

Annex A: Current evidence on the effectiveness of sentencing with regard to reoffending: a 2018 update on the 2017 review

1. Summary

- In 2017, we reviewed the literature since 2006 on the effectiveness of sentencing with regard to reoffending. This is the first annual update to this work, which includes only high-quality studies.
- Firstly, concerning the **effects of non-custodial and short custodial sentences**, the **international literature** suggests that reoffending rates are the same or slightly higher following short-term custody compared to sentences served in the community. In late 2017, the Campbell Collaboration¹ concluded, “Overall the evidence shows that recidivism by offenders given non-custodial sentences is no higher, if not lower, than those given custodial sentences”.
- In our review in 2017 it was concluded that **UK studies** produced by the Ministry of Justice (MoJ) presented **high quality evidence** that court orders (i.e. community orders and suspended sentence orders) are associated with **lower reoffending** compared to custodial sentences of less than a year. A 2018 follow up to this work has suggested this effect is driven by the behaviour of repeat offenders, the odds² of reoffending increasing significantly for offenders with 11 or more previous convictions.
- As at 2017, high quality studies into the effects of **duration of custody** on reoffending tended to show **short-term custody** as associated with a **negative** effect on reoffending compared to longer periods of custody. Two Dutch studies now suggest that length of incarceration is unrelated to recidivism when sentences are *very short* i.e. up to around a year; and US studies have suggested that relatively long sentences could be shortened without impacting on recidivism.
- Last year we also concluded that there is high-quality evidence to suggest that some requirements and combinations of requirements in **community orders** can reduce

¹ The Campbell Collaboration produces comprehensive syntheses of high-quality research for the benefit of policy makers and practitioners, so promoting evidence-based policy and practice. Its work is highly regarded in social science.

² Broadly speaking, a measure of the likelihood of reoffending within a designated follow up period, in most cases, one year.

reoffending (specifically, **curfew orders, supervision orders and programme requirements**) and no further evidence has been published to support or cast doubt on that conclusion. However, one US study has since bolstered support for **intensive supervision** as an alternative to custody, finding significantly lower recidivism amongst offenders supervised intensively compared to those receiving normal supervision.

- Lastly, a handful of studies have added weight to the evidence that certain programmes (that may be incorporated into sentences in England and Wales) can ‘work’ in the sense of reducing reoffending, specifically: **sex offender, drug, alcohol and mental health treatment programmes and restorative justice conferencing**. Taken together with earlier work, we conclude there is particularly good evidence for **drug misuse treatments and restorative justice conferencing**; good evidence for **anger management programmes for violent offenders and offending behaviour programmes** (although no new work has augmented the evidence base on these); mixed evidence for **drink driver requirements and mentoring programmes** (again, no changes from 2017); and **improving** evidence for **sex offending behaviour programmes, alcohol treatment programmes and mental health interventions**.

2. A reminder of the scope of this review

The original review encompassed UK and international studies on adult offenders reported in peer reviewed journals, government reports and other publications (e.g. Campbell Collaboration reviews) from 2006 to August 2017. This update covers high quality research³ published since then, to August 2018.

Whilst sentences serve multiple purposes (e.g. punishment, deterrence, rehabilitation) and have multiple effects (e.g. incapacitation, changes to social relationships), in this review we look only at reoffending, as this outcome is measurable, and relates to both deterrence and rehabilitation.

In the original review, we drew conclusions based on both the extent and quality of the available evidence, and what this evidence says about the effect of the sentence on

³ High quality research will have an adequately large and representative sample for the method used, will examine behaviour before and after the sentence, and will ensure that as many additional factors as possible (aside from the sentence) which might influence sentencing behaviour are controlled for, so that we can confidently infer that the results are due to the sentence rather than extraneous factors.

recidivism or reoffending. Evidence was characterised as either **high or good quality, mixed quality, or weak/insufficient**. In this update, for each group of studies reviewed, we first summarise the position in the 2017 review, and then summarise the up-to-date, additional evidence, highlighting any changes to our overall assessment of the strength of the evidence and the conclusions we can draw from it.

