

Summary

This analysis assessed the impact on re-offending of an accommodation based and floating support service run by Langley House Trust targeted at male and female offenders in the community (excluding those who have ever committed sex offences). The one year proven re-offending rate¹ for 231² offenders who received the support service provided by Langley House Trust was 26%, compared with 35% for a matched control group of similar offenders. Statistical significance testing has shown that this difference in the re-offending rates is statistically significant³; meaning that we can be confident that there is a real difference in the re-offending rate for the persons who have never committed sex offences and who received the support service run by Langley House Trust by between 2 and 14 percentage points.

However, 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 accommodation issues, homelessness status, mental health issues, multiple complex needs or any other factors associated with resettlement after release from custody or during community sentences for both the group that Langley House Trust worked with, and the matched control group. The control group against which re-offending rates for those using Langley House Trust's support service have been compared will therefore include offenders both with and without the specific accommodation needs that Langley House Trust are seeking to address. Individuals with accommodation or mental health 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. Further detail about the caveats and limitations to this analysis can be found later in this document.

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, start their court sentence, or from receipt of their caution.

² 231 individuals were matched from a cohort of 775 individuals, whose details were sent to the Justice Data Lab, as described on page 3 of this report.

³ The p-value for this significance test was 0.005. Statistical significance testing is described on page 9 of this report.

Langley House Trust accommodates and supports a variety of offenders with mixed backgrounds of offending, including those who have been convicted of sex offences. In line with the Justice Data Lab criteria, Langley House Trust excluded individuals who were known to have committed sex offences. The Justice Data Lab excluded further sex offenders when matching the Langley House Trust cohort to our administrative datasets (refer to “Processing the Data” section for more information). Therefore, the results of this analysis should be interpreted with particular care as those who have been convicted of sex offences will have been removed. This analysis is not representative of all the users of Langley House Trust as it only includes individuals that have never committed a sex offence. **Therefore, this analysis should not be seen as a full reflection of the effectiveness of Langley House Trust on all of the individuals they work with.**

What you can say: This analysis indicates that individuals who received the support service provided by Langley House Trust and who have never committed a sex offence, experienced a reduction in re-offending between 2 and 14 percentage points.

Introduction

Langley House Trust is a national charity that provides accommodation based and floating support to male and female offenders. Langley House Trust was originally set up to provide supportive accommodation for those coming out of prison in 1958 by a group of Christian professionals. Langley House Trust is established on Christian principles and foundations but the services provided are for anyone – those with faith or no faith. Their mission is to work with those who are at risk of offending or have offended, establishing positive foundations so that they can lead crime-free lives and become contributors to society. This means safer communities, fewer victims and restored lives. Also, Langley House Trust is a Housing Association, regulated by the Home and Communities Agency and is registered with the Care Quality Commission to provide registered care at several sites. Langley House Trust operates from 80 sites, spread over 20 different local authorities throughout England in the following locations: Wakefield, Rossendale, Lancaster, Wyre, Bradford, Medway, Coventry, Cheltenham, Taunton, Winchester, Poole, Rochdale, Bedford, Luton and London.

Langley House Trust works with offenders in the community (including those who are subject to statutory intervention and those who are not) and work in close partnership with local agencies to deliver end to end and holistic support covering the NOMS seven pathways to reducing re-offending. The support services run by Langley House Trust are person-centred, focusing on individual needs and enables offenders to reintegrate into society and move onto independence. The levels of support offered are dependent upon the specific needs of the individuals in question. The services run by Langley House Trust include training and education, support with substance misuse issues, learning disabilities (mild to moderate) support, mental health and personality disorders support, one to one key working, support to enable independence (such as tenancy maintenance and budgeting),

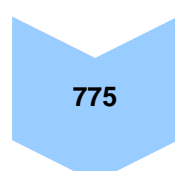
support to improve health and wellbeing, support to build positive relationships and reintegrate into society.

