



Summary

This analysis assessed the impact on re-offending of a programme run by Everyday Skills targeted at offenders in the Northumbria Probation Trust area, serving community sentences or after release from custody on licence. The one year proven re-offending rate¹ for 214 offenders who participated in the programme run by Everyday Skills was 33%, compared with 36% for a matched control group of similar offenders. Statistical significance testing has shown that this difference is not significant²; suggesting that at this stage there is insufficient evidence to draw a conclusion about the impact of the programme provided by Everyday Skills on re-offending. However, the results of the analysis do not mean that the programme run by Everyday Skills 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 the programme run by Everyday Skills on re-offending.

What you cannot say: This analysis shows that the programme run by Everyday Skills decreased proven re-offending by 3 percentage points, or by any other amount.

Introduction

Everyday Skills have been delivering employment and skills programmes designed to assist disadvantaged individuals to overcome barriers and progress into education, employment and training since 1995.

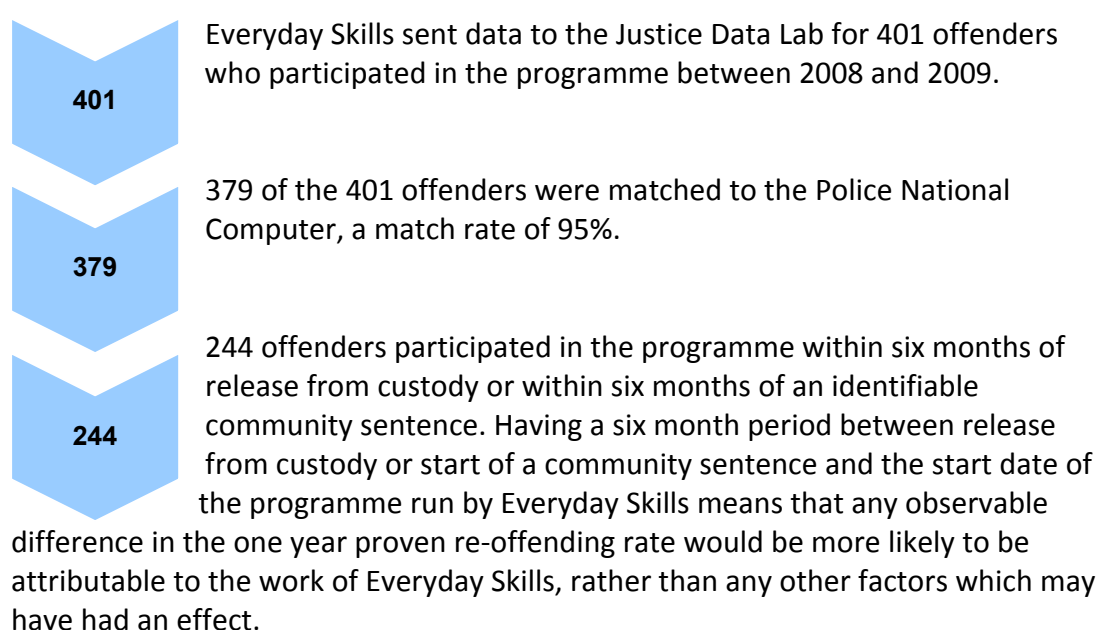
The programme run by Everyday Skills aims to provide an enhanced level of information, advice, guidance, and access to learning for offenders in the Northumbria Probation Trust area with the aim of improving skills and supporting offenders to prepare for secure employment. Through the programme, offenders can access a range of non accredited learning opportunities based around improving their likelihood of securing employment, such as helping to create CVs and covering letters of application, interview techniques and support on how to disclose offences. For those with complex barriers, signposting support is given to access further services.

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, $p = 0.40$. Statistical significance testing is described on page 6 of this report.

Everyday Skills generally work with offenders on a one-to-one basis, once a week for around half an hour to an hour, usually over a period of six months, depending on the level of support required by the individual. Eligibility for the programme was persons under the supervision of Northumbria Probation Trust that were either serving a community order or released from custody on licence, currently unemployed, and over the age of 18. These persons were identified by Northumbria Probation Trust as having an education, training or employment need, and were therefore given a referral to Everyday Skills. This analysis relates to those persons who met the criteria above, and were on the programme between 2008 and 2009.