3. Comparative studies of custodial versus non-custodial sentences

In 2017 we noted that there appears to be a growing consensus amongst criminologists internationally that the effect of short-term custody is neutral or slightly criminogenic compared to sentences served in the community. The position has been since summarised by the Campbell Collaboration in a 2017 policy brief, “Overall the evidence shows that recidivism by offenders given non-custodial sentences is no higher, if not lower, than those given custodial sentences” (p.1).

We found only one additional, high quality international study to add to the evidence base (Caudy et al., 2018). This examined the relative impact of jail versus probation on the recidivism of adult offenders sentenced in a large urban county in the USA (sample or ‘n’ = 15,727). The study design controlled for most of the factors which have been shown to effect recidivism (age, criminal history, current offence type and risk of future offending), enabling us to be relatively confident that any differences found between those receiving a jail sentence and those receiving probation are most likely attributable to the difference in sentence. The authors found that jail incarceration increased the odds of recidivism by men by 140 per cent, and women by 117 per cent. The criminogenic effect of jail was exacerbated for offenders assessed as having a high risk of recidivism and those with particular needs (e.g. drug abuse and ‘family stress’, defined as marital or family relationships that presented major disorganisation or stress for the individual). Whilst a limitation of the study is that the data did not contain information on the length of incarceration – without this, and a measure of offence severity, it is possible that those sentenced to probation were simply less serious or entrenched offenders than those sentenced to jail – in the US, those incarcerated in jails (as opposed to prisons) are usually serving short sentences of less than a year for low seriousness crimes.⁴ This means the jail and probation groups are in practice likely to be fairly comparable, making the study valid and reliable.

⁴ <https://www.hg.org/legal-articles/what-is-the-difference-between-jail-and-prison-31513>

The 2017 review also concluded that there is **good evidence from UK studies** that non-custodial sanctions are associated with lower reoffending than short-term custody. The conclusion was largely based on two high quality studies from the MoJ (MoJ, 2013; Mews et al., 2015). The 2015 analysis found that court orders⁵ were associated with significantly lower proven reoffending compared to short-term custody, the one-year reoffending rate being around **four** percentage points⁶ lower for the former group compared to the latter, averaging the difference across cohorts. As per the earlier study (MoJ, 2013), the difference was greater for suspended sentence orders than community orders, at around -7 and -3 percentage points respectively. Note that whilst these percentage point differences were statistically significant and replicated across several large cohorts of offenders,⁷ the size of the effects are not particularly large: the difference of five percentage points found for the 2008 cohort after one year equates to an eight per cent reduction in the number reoffending amongst the court order group. That said, reoffending rates are high (at around 60 per cent after one year in this sample) and they are also stable, so a difference of this size may still be worth taking notice of when thinking about sentencing policy.

Building on this work, a more recent MoJ paper re-analysing the same data (Hillier and Mews, 2018) examined whether the headline finding favouring court orders over short custodial sentences differed according to offender characteristics. Most interestingly for our purposes, the study found that **court orders held greater benefits for those with a high number of previous convictions**. Specifically, for those offenders with between zero and ten previous convictions, the odds of reoffending did not differ significantly between those who had served the short custodial sentence compared to those who were starting a court order.⁸ However, for those with 11-15 previous convictions, the odds of reoffending were 14

⁵ Community order or suspended sentence order.

⁶ When we are looking at differences in percentages, we usually measure this in percentage points i.e. the number of points between the first and second percentage. This is different from percentage difference, which is the percentage increase or decrease across two different values.

⁷ Those beginning their community or suspended sentence, or being released from prison on a sentence of under 12 months, in 2008, 2009, 2010 and 2011.