Individuals are referred to the services run by Langley House through criminal justice agencies for example, probation and prison and by self-referrals or referrals through friends and families. Langley House Trust works with any offender as long as the individual is over the age of 18 and is willing to engage with the service. Langley House Trust works with a large number of hard to place offender groups including those with substance misuse needs, mental health needs, housing needs, multiple complex needs and those with a wide spectrum of risk (including high risk of harm and high risk of re-offending). Additionally, Langley House Trust works with a number of sex offenders. These individuals have been excluded in this analysis as sex offenders are known to have very different patterns of re-offending and particularly complex needs which are not adequately reflected in our administrative datasets.

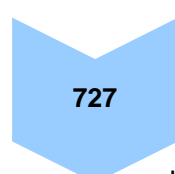
This analysis relates to offenders who received the support service run by Langley House Trust following release from custody or whilst on community sentences between 2002 and 2011.

More information on the services Langley House Trust provide can be found here: www.langleyhoustrust.org/

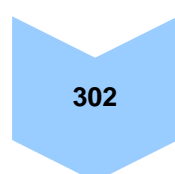
Processing the Data



Langley House Trust sent data to the Justice Data Lab for 775 offenders who received the support service in the community between 1988 and 2011.



727 of the 775 offenders were matched to the Police National Computer, a match rate of 94%. Forename, gender and date of birth were not provided for 22 of the unmatched offenders; these individuals could not be matched as forename, gender and date of birth are requirements for matching. There were 3 individuals who did not appear to have ever received a conviction at court, or their cases were currently pending. There were 2 individuals who did not match to the Police National Computer; these individuals started receiving support from Langley House Trust before 2000 (the Police National Computer was established in 2000, therefore information on the criminal history of individuals before 2000 can be inconsistent). The remaining 21 individuals could not be matched to the Police National Computer.



302 of the 727 offenders received the support service run by Langley House Trust within a year after release from custody (203 individuals) or within a year of an identifiable community sentence (a Community

Order or Suspended Sentence Order) (99 individuals). Having a year period between release from custody or the start of a community sentence and receiving the support service provided by Langley House Trust means that any observable difference in the one year proven re-offending rate would be more likely to be attributable to the work of Langley House Trust, rather than any other factors which may have had an effect.

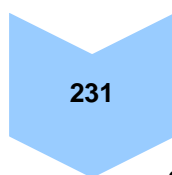
425 of the 727 offenders were not matched. Analysis of the 425 unmatched individuals revealed the following:

- Some were individuals who did not have a custodial sentence or community sentence as the most recent proven offence before receiving the support service run by Langley House Trust; this could include persons who appear to have received fines, conditional discharges, cautions or other sentences (231 individuals across all different sentence types, 116 of these individuals received the support service from Langley House Trust within a year of receiving a sentence. These 116 individuals appeared to have received a range of 9 different sentence types. It is likely that an additional analysis on individuals that received conditional discharges, fines and cautions would be possible).
- There were 150 individuals who had a custodial sentence or community sentence as the most recent proven offence before receiving the service run by Langley House Trust, but who were not included in the analysis. All of these individuals did not commence receiving the support service provided by Langley House Trust until at least a year after release from custody or a year after the start of a community sentence.
- There were 35 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.
- There were 2 individuals who were not included in the analysis as they received indeterminate custodial sentences.
- There were 7 individuals who could not be included in the analysis for modelling purposes. These individuals could not be included in the analysis as they had a criminal history that was significantly different from the remainder of the matched group, in that they had much more complex criminal histories compared to the matched group. In order to allow for the statistical modelling to work, and achieve reasonable matching quality it was necessary to remove these 7 individuals at this stage; however it does mean the results of this analysis should be interpreted with particular care as the effect on re-offending detailed within this analysis may not be expected for those individuals who have had particularly complex criminal histories.

231

71 individuals were removed because they had committed a re-offence before the support service provided by Langley House Trust commenced.

Creating a Matched Control Group



All of the 231 offender records for which re-offending data was available could be matched to offenders with similar characteristics, but who did not receive the support service run by Langley House Trust. In total the matched control group consisted of 528,622 offender records.

As this analysis refers to those that received the support service provided by Langley House Trust after release from custody or after the start of a community sentence, additional checks were 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 Langley House Trust counterparts. Any matches where the control group had committed a proven re-offence prior to the intervention start date of the Langley House Trust counterpart were excluded from the analysis. Also, all the members of the matched control group could only be matched to the Langley House Trust counterparts if they received the same sentence type. These checks ensured that we have greater confidence that the matched control group presents a more accurate counterfactual for comparison.

