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Parole supervision and reoffending

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Foreword | ***Although more than 12,000 offenders are on parole at any given time, little is known about the effectiveness of parole supervision in reducing reoffending. The few studies that have been conducted involve samples of parolees released from prison in other countries. The present study is the first to evaluate the effectiveness of parole supervision in Australia. It compares several groups of offenders, matched in terms of the factors likely to affect reoffending, but differing in terms of whether they are supervised and if supervised, in terms of the intensity of supervision. The results suggest that parole supervision does reduce the risk of reoffending.***

Adam Tomison
Director

Past research (Weatherburn et al. 2009) has shown that one of the major drivers of high imprisonment rates is the high rate of return to custody. The primary means by which correctional authorities seek to limit the rate of reoffending and the rate of return to prison is to provide supervision and support to offenders following release (hereafter referred to simply as 'supervised release'). As at March 2014, more than 12,000 offenders were on parole across Australia (ABS 2014).

As recently as 2005, the Urban Institute noted that although 774,000 men and women were under parole supervision in the United States in 2003, 'remarkably little is known about whether parole supervision increases public safety or improves re-entry transitions' (Solomon, Kachnowski & Bhati 2005: 1). Reviewing the situation in Britain, Shute (2004) remarked that after 35 years of research, it was still unclear whether parole release has a beneficial effect on recidivism. The same is true in Australia. In fact, the authors were able to locate only one Australian study that examined the effectiveness of the Australian parole system (Broadhurst & Maller 1990). That study employed only limited controls for selection bias.

The current study

Other things being equal, it would be expected that offenders granted unconditional release would be more likely to reoffend, to reoffend more quickly, to reoffend more often and to commit more serious offences than offenders released conditionally into the community. Further, if supervision is the mechanism by which conditional release affects reoffending risk then it would be expected that offenders who receive minimal supervision would be more likely to reoffend, to reoffend more quickly, to reoffend more often and to commit more serious offences than offenders who are more actively supervised. The current study, seeks to address two major questions:

1. Does unconditional release increase the risk, speed or seriousness of further offending compared with conditional release?
2. Does less frequent supervision increase the risk, speed or seriousness of further offending compared with more frequent supervision?

Criminology Research Grants

Propensity score matching was employed to ensure that groups being compared in terms of supervision status and supervision intensity were alike in all other observed respects.

Parole in New South Wales

Before describing the methodology of the current study in more detail, the parole process in New South Wales is briefly summarised.

NSW parole legislation establishes different parole procedures for offenders given sentences of six months or less, offenders given sentences of three years or less (but more than 6 months) and offenders given sentences of more than three years.

Sentences of six months or less do not have a parole component. In cases where the court imposes a sentence greater than six months but less than three years, the court specifies a non-parole period, at the end of which the offender is automatically released on parole under conditions laid down by the sentencing court. Where a court imposes a sentence of three years or more, the sentencing court may specify a non-parole period but it is the responsibility of the State Parole Authority (SPA) to determine whether the offender will be released at the end of the non-parole period and if so, under what conditions.

In making its decision, SPA is bound not to release an offender unless it is satisfied on the balance of probabilities that release of the offender is in the public interest. The relevant legislation stipulates a number of factors that SPA may take into account when reaching its decision. These factors include the past behaviour of the offender, the threat the offender poses to the community, and reports and assessments provided to the SPA by the probation and parole service.

Method

Data source

Corrective Services NSW provided data on all offenders who were released from a NSW correctional centre between 1 January 2009 and 30 June 2010, after serving a full-time imprisonment sentence. These data were then linked to the NSW Bureau of Crime Statistics and Research's Reoffending Database (see Hua & Fitzgerald 2006) to obtain measures of reoffending.

Sample definition

The sample comprised 7,494 offenders who were released from a NSW correctional centre between 1 January 2009 and 30 June 2010.