⁸ This study and its predecessor compared adult offenders released from a custodial sentence of under 12 months with those commencing a court order. This is a limitation of the method, since the latter group would most likely be under probation supervision in the follow up period, whereas the custodial group would not – hence the comparison is not quite ‘like for like’. If this study was repeated using more recent data, the authors note that the supervision of offenders released from short-term custody and court orders for certain types of offender’ (p.4), post-sentence supervision being intended to reduce the likelihood of reconviction. However, a recent, high quality study from the USA (Harding et al., 2017) suggests the opposite might be true: this study found that offenders released from prison (and supervised) were indeed more likely to reoffend in the years post-release compared to those sentenced to probation, but that this was driven by technical violations of the terms of their parole rather than new substantive crimes. Because supervision makes breach offences more likely and perhaps new crimes more detectable, post-sentence supervision for those leaving prison might mean

per cent higher for the custodial group compared to the non-custodial group, rising to over a third higher for those with 16 or more previous convictions.⁹ Suspended sentence orders were associated with lower levels of reoffending than community orders in general, and were most effective for those with no previous offences.

The study also showed that, after controlling for number of previous offences, the use of court orders had a greater benefit for young (18-20 years) and older (over 50 years) offenders. However, the odds of reoffending under the various conditions (short term custody, suspended sentence and community orders) did not differ by gender or ethnicity, so both male and female, Black, White and Asian offenders showed the patterns discussed above.

4. Duration of custody

The 2017 position on duration of custody was that there is a small amount of high quality evidence from the UK and USA to suggest that **short prison terms, mostly of less one year, may be criminogenic relative to longer terms** (MoJ, 2013; Meade et al., 2012; Mears et al., 2016). One of these (Mears et al., 2016) found a curvilinear relationship between length of custody and recidivism, such that greater time served initially increased recidivism, but then after one year decreased it and after approximately two years exerted no effects. These authors suggest that the criminogenic effects of prison may accumulate rapidly in the first year as, for example, prosocial ties to employment and family are broken, anti-social ties accumulate and social capital is lost. Then inmates may adjust, social bonds may slowly be restored or the effects of rehabilitation programmes in prison may kick in. The effects of these positive factors may then level off. Meade et al. (2012) found that time served was associated with decreasing recidivism, but this effect only reached statistical significance after five years, which may be when inmates 'aged out' of the peak years of offending (it is well known that offending decreases with age).

A few high-quality US studies published in the last year or so have aimed to assess whether prison lengths could be shortened without impacting negatively on reoffending. Two of these studies (Rhodes et al., 2018; Hunt et al., 2018) concluded that **prison stays could be shortened without incurring an increase in recidivism**. For example, in a natural

more reconvictions, widening, rather than narrowing, the reconviction gap between short-term custody and court orders.

⁹ In 2017, of all offenders sentenced for indictable offences (indictable only and triable either way, combined), 39% had 11 or more previous cautions or convictions. Of all offenders sentenced for summary offences, 22% had 11 or more previous cautions or convictions.

experiment,¹⁰ one group of crack cocaine offenders who had had their sentences commuted by an average of 30 months because of a retroactively-applied change in sentencing policy were found to have exactly the same three-year recidivism rates as a 'control' group of offenders who had served their full sentence, at 38 per cent in each case (Hunt et al., 2018). Another US study using a smaller sample of male sex offenders (n = 671) found that controlling for age, prior offending and risk of offending, the odds of reoffending decreased by around 9 per cent for every year spent in prison, although for high risk offenders the length of the prison term had the opposite effect, increasing the odds of returning to prison by about 20 per cent with every year spent inside (Hsieh et al., 2018).

Another study has added to a small amount of research from the Netherlands that suggests **that length of incarceration is unrelated to recidivism when sentences are short** i.e. sentences ranging from less than one month to around one year don't really vary in their effects on reoffending (Snodgrass et al., 2011; Wermink et al., 2018). However, it is not clear the extent to which these results would generalise to the UK, where the prison context may be quite different (typically the Dutch prison regime is seen as less oppressive than that of other countries; see Raaijmakers et al., 2017) and the average length of stay is much longer than the Dutch average prison term of four months.¹¹

