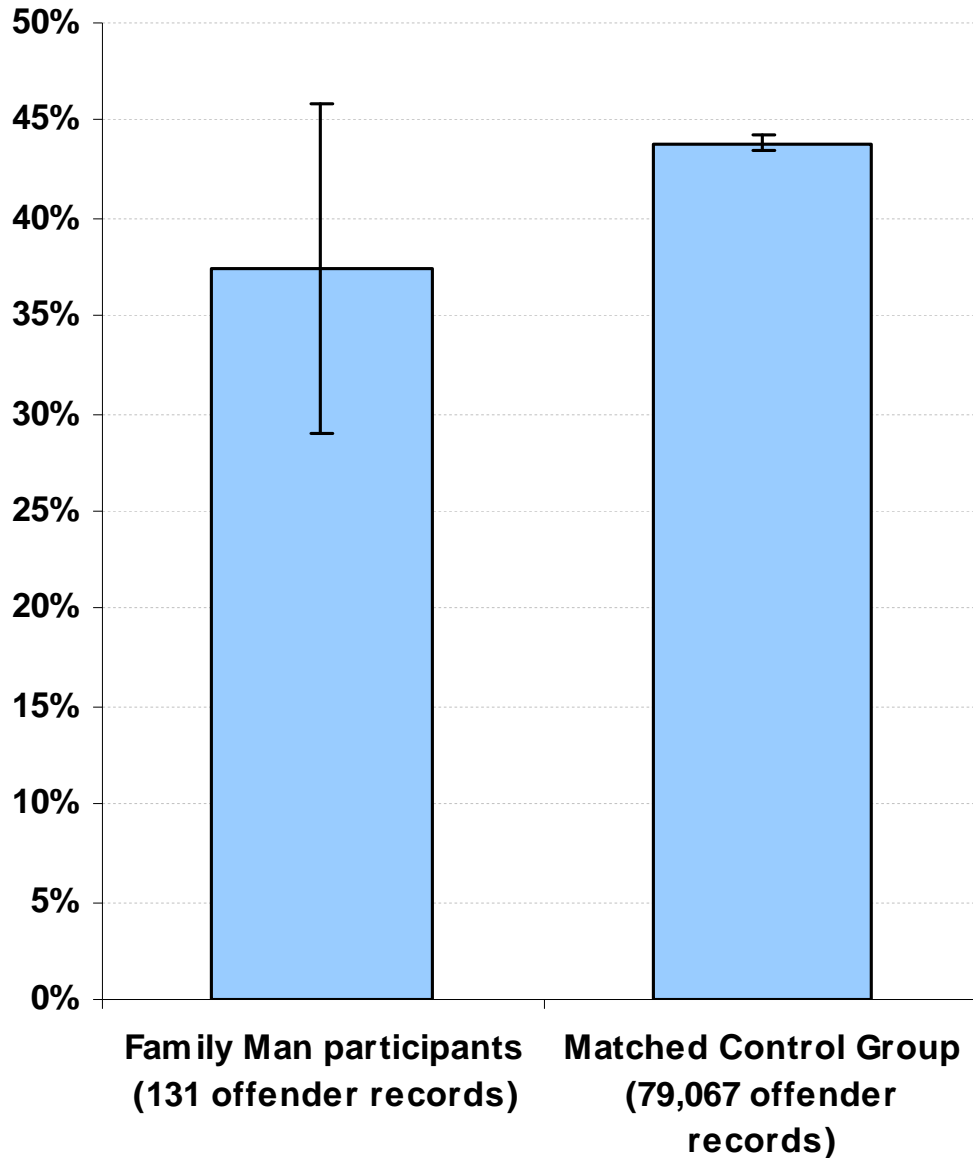
The Annex provides information on the similarity between the treatment and control groups. Further data on the matching process is available upon request.

Results

The one year proven re-offending rate for 131 offenders on the Family Man programme was 37%. This compares to 44% 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 two groups is between 2 and -15 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.

Additional proven re-offending measures

Frequency of re-offending

The frequency of one year proven re-offending for 131 offenders attending the Family Man programme was 1.10 offences per individual, compared with 1.43 per individual in the matched control group. Statistical significance testing has shown that this difference in the re-offending rates is statistically significant³.

This analysis indicates that individuals, attending the Family Man programme run by Safe Ground experienced a real reduction in the frequency of re-offending. The same caveats and limitations apply to these findings, which are described below.

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 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 relationship 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 131 of the 164 offenders 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 a

³ The p-value for this significance test was 0.05. Statistical significance testing is described on page 6 of this report.

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 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 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 attended the Family Man programme, 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 <http://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	131	79,067	
Ethnicity			
White	54%	54%	1
Black	36%	36%	-1
Other	10%	10%	0
Nationality			
UK Citizen	94%	94%	0
Foreign National	6%	6%	0
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	0
Index Offence¹			
Violent offences including robbery	40%	39%	1
Burglary	22%	22%	1
Theft and handling	9%	9%	0
Motoring offences, including theft of and from Vehicles	8%	9%	-1
Drugs	16%	16%	-1
Other ²	5%	4%	1
Length of Custodial Sentence			
12 months or less	10%	10%	0
12 months to 4 years	60%	60%	0
4 years to 10 years	30%	30%	-1
Criminal History³			
Mean Copas Rate	-0.71	-0.72	1
Mean total previous offences	36	35	3
Mean previous criminal convictions	13	13	3
Mean previous custodial sentences	5	5	3
Mean previous court orders	3	3	2
Notes:			
1 Index Offence is based on OGRS categories. Further details on make-up of categories available upon request.			
2 Other offences include fraud and forgery and criminal or malicious damage.			
3 All excluding Penalty Notices for Disorder. All prior to Index Offence.			
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.

In addition to the variables listed in Table 1 it would have been helpful for us to have taken into account the employment and benefit history for both the group that Safe Ground worked with, and the matched control group. This information is currently not available routinely to the Justice Data Lab for individuals with a release date from custody or an identifiable sentence (such as community, conditional discharge or fine) in 2011. Therefore, the employment and benefit information has been dropped for all individuals in this report.

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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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