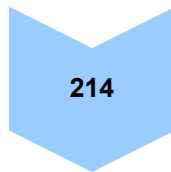
Processing the Data



Analysis of the unmatched data revealed the following:

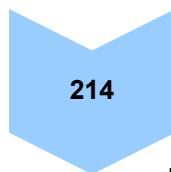
- Some were individuals who did not have a prison sentence or community sentence as the most recent proven offence before participating in the programme run by Everyday Skills; this could include persons who received cautions, fines, conditional and absolute discharges, positive drug tests or youth sentences (46 individuals across all different sentence types, 28 of these individuals participated in the programme run by Everyday Skills within 6 months of receiving a sentence).
- There were 63 individuals who had a prison sentence or community sentence as the most recent proven offence before participating in the programme run by Everyday Skills, but who were not included in the analysis. All of these individuals did not commence the programme run by Everyday Skills until at least 6 months after release from custody or after the start of a community sentence.
- There were 15 individuals that could not be included in the analysis as they had a previous sexual offence or their index offence appeared to be of a sexual nature.

- Relevant sentences could not be found on the administrative datasets for the 11 remaining individuals.



30 persons were removed because they had committed a re-offence before the programme provided by Everyday Skills commenced.

Creating a Matched Control Group



All of the 214 offender records for which re-offending data was available could be matched to offenders with similar characteristics, but who did not participate in the programme run by Everyday Skills. In total the matched control group consisted of 136,377 offender records.

As this analysis refers to those that participated in the programme provided by Everyday Skills after release from custody or after the start of a community sentence, an additional check was imposed on the control group to ensure that the matched individuals had similar characteristics. All members of the matched control group could not have committed a proven re-offence before the intervention start date for the matched Everyday Skills counterparts. Any matches where the control group had committed a proven re-offence prior to the start date of the Everyday Skills counterpart were excluded from the analysis. This check ensured that we have greater confidence that the matched control group presents a more accurate counterfactual for comparison.