Two further recent studies on the experience of short-term custody warrant mentioning. These relate to the debate in criminology around the extent to which custody deters offenders from reoffending (because it is recalled as an adverse experience) or the extent to which countervailing processes (such as loss of pro-social ties and gain of anti-social ties, or the labelling effect of being an ex-prisoner) may outweigh any such deterrent effect. Casting doubt on the deterrent effect, one new study of short-term prisoners supports previous work (Drago et al., 2011; Nagin and Snodgrass, 2013) in failing to show that recall of the prison experience as harsh is associated with lower reoffending (Raaijmakers et al., 2017). The second study, a qualitative examination of eight UK offenders serving sentences of less than 12 months, supports the view that short sentences are detrimental in key ways (Llievesley et al., 2018). Participants felt that offending was needs-driven, was a way of life and part of

¹⁰ In a natural experiment, groups do not have to be rigorously matched or matched using statistical methods because it can be assumed that the external event (in this case, the retrospectively applied change to sentencing policy), will be the only systematic difference between the group of interest and the control group. Natural experiments are a rare event in social science, but are considered to be of very high validity.

¹¹ At March 2018, 46% of the prison population in England and Wales were serving a determinate prison sentence of more than four years and less than 10% were serving a sentence of less than a year. See: <https://researchbriefings.parliament.uk/ResearchBriefing/Summary/SN04334#fullreport>

their identity, and the system failed to provide rehabilitation or post release support. Released back into the same circumstances that shaped to their offending in the first place, compounded by the consequences of being labelled an ex-prisoner, their return to prison felt inevitable, such that, 'they are essentially serving a life sentence in instalments' (p.414). Whilst the authors note that post-sentence supervision is a change in policy that may help address the problem, evidence so far suggests that many prisoners are still being released without their needs being met (Her Majesty's Inspectorate of Probation, 2016). The same inspectorate report suggests that prison staff share the view that short-sentenced prisoners are likely to fail, and the authors suggest this makes it likely that the views of both prisoners and staff, 'feed into and worsen an already hopeless attitude for the future of these participants' (p.422). Although of course we cannot generalise from one study of eight participants, it does add detail and credibility to the view that short-term sentences might make reoffending more, rather than less likely.

5. Requirements of community sentences

We found two new studies relating to community sentences for this period. In 2017, based largely on a high-quality MoJ study (Mews and Coxon, 2014), we concluded that there is good evidence that intensive supervision as an alternative to custody can lessen *frequency* of reoffending, but insufficient evidence that it can have a beneficial effect on the overall proportion of offenders reoffending. A recent US evaluation of Michigan's Swift and Sure Sanctions Probation Programme¹² found that the reoffending rate of the programme participants was nine percentage points lower than that of a statistically matched control group sentenced to probation as usual, and that the odds of reoffending were 36 per cent lower (DeVall et al., 2017). Another US study found positive results for an intensive supervision programme for drink driving offenders, although the quality of this study is less clear, but they also note positive findings on intensive supervision from a 2015 meta-analysis¹³ of four published reports on intensive supervision, all of which found a reduction in recidivism (Barta et al., 2017). Taken together, it seems that these studies provide **good evidence that intensive supervision can be associated with lower reoffending**, although the US evidence is more supportive than that from the UK.

¹² This is an 'alternative to incarceration' programme; these target high risk offenders and provide intensive supervision combined with swift and certain sanctions for violations.

¹³ Meta-analyses use statistical methods to combine the results from multiple studies, in so doing overcoming many of the limitations of each study in isolation.

6. Treatments and interventions

A clutch of recent studies have provided good evidence that certain treatments can have a beneficial effect on reoffending. On mental health interventions, whilst a high-quality Canadian study failed to find any effect on recidivism for a cognitive skills programme (Kingston et al., 2018), the aforementioned UK analysis by Hillier and Mews (2018) was more positive with regard to the mental health treatment requirement (MTHR). For those with identified mental health issues, the MTHR was associated with significant reductions in reoffending where it was used compared to similar cases where it was not. Specifically, the reoffending rate was around 3.5 percentage points lower in the follow up year when it was included as part of a community order, and 5 percentage points lower when it was part of a suspended sentence order. Whilst last year we concluded that there was insufficient evidence to judge the efficacy of **mental health interventions**, this year we can therefore conclude that there is at least some **good evidence** that they can be associated with lower reoffending.

