



Does a prison sentence affect future domestic violence reoffending?

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Aim: To examine whether short prison sentences (up to 12 months) exert a deterrent effect for domestic-violence (DV) related offending.

Method: Propensity score matching was used to compare time to reoffence among 1,612 matched pairs of offenders, in which one of each pair received a prison sentence of 12 months or less and the other received a suspended sentence of two years or less. Kaplan-Meier survival analysis was then used to examine time to the first proven offence committed after the index court appearance.

Results: In the matched analysis, DV-related reoffending was not significantly different for people with suspended sentences and prison sentences. After 1 year, 20.3% of people given a suspended sentence and 20.3% of people given prison sentence had at least one new DV-related offence, and after 3 years the proportions were 34.2% and 32.3% respectively. These were not significantly different (HR 0.96, $p=0.6$).

Conclusion: Short prison sentences (up to 12 months) are no more effective in deterring DV-related reoffending than suspended sentences.

Keywords: domestic violence, prison sentence, suspended sentence, reoffending, deterrence, propensity score matching

INTRODUCTION

Domestic Violence (DV) is a crime that affects a large proportion of the Australian population. Nearly one in five adult Australian women and one in 20 adult Australian men report having experienced intimate partner violence since the age of 15 (Australian Bureau of Statistics, 2013). In New South Wales (NSW), police attend close to 30,000 DV incidents each year (NSW Bureau of Crime Statistics and Research, 2015) and have recorded 238 domestic violence related homicides over the last 10 years (Domestic Violence Death Review Team, 2015).

While a large number of reforms have been made to help improve support and services for DV victims and their families in NSW, more recent focus has shifted toward the perpetrators of DV and their reoffending. In 2015, Premier Baird nominated domestic violence reoffending as a Premier's Priority area for NSW and set a target to reduce the 12-month reoffending rate of domestic violence assault offenders by 5 percentage points, from 14.2% to 9.2%, by 2019. There is, however, limited reliable

evidence nationally and internationally on the effectiveness of various DV initiatives and interventions to help inform policy and strategy in this area (Day et al., 2010; Feder & Wilson, 2005; Miller, Drake & Nafziger, 2013). Early evidence from a landmark experimental study conducted by Sherman and Berk (1984) suggested that DV offenders are deterred by formal sanctions. In this study, a police arrest – even one of very short duration – was found to be substantially more effective in reducing the likelihood of repeat DV victimisation than either police mediation or physical separation of perpetrator from victim. Subsequent attempts at replicating this research have, however, found mixed evidence for a deterrent effect of a DV arrest (for a review see Mills, 1998), with some suggestion that formal sanctions may only deter certain types of DV offenders (e.g. Sherman et al., 1992).

The lack of research on sentencing and reoffending amongst DV offenders in Australia arises from the fact that, historically, it has been difficult to identify offences that are DV related from

court administrative datasets. Since 2008, however, all NSW courts have been required to record an offence as domestic violence related if it occurred in a domestic relationship (see section 12 of the *Crimes (Domestic and Personal Violence) Act 2007 (NSW)*). A domestic relationship for the purposes of this Act is a relationship between two people who are or have been (1) married, (2) defacto partners, (3) in an intimate (sexual or non-sexual) personal relationship, (4) living in the same household or same residential facility (5) related (or kin for Aboriginal and Torres Strait Islander peoples) or (6) in a dependent relationship where one person requires ongoing care. This legislation served to broaden the definition of domestic violence to include offences such as stalking, intimidation, malicious damage to property, trespass and offensive behaviour, in addition to violent personal offences such as assault and sexual assault.

An analysis undertaken by Ringland and Fitzgerald (2010) after the legislative changes described the type of DV offences being brought before the Local Court in NSW and the principal penalty imposed for these offences (over the period January 2008 and June 2009). The most prevalent DV offence was common assault (n=7,351), followed by breach of an Apprehended Violence Order (AVO; n=4,737), assault occasioning actual bodily harm (n=3,469), property damage (n=2,299) and stalking/intimidation (n=1,307). Just over one in 10 of these offenders received a custodial penalty for their principal offence; most often for the more serious assault offences, such as assault occasioning actual bodily harm, recklessly wound any other person or recklessly cause grievous bodily harm. A large number of offenders imprisoned were also found guilty of a breach Apprehended Violence Order (AVO) or common assault as their principal offence. The prison sentences handed down for these DV offences were generally relatively short in length, with a median duration of less than 6 months for all but 2 offences (reckless wounding and recklessly cause grievous bodily harm) which had a median duration of 10 and 12 months respectively.

Recent work by Trevena and Weatherburn (2015) has questioned the utility of short custodial sentences given the cost of incarceration and limited evidence for its effectiveness in deterring offending. Trevena and Weatherburn used propensity score matching to compare offenders given short prison sentences in a NSW Local Court with offenders receiving suspended sentences and found no difference in time to first offence across the two groups. This result is consistent with most other deterrence studies comparing reoffending rates of prisoners with offenders serving other community-based sanctions (see Nagin, Cullen, & Jonson, 2009 and Trevena & Weatherburn, 2015 for a review of the deterrence literature).

In Trevena and Weatherburn's (2015) analysis, however, offenders with any proven offence were included in the sample.

Reoffending rates amongst particular subgroups of offenders, such as those found guilty of a DV offence, were not examined. It is quite possible that prison exerts no specific deterrent effect for general offending but is effective for those who commit offences within a domestic setting. The current study, therefore, extends this earlier work to examine the deterrent effect