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

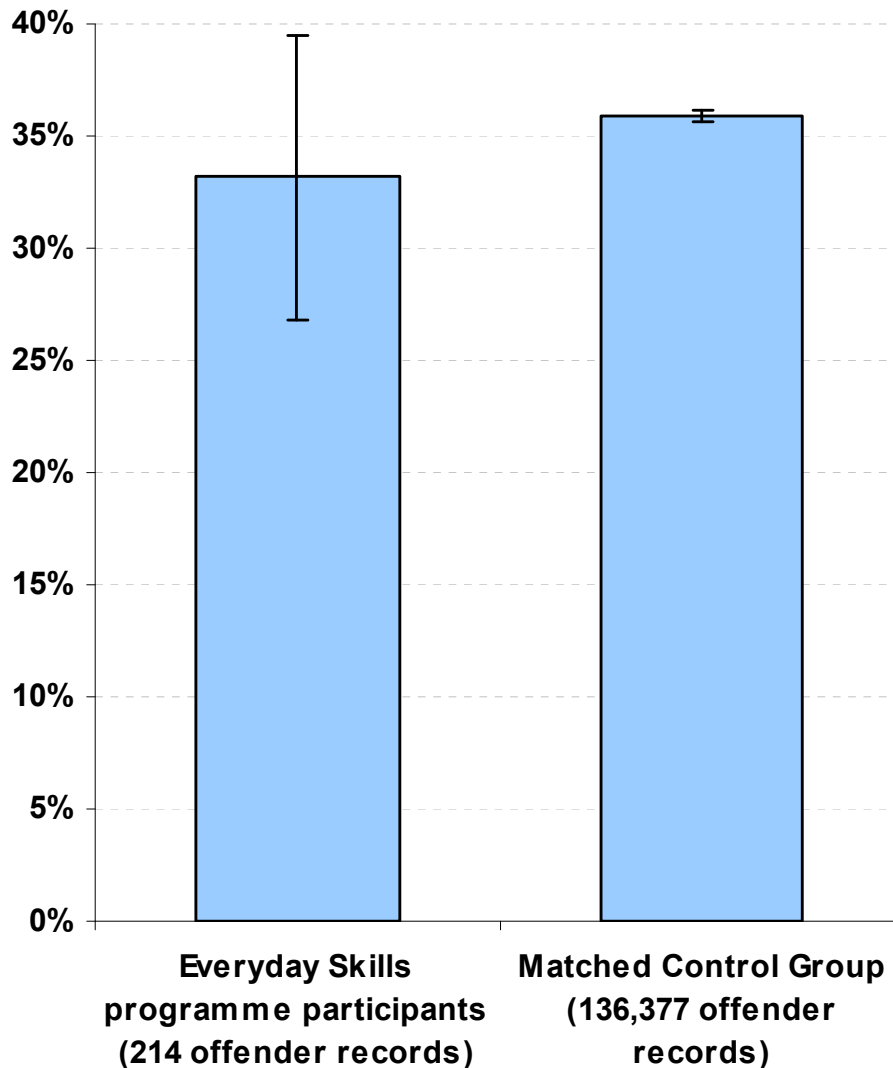
Results

The one year proven re-offending rate for 214 offenders who participated in the programme run by Everyday Skills was 33%. This compares to 36% 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 -9 and 4 percentage points. However, because this difference crosses 0, we cannot be sure either way that participating in the programme provided by Everyday Skills 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 programme run by Everyday Skills after release from custody or whilst on a community sentence, and a matched control group



The precision of this estimate could be improved if the size of the Everyday Skills 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 214 offenders who participated in the programme run by Everyday Skills was 0.75 offences per individual, compared with 1.06 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, who participated in the programme run by Everyday Skills 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. 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. It is also possible that underlying characteristics about the individuals included in the analysis which were not captured by the data, (e.g. education history; attendance on other interventions) that may have impacted participants' success in achieving the aims of the programme, and re-offending behaviour.

In this instance, it would have been particularly beneficial to be able to take account of various factors such as employment outcomes, educational attainment, and motivation for both the group that Everyday Skills worked with, and the matched control group. This information however, is currently not available routinely to the Justice Data Lab. This analysis presents a comparison between offenders with similar characteristics, where one group (the treatment group) was known to receive support through the programme provided by Everyday Skills, and the comparison group did not. Whilst the success of the matching described in the Annex suggests that the individuals were well matched to the control group on key characteristics such as demographic and criminal history, individuals with employment and education problems are known to have particular difficulties in breaking the cycle of re-offending. As this key information is missing from the underlying data used, the results of this analysis should be interpreted with particular care.

It also should be noted that offenders who participated in the programme run by Everyday Skills were either serving a community sentence or released from custody on licence. We have been unable to statistically control for those who were released from custody on licence in the control group. Therefore the control group may contain offenders who were released from custody on licence and those who were not.

³ The p-value for this significance test was 0.003. Statistical significance testing is described on page 6 of this report.

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 214 of the 401 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 a 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 programme provided by Everyday Skills. 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 programme run by Everyday Skills, 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	214	136,377	
Ethnicity			
White	100%	100%	0
Nationality			
UK Citizen	100%	100%	0
Gender			
Proportion that were male	90%	89%	1
Age			
Mean age at Index Offence	29	29	3
Mean age at first contact with CJS	17	17	1
Index Offence¹			
Violent offences including robbery	40%	41%	-1
Burglary	9%	9%	2
Theft and handling	10%	11%	-4
Motoring offences, including theft of and from Vehicles	17%	17%	1
Criminal or malicious damage	7%	7%	3
Drugs	9%	10%	-3
Fraud and Forgery or other	7%	6%	1
Criminal History²			
Mean Copas Rate	-0.89	-0.89	-1
Mean total previous offences	25	25	0
Mean previous criminal convictions	10	10	0
Mean previous custodial sentences	2	2	0
Mean previous court orders	3	3	-1
Employment and Benefit History			
In P45 employment (year prior to conviction)	47%	46%	2
In P45 employment (month prior to conviction)	21%	22%	-2
Claiming Out of Work Benefits (year prior to conviction) ³	85%	84%	3
Claiming Job Seekers Allowance (year prior to conviction)	63%	62%	1
Claiming Incapacity Benefit (year prior to conviction)	35%	34%	2
Claiming Income Support (year prior to conviction)	30%	30%	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 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

Press enquiries should be directed to the Ministry of Justice press office:

Tel: 020 3334 3555

Other enquiries about the analysis should be directed to:

Justice Data Lab Team

Ministry of Justice

Justice Data Lab

Justice Statistical Analytical Services

7th Floor

102 Petty France

London

SW1H 9AJ

Tel: 0203 334 4396

E-mail: Justice.DataLab@justice.gsi.gov.uk

General enquiries about the statistical work of the Ministry of Justice can be e-mailed to: statistics.enquiries@justice.gsi.gov.uk

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

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