In 2017, we concluded that there was good evidence for a beneficial effect of drug treatment programmes on reoffending, and mixed evidence on alcohol treatments. A recent longitudinal study (MoJ, 2017) has increased the weight of support for both. The study looked at reoffending following community based treatments for substance misuse, using data matching techniques linking data from the MoJ with data from Public Health England to examine the same offenders (all those commencing a structured drug and alcohol treatment in 2012, n = 133,000) in the two years before and after starting treatment. It found a reduction of 44 per cent in the offending rate of participants from pre- to post, with opiate clients showing the lowest decrease (of 31 per cent) and alcohol only clients, the largest decrease (of 59 per cent). Whilst these figures seem very promising, we cannot fully infer causality because without a matched control group we cannot be confident that the reduction was due to the programme as opposed to other, unrelated factors. Note also that participation in these programmes was not necessarily as part of a sentence – most of the sample had not been recorded as committing a crime in the two years prior to treatment. Hillier and Mews' study (2018) also found that for those with an identified alcohol misuse issue, the alcohol treatment requirement was associated with lower reoffending where it was used compared to where it was not. Taken together we can conclude that there remains **good evidence for the positive effects of drug treatment**, and there is now also **some good evidence for a positive effect of alcohol treatment**.

We also concluded in 2017 that there was insufficient evidence for the efficacy of sex offender treatment programmes, a conclusion that was influenced by disappointing results

from an evaluation of the UK's core sex offender treatment programme, delivered in a custodial setting (Mews et al., 2017). However, a recent systematic review and meta-analysis from the Campbell Collaboration (Schmucker and Losel, 2017) suggests cognitive-behavioural programmes for sex offenders can significantly reduce reoffending, the mean recidivism rate across programmes being 10 per cent for treated offenders compared to 14 per cent without treatment. This review encompassed 27 studies across seven countries, but did not include the most recent MoJ work. Interestingly, the results of individual studies were very heterogenous, and the results for community-based interventions were more positive than prison-based - indeed the authors conclude that there is still insufficient evidence that in-prison interventions work, supporting the MoJ study. The review also suggests that more individually-tailored treatment with some individual content work better than group-based programmes, which again supports the conclusion of the authors of the MoJ study, who suggest that group treatment may normalise individuals' behaviour, making it seem less wrong or different. Overall, we can now conclude that there is **good evidence that sex offender treatments can work in some settings**, although the international evidence is stronger than the UK evidence for this.

Last year we noted another recent review by the Campbell Collaboration (Strang et al., 2013) showed **strong support for restorative justice conferencing in reducing reoffending**, particularly in relation to violent crime. Likewise, a recent high-quality study compared a group of drunk driving offenders who had attended a victim impact panel¹⁴ (n = 410) with offenders from the same court system who had not done so (n = 373) (Joyce and Thompson, 2017). Controlling for some key variables (age, gender, previous drink driving offences and previous convictions) it found that the odds of being reconvicted for another drink driving offence after one year were 2.6 times as high for the comparison group compared to those who had attended the panel, suggesting good support for the effectiveness of restorative justice conferencing in this particular type of offending.

Finally, a 'review of reviews' takes a different slant to ask what doesn't work in interventions aimed at reducing recidivism (Barnett and Fitzalan Howard, 2018). Cutting across types of intervention, they identify that neither punitive nor deterrence-based interventions, nor discipline approaches (e.g. boot camps), nor community-based surveillance programmes appear to work in isolation, *without* rehabilitative support. The problems that these

¹⁴ According to this paper, a typical victim impact panel solicits four or five victims to speak to drunk driving offenders about how drunk driving changed their lives. The idea is to inculcate the personal side of loss so that offenders can see the sorrow that victims have experienced as a result of alcohol-related driving tragedies.

approaches share are: a failure to build skills which help people to behave differently in the future; a failure to help offenders build a prosocial, non-criminal identity; a reliance on only extrinsic motivation to desist (e.g. fear of getting caught); poor implementation; and a failure to act on the eight key factors that research has shown are linked to reoffending (attitudes and social networks that support crime; self-management and impulse control issues; lack of pro-social relationships;¹⁵ homelessness and living in a criminal neighbourhood; substance misuse; lack of positive recreation activities; and lack of or unstable employment) – many of which are factors that a short prison term may most likely worsen.