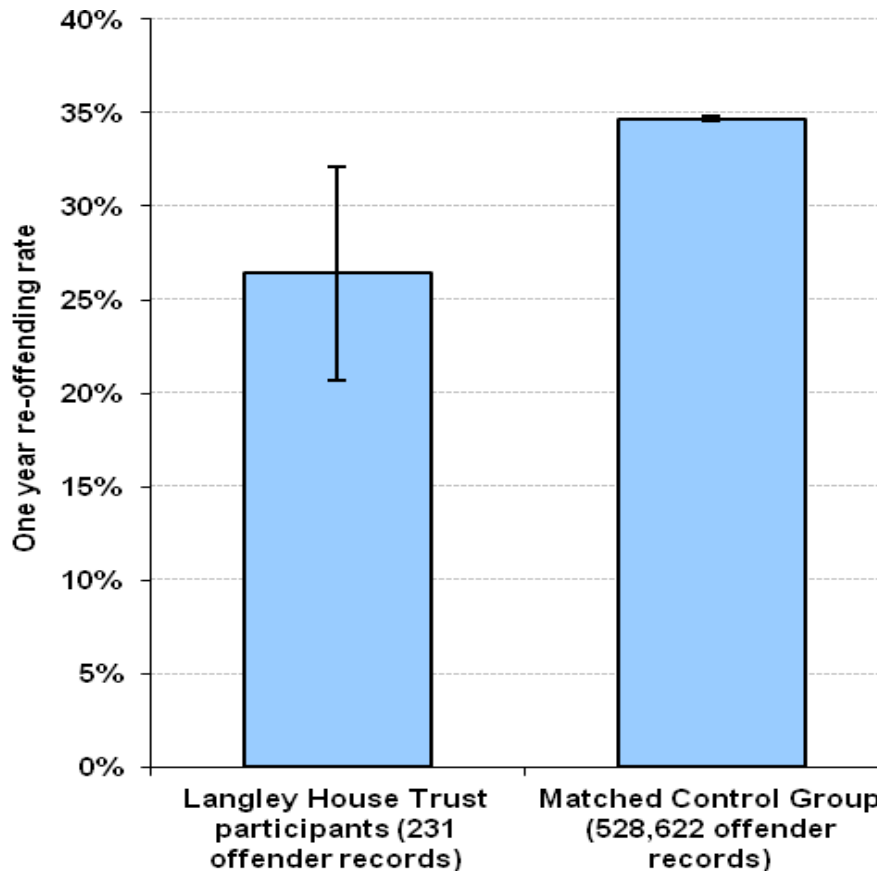
The Annex provides information on the similarity between the treatment and control groups. Further data on the matching process is available upon request.

Results

The one year proven re-offending rate¹ for 231² offenders who received the support service run by Langley House Trust and who have never committed sex offences was 26%. This compares to 35% 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 14 percentage points. 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 received the support service run by Langley House Trust in the community, and a matched control group



The precision of this estimate could be improved if the size of the Langley House Trust group used in the analysis was increased.

Additional proven re-offending measures

Frequency of re-offending

The frequency of one year proven re-offending⁴ for 231² offenders who received the support service run by Langley House Trust and who have never committed sex offences was 0.95 offences per individual, compared with 1.15 per individual in the matched control group. Statistical significance testing has shown that this difference in the re-offending rates is not statistically significant⁵.

⁴ The **frequency of one year proven re-offending** is defined as the number of re-offences committed in a one year follow-up period which were 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, start their court sentence, or from receipt of their caution.

⁵ The p-value for this significance test was 0.15. Statistical significance testing is described on page 9 of this report.

Time to re-offending

The average time to the first offence within a year for the 61 individuals that were matched, and had re-offended, and who have never committed sex offences, after receiving the support service provided by Langley House Trust was 175 days. This compares to 174 days for the 214,627 individuals who re-offended from the matched control group. Statistical significance testing has shown that this difference in the time to first re-offence within a year is not statistically significant⁶.