Independent variables

The study involved two independent variables—post-release supervision and supervision intensity. Supervision status was coded according to whether the offender was released from prison to parole or released unconditionally (either because they had a fixed sentence or because their sentence had expired). Supervision intensity was measured according to the number of contacts that each offender had with a Community Corrections Officer during their period of supervision and the length of time for which they were under supervision.

Separate measures of supervision intensity were created according to whether the supervision was rehabilitation focused or compliance focused. *Rehabilitation-focused supervision* means supervision conducted by Community Offender Services, where the purpose of the supervision is to address the offender's criminogenic needs and risk factors. *Compliance-focused supervision* refers to contacts where the aim is simply to ensure that the offender is complying with the conditions of their parole order.

Outcome variables

The main outcome variable was reoffending. Reoffending was defined as any new proven offence that was finalised in a NSW Local or Higher Court before 30 September 2013. The offence was considered to be 'new' if the recorded offence date occurred after the 'index' custodial release date and before 30 June 2013.

Explanatory variables

The following covariates were considered for inclusion in the reoffending and propensity score models.

- Age—age in years at index release date.
- Gender—male or female.
- Indigenous status—whether the prisoner identified as being Indigenous or non-Indigenous at the index custodial episode.
- SEIFA of residence—the Australian Bureau of Statistics' Socioeconomic Index for Area (SEIFA) was applied to prisoners' postcodes of residential address at the time of their index custodial episode (ABS 2011).
- Remoteness of residence—the Australian Bureau of Statistics' *Accessibility Remoteness Index of Australia* (ABS 2001) was applied to prisoners' postcodes of residential address at the time of their index custodial episode.
- Time in custody—number of days from index episode start date until release date.
- Parole length—number of days from index release date until expiry date of parole order.
- Prior court finalisations—number of finalised court appearances (including youth justice conferences) during the index custodial episode or within five years prior to the index custodial start date where one or more offences were proven.
- Prior children's court finalisations—number of finalised court appearances in the children's court or at a youth justice conference during the index custodial episode or within five years prior to the index custodial start date where one or more offences were proven.
- Prior imprisonment—number of finalised court appearances during the index custodial episode or within five years prior to the index custodial start date that resulted in a full-time prison sentence (including juvenile control orders).
- Prior intensive correction order, periodic detention or home detention—number of finalised court appearances during the index custodial episode or within five years prior to the index custodial start date that resulted in a penalty of periodic

detention, intensive correction order or home detention.

- Prior suspended sentence—number of finalised court appearances during the index custodial episode or within five years prior to the index custodial start date that resulted in a suspended sentence.
- Prior good behaviour bond—number of finalised court appearances during the index custodial episode or within five years prior to the index custodial start date that resulted in a bond.
- Prior supervised order—number of finalised court appearances during the index custodial episode or within five years prior to the index custodial start date that resulted in a supervised bond or supervised suspended sentence (including children's court supervised orders).
- Prior serious violence offence—number of finalised court appearances during the index custodial episode or within five years prior to the index custodial start date, where one or more serious violent offences were proven (defined as any prior proven offence under the Australian and New Zealand Standard Offence Classification (ANZSOC) divisions 01, 05 or 06 and groups 211 and 311).
- Prior non-serious violence offence—number of finalised court appearances during the index custodial episode or within five years prior to the index custodial start date where one or more non-serious violent offences were proven (defined as any prior proven offence under ANZSOC division 02 (except group 211), division 03 (except group 311) and division 04).
- Prior property offence—number of finalised court appearances during the index custodial episode or within five years prior to the index custodial start date where one or more property offences were proven (defined as any prior proven offence under ANZSOC divisions 07, 08, 09).
- Prior break and enter offence—number of finalised court appearances during the index custodial episode or within five years prior to the index custodial start date where one or more break and enter offences were proven (defined as any prior proven offence under ANZSOC division 07).
- Prior drug offence—number of finalised court appearances during the index custodial episode or within five years prior to the index custodial start date where one or more drug offences were proven (defined as any prior proven offence under ANZSOC division 10).
- Prior drink driving offence—number of finalised court appearances during the index custodial episode or within five years prior to the index custodial start date where one or more drink driving offences were proven (defined as any prior proven offence under ANZSOC groups 411, 412 and 1431).
- Prior driving offence—number of finalised court appearances during the index custodial episode or within five years prior to the index custodial start date where one or more driving offences were proven (excluding drinking driving offences; defined as any prior proven offence under ANZSOC division 14, except group 1431).
- Prior breach of a court order—number of finalised court appearances during the index custodial episode or within five years prior to the index custodial start date where one or more breaches of court orders were proven (defined as any prior proven offence under ANZSOC subdivisions 151, 152 or 153, except group 1511).
- Prior indictable offence—number of finalised court appearances during the index custodial episode or within five years prior to the index custodial start date where one or more indictable offences were proven.