7. Conclusion to the 2018 update

This year's update of last year's review has added a further, high-quality study to the growing body of work which suggests that short-term custody is associated with slightly higher reoffending than sentences served in the community (Caudy et al., 2018). A further analysis of the data used in MoJ's important 2015 study of short-term custody compared with court orders suggests that the criminogenic effect of the former 'kicks in' when offenders have 11 or more previous convictions (Hillier and Mews, 2018). Evidence from the Netherlands suggests recidivism rates do not vary appreciably when we compare very short sentence lengths with one another (Wermink et al., 2018). Meanwhile other studies, focusing on the offenders' subjective experience, have cast doubt on the idea that the worse the prison experience, the less likely you are to reoffend (Raaijmakers et al., 2017), and added more granular detail to the reasons why short prison terms may be criminogenic (Llievesley et al., 2018). Interestingly, a couple of US studies have also suggested that sentences could be shortened appreciably without having a negative effect on recidivism (Hunt et al., 2018; Rhodes et al., 2017).

A handful of studies have bolstered the evidence that certain policies and programmes can 'work' in the sense of reducing reoffending, these being: intensive supervision (DeVall et al., 2017); sex offender, drug, alcohol and mental health treatment programmes (Schmucker and Losel, 2017; MoJ 2017 and 2018); and restorative justice conferencing (Joyce and Thompson, 2017). And finally, an interesting paper by two psychologists has summarised what interventions don't seem to work in reducing reoffending, and why (Barnett and Fitzalan Howard, 2018).

¹⁵ Several studies published this year have suggested the importance of quality of relationships in determining reoffending and desistance from reoffending (Atkin-Plunk and Armstrong, 2018; Brunton-Smith and McCarthy, 2017).