These results are in the same direction of the findings around the indicator of one year proven re-offending; the subject of this report. The same caveats and limitations apply to these findings, which are described on the next page.

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.

In particular it was not possible to statistically control for accommodation issues, mental health problems, substance misuse needs, any other factors that are associated with referrals to the service provided by Langley House Trust. This information is currently not available routinely to the Justice Data Lab. The control group against which re-offending rates for those receiving support provided by Langley House Trust have been compared with will therefore include offenders both with and without the specific needs that Langley House Trust aim to address. Whilst the success of the matching described in Annex A suggests that the individuals were well matched to the control group on key characteristics such as demographic and criminal history, individuals with accommodation issues or mental health problems or substance misuse needs are known to have particular difficulties in breaking the cycle of re-offending. Additionally, the service engages with offenders who have multiple complex needs, and as such could be considered to be harder to help to break 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 is possible that underlying characteristics about the individuals included in the analysis which were not captured by the data (e.g. homelessness; education history; history of drug and alcohol use etc) may have impacted participants' success in achieving the aims of the support provided by Langley House Trust, and may also have a role in affecting their re-offending behaviour. 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 at other interventions

⁶ The p-value for this significance test was 0.96. Statistical significance testing is described on page 9 of this report.

targeted at offenders, that may have impacted re-offending behaviour. Therefore, there remains a possibility that any difference in re-offending behaviour after matching reflects differences in underlying characteristics between the two groups which are not recorded in the data, rather than differences in re-offending behaviour associated with support from Langley House Trust.

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. In this instance individuals are referred to the support service run by Langley House Trust through criminal justice agencies (such as probation and prison) or personal referrals (including self referrals or by their friends and families), therefore this will lead to positive and negative selection bias.

Furthermore, only 231 of the 775 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. 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. Langley House Trust accommodates and supports a variety of offenders with mixed backgrounds of offending, including those who have been convicted of sex offences who have been excluded from this analysis; therefore the final treatment group will not be representative of all offenders who received the support service. **Therefore, this analysis should not be seen as a full reflection of the effectiveness of Langley House Trust on all of the individuals they work with.**

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 received the support service provided by Langley House Trust, 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	231	528,622	
Ethnicity			
White	92%	93%	-2
Black, Asian and Other	8%	7%	2
Nationality			
UK Citizen	94%	95%	-5
Foreign National and Unknown Nationality	6%	5%	5
Gender			
Proportion that were male	87%	86%	2
Age			
Mean age at Index Offence	33	33	0
Mean age at first contact with CJS	19	19	3
Index Offence¹			
Violent offences including robbery	41%	39%	4
Burglary	15%	15%	-2
Theft and handling	15%	17%	-5
Fraud and Forgery	5%	5%	-1
Motoring offences, including theft of and from Vehicles and Other	6%	6%	0
Criminal or malicious damage	7%	7%	3
Drugs related ²	10%	10%	0
Type of Sentence			
Individuals on community sentences	30%	30%	0
Individuals on custodial sentences of less than 12 months	14%	14%	0
Individuals on custodial sentences of 12 months to 4 years	33%	35%	-3
Individuals on custodial sentences of more than 4 years	22%	20%	4
Criminal History³			
Mean Copas Rate	-0.80	-0.83	4
Mean total previous offences	31	31	1
Mean previous criminal convictions	12	12	1
Mean previous custodial sentences	4	4	2
Mean previous court orders	3	3	2
Employment and Benefit History			
In P45 employment (year prior to conviction)	29%	30%	-3
In P45 employment (month prior to conviction)	16%	16%	-1
Claiming Out of Work Benefits (year prior to conviction) ⁴	69%	71%	-4
Claiming Job Seekers Allowance (year prior to conviction)	36%	38%	-4
Claiming Incapacity Benefit and/or Income Support (year prior to conviction)	46%	46%	-1
Notes:			
1 Index Offence is based on OGRS categories. Further details on make-up of categories available upon request.			
2 Drug related offences including importation, exportation, possession, and supply of drugs.			
3 All excluding Penalty Notices for Disorder. All prior to Index Offence.			
4 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%)

We assess whether the treatment group and the matched control group are balanced and well matched through a comparison of the standardised differences generated for every variable included in the matching process. 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.

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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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