Group comparisons

Survival analysis, McNemar's test and the paired-t test were used to test differences in reoffending outcomes between

1. offenders who received supervision post-release and those who were released unconditionally;
2. offenders who received a low level of compliance-focused contacts while under supervision and those who received a high level of compliance-focused contacts while under supervision; and
3. offenders who received a low level of rehabilitation-focused contacts while under supervision and those who received a high level of rehabilitation-focused contacts while under supervision.

To compare time to reoffend, the accelerated failure time (AFT) model was used. This model allows covariates to alter the speed with which an individual fails (offends).

Table 1 Time to any new proven offence, matched supervised and unsupervised groups

	Unsupervised group	Supervised group	95% CI	p value
Number of offenders	2,019	2,019		
Unadjusted time ratio	1.000	1.282	(1.125, 1.461)	<.001
Adjusted time ratio	1.000	1.212	(1.080, 1.361)	.001
Unadjusted reoffending rate at 12 months	48.6%	43.6%		
Unadjusted reoffending rate at 24 months	62.6%	57.7%		
Unadjusted reoffending rate at 36 months	70.3%	65.7%		

McNemar's test was used to determine whether there was a significant difference between the treatment and control groups in the proportion of offenders who recorded a new proven indictable offence after being released from custody. For frequency of reoffending, a one-tailed paired t-test was used to determine whether the mean number of new proven offences was higher for the control group compared with the treatment group.

Results

Supervision versus no supervision

Table 1 shows a significant difference between the supervised and unsupervised groups in the number of days to first new offence. Twelve months after release, the AFT model estimates that 48.6 percent of unsupervised offenders will reoffend while only 43.6 percent of supervised offenders will reoffend. At 36 months after release, the estimated reoffending rate for the unsupervised group (70.3%) is still significantly higher than the reoffending rate for the supervised group (65.7%).

Table 2 presents both the proportion of offenders who have one or more new proven indictable offences after the index custodial episode and the mean number of new proven offences within 12, 24 and 36 months for the matched supervised and unsupervised groups. A significantly higher proportion (51.3%) of the unsupervised offender group recorded at least one new proven indictable offence after the index custodial episode compared with the supervised offender group (46.1%; χ^2=10.98, df=1, p=.001). Moreover, the mean number of new proven offences within 12, 24 and 36 months post-release was significantly higher for offenders in the unsupervised group compared with offenders in the supervised group (p<.001). After adjusting for potential covariates, the difference in frequency and seriousness of reoffending remains significant.

High-level versus low-level compliance-focused contacts

Table 3 shows that the time to reoffending for the high-level supervision group is not significantly different from the low-level group, regardless of whether or not the model is adjusted for other covariates.

Table 4 shows the proportion of offenders who have one or more new proven indictable offences after the index custodial episode and the mean number of new proven offences within 12, 24 and 36 months post-release for the two matched groups. No significant differences were found between the low-level and high-level supervision groups in the proportion who committed a new indictable offence after being released from custody. Moreover, there were no significant differences between the low-level and high-level supervision groups in the mean number of new proven offences within 12, 24 and 36 months post-release.

Table 2 Frequency and seriousness of reoffending for matched supervised and unsupervised groups

Reoffending outcomes		Unsupervised group (n1=2,019)	Supervised group (n2=2,019)	Significance (McNemar's test/paired t-test)
Any new proven indictable offence after index custodial episode release date	percent	51.3	46.1	.001
	95% CI	(49.1, 50.9)	(43.9, 48.3)	
Number of new proven offences within 12 months	mean	1.8	1.4	<.001
	95% CI	(1.7, 2.0)	(1.3, 1.5)	
Number of new proven offences within 24 months	mean	3.1	2.6	<.001
	95% CI	(2.9, 3.3)	(2.5, 2.8)	
Number of new proven offences within 36 months	mean	4.3	3.6	<.001
	95% CI	(4.1, 4.6)	(3.4, 3.8)	

Table 3 Time to any new proven offence, matched high-level and low-level compliance-focused contacts groups

	Low-level group	High-level group	95% CI	p value
Number of offenders	1,494	1,494		
Unadjusted time ratio	1.000	1.078	(0.930, 1.249)	.322
Adjusted time ratio	1.000	1.037	(0.912, 1.181)	.577
Unadjusted reoffending rate at 12 months	45.4%	43.9%		
Unadjusted reoffending rate at 24 months	60.0%	58.5%		
Unadjusted reoffending rate at 36 months	68.1%	66.7%		

Table 4 Frequency and seriousness of reoffending, matched high-level and low-level compliance-focused contacts groups				
Reoffending outcomes		Low-level group (n1=1,494)	High-level group (n2=1,494)	Significance (McNemar's test/paired t-test)
Any new proven indictable offence occurred after index custodial episode release date	percent	48.3	47.8	ns
	95% CI	(45.7, 50.8)	(45.3, 50.3)	
Number of new proven offences within 12 months	mean	1.4	1.6	ns
	95% CI	(1.3, 1.5)	(1.5, 1.8)	
Number of new proven offences within 24 months	mean	2.6	3.0	ns
	95% CI	(2.4, 2.8)	(2.8, 3.2)	
Number of new proven offences within 36 months	mean	3.5	4.1	ns
	95% CI	(3.3,3.8)	(3.8, 4.3)	

Table 5 Time to any new proven offence, matched high-level and low-level rehabilitation-focused contacts groups				
	Low-level group	High-level group	95% CI	p value
Number of offenders	1,409	1,409		
Unadjusted time ratio	1.000	1.431	(1.205, 1.700)	<.001
Adjusted time ratio	1.000	1.349	(1.170, 1.556)	<.001
Unadjusted reoffending rate at 12 months	48.8%	41.7%		
Unadjusted reoffending rate at 24 months	62.3%	55.4%		
Unadjusted reoffending rate at 36 months	69.7%	63.2%		

Table 6 Frequency and seriousness of reoffending, matched high-level and low-level rehabilitation-focused contacts groups				
Reoffending outcomes		Low-level group (n1=1,409)	High-level group (n2=1,409)	Significance (McNemar's test/paired t test)
Any new proven indictable offence occurred after index custodial episode release date	percent	47.7	47.2	ns
	95% CI	(45.1, 50.3)	(44.6, 49.8)	
Number of new proven offences within 12 months	mean	1.6	1.4	.026
	95% CI	(1.4, 1.7)	(1.2, 1.5)	
Number of new proven offences within 24 months	mean	2.7	2.5	ns
	95% CI	(2.5, 2.9)	(2.4, 2.7)	
Number of new proven offences within 36 months	mean	4.0	3.5	.002
	95% CI	(3.7,4.3)	(3.2, 3.7)	

High-level versus low-level rehabilitation-focused contacts

Table 5 presents the results of the AFT model comparing time to first new offence for the low-level and high-level supervision groups. As can be seen, the adjusted time to first new proven offence for the high-level group is 1.4 times longer than that of the low-level group.

The estimated reoffending rates at 12, 24 and 36 months (from the unadjusted model) for the high-level group are 41.7 percent, 55.4 percent and 63.2 percent respectively. These estimated reoffending rates are significantly lower than the estimated reoffending rates for the low-level supervision group (48.8%, 62.3% and 69.7%).

Table 6 reports the proportion of offenders who have one or more new proven indictable offences after their index custodial episode and the mean number of new proven offences within 12, 24 and 36 months for both the low-level and high-level supervision groups. There is no significant difference across the two groups with regard to the proportion of offenders recording a new proven indictable offence. However, the mean number of new proven offences within 12 and 36 months is significantly lower in the high-level supervision group relative to the low-level supervision group (p=.026 for 12 months and p=.002 for 36 months). After adjusting for covariates, the difference in the mean number of new proven offences within 12 months is insignificant, while that for 36 months remains significant.

Discussion

The current study sought to address two questions of importance to correctional policy:

1. Does unconditional release increase the risk, speed or seriousness of further offending compared with conditional release?
2. Does less frequent supervision increase the risk, speed or seriousness of further offending compared with more frequent supervision?

The results of this part of the study revealed that offenders who received parole supervision upon release from custody took longer to commit a new offence, were less likely to commit a new indictable offence and committed fewer offences than offenders who were released unconditionally into the community. The answer to question (2) is that more active supervision can reduce parolee recidivism but only if it is rehabilitation focused.

It is not clear why the present study found beneficial effects from parole supervision, whereas studies in other jurisdictions (eg Drake & Barnoski 2006; Jackson 1983) found no effect. There are several possibilities. First, as Ostermann (2013) points out, traditional analyses of the effectiveness of parole typically assume that offenders released to parole are under supervision. In practice, active supervision often ends prior to the expiry of the parole order. In the present study, offenders on parole were only treated as supervised if they were actually under supervision.

A second possibility is that since offenders at higher risk of reoffending are likely to be assigned to higher levels of supervision, the benefits of supervision may be hidden in studies that do not control adequately for selection bias. The present study used propensity score matching to ensure that offenders released without supervision and offenders released with supervision were identical (within the limits of chance) on a large range of factors relevant to reoffending. As Apel and Sweeten (2010) show, propensity score matching offers more assurance than conventional regression methods (such as those often used in earlier parole evaluation studies) that the two groups being compared are alike in all relevant particulars.

A third possibility is that jurisdictions differ in the quality and intensity of their parole supervision and support. It may be that the treatment and/or supervision of parolees in New South Wales is more intensive or of higher quality than in other jurisdictions or there are fewer barriers to successful re-entry into community life (eg prohibitions against the employment of ex-offenders in a large number of areas) for NSW parolees.

All research findings are subject to caveats. The most important caveat surrounding the current study is that even if our results are accepted as evidence of the effectiveness of parole in New South Wales, it is important to bear in mind that the supervision versus no supervision comparison was necessarily restricted to offenders who had served 12 months or less in custody. It is therefore unclear to what extent the current results are applicable to prisoners who have served lengthy custodial sentences or parole orders (although it is worth noting that this latter group of 366 offenders represents a minority of the 7,494 offenders in the sample (4.8%)).

The current findings are also consistent with research recently carried out by Kuziemko (2013), who studied the effects of a US reform that eliminated parole for certain offenders. She found that the prisoners affected by this reform accumulated a larger number of disciplinary infractions, completed fewer rehabilitative programs and reoffended at higher rates than inmates unaffected by the reform. Both sets of findings provide encouraging evidence of the benefits of parole supervision, if conducted in a way that addresses the criminogenic needs of the offender. The findings of the current study also raise an important question for governments. If parole supervision is effective in reducing reoffending despite the limited resources available for post-release support, how much more effective would it be if it were better resourced?

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