References

1. Barnett, G. D. and Fitzalan Howard, F. (2018). What doesn't work to reduce reoffending? A review of reviews of ineffective interventions for adults convicted of crimes. *European Psychologist*, 23:2, 111-129.
2. Barta, W. D., Fisher, V. and Hynes, P. (2017). Decreased re-conviction rates of DUI offenders with intensive supervision and home confinement. *The American Journal of Drug and Alcohol Abuse*, 43:6, 742-746.
3. Campbell Collaboration Policy Brief no.4. (2017). The Effects of sentencing policy on reoffending: A summary of the evidence from 12 Campbell systematic reviews.
4. Caudy, M. S., Skubak Tillyer, M. and Tillyer, R. (2018). A gender-specific test of differential effectiveness and moderators of sanction effects. *Criminal Justice and Behavior*, 45:7, 949-968.
5. DeVall, K. E., Lanier, C., Hartmann, D. J., Williamson, S. H. and Askew, L. N. (2017). Intensive supervision programs and recidivism: how Michigan successfully targets high-risk offenders. *The Prison Journal*, 97:5, 585-608.
6. Drago, F., Galbiati, R. and Vertova, P. (2011). Prison conditions and recidivism. *American Law and Economics Review*.
7. Harding, D. J., Morenoff, J.D, Nguyen, A.P. and Bushway, S.D. (2017) Short and long-term effects of imprisonment on future felony convictions and prison admissions. *Proceedings of the National Academy of Sciences of the USA*, 114:42, October 2017, 11103-11108.
8. Her Majesty's Inspectorate of Probation (2016). *An inspection of through the gate resettlement services for short-term prisoners*. Manchester, UK.
9. Hillier, J. and Mews, A. (2018). Do offender characteristics affect the impact of short custodial sentences and court orders on reoffending? Ministry of Justice.
10. Hunt, K. S., Maass, K. and Kostyshak, T. (2018). Recidivism among federal offenders receiving retroactive sentence reductions: the 2011 Fair Sentencing Act guideline amendment. United States Sentencing Commission.
11. Hsieh, M., Hamilton, Z. and Zgoba, K. M. (2018). Prison experience and reoffending: exploring the relationship between prison terms, institutional treatment, infractions and recidivism for sex offenders. *Sexual Abuse*, 30:5, 556-575.
12. Joyce, S. and Thompson, K. M. (2017). Do victim impact panels reduce drunk driver recidivism? *Restorative Justice*, 5:2, 251-266.
13. Kingston, D. A., Olver, M. E., McDonald, J. and Cameron, C. (2018). A randomised control trial of a cognitive skills programme for offenders with mental illness. *Criminal Behavior and Mental Health*, 28, 369-382.
14. Llievesley, R., Winder, B., Norman, C. and Banyard, P. (2018). A life sentence in instalments: a qualitative analysis of repeat offending among short-sentenced offenders. *Victims and Offenders*, 13:3, 409-426.
15. Meade, B., Steiner, B., Makarios, M. and Travis, L. (2012). Estimating a dose-response relationship between time served in prison and recidivism. *Journal of Research in Crime and Delinquency*, 50:4, 525-550.
16. Mears, D.P., Cochran, J.C., Bales, W.D. and Bhati, A.S., 'Recidivism and Time Served in Prison' (2016) *Journal of Criminal Law and Criminology* 106:1, 81-122.
17. Mews, A. and Coxon, C. (2014). Updated analysis of the impact of the intensive alternatives to custody pilots on reoffending rates. Ministry of Justice Analytical Summary.
18. Mews, A., Di Bella, L. and Purver, M. (2017). Impact evaluation of the prison based core sex offender treatment programme. Ministry of Justice Analytical Series 2017.
19. Mews, A., Hillier, J., McHugh, M., Coxon, C. (2015). The impact of short custodial sentences, community orders and suspended sentence orders on reoffending. Ministry of Justice Analytical Series 2015.

20. Ministry of Justice (2013). Compendium of reoffending statistics and analysis. Ministry of Justice.
21. Ministry of Justice and Public Health England (2017). The impact of community-based drug and alcohol treatment on reoffending.
22. Nagin, D.S. and Snodgrass, G. M. (2013). The effect of incarceration on reoffending: evidence from a natural experiment in Pennsylvania. *Journal of Quantitative Criminology*, 29:4, 601-642.
23. Raaijmakers, E.A.C., Loughran, T.A., de Keijser, J.W., Nieuwbeerta, P. and Dirkzwager, A.J.E. (2017). Exploring the relationship between subjectively experienced severity of imprisonment and recidivism: a neglected element in testing deterrence theory. *Journal of Research in Crime and Delinquency*, 54:1, 3-28.
24. Rhodes, W., Gaes, G.G. Kling, R. and Cutler, C. (2017). Relationship between prison length of stay and recidivism: a study using regression discontinuity with multiple break points. *Criminology and Public Policy*, 17:3, 731-769.
25. Schmucker, M. and Losel, F. (2017). Sexual offender treatment for reducing recidivism among convicted sex offenders: a systematic review and meta-analysis. Campbell Systematic Reviews.
26. Snodgrass, G. M., Haviland, A., Blokland, A., Nieuwbeerta, P. and Nagin, D.S (2011). Does the time cause the crime? An examination of the relationship between time served and reoffending in the Netherlands. *Criminology*, 49:11, 1149-1194.
27. Strang, H., Sherman, L.W., Mayo-Wilson, E., Woods, D. and Ariel, B. (2013). Restorative justice conferencing (RJC) using face-to-face meetings of offenders and victims: effects on offender recidivism and victim satisfaction. Campbell Collaboration, 2013.
28. Wermink, H., Nieuwbeerta, P., Ramakers, A. A. T., de Keijser, J. W. and Dirkzwager, A. J. E. (2018). Short-term effects of imprisonment length on recidivism in the Netherlands. *Crime and Delinquency*, 64:8, 1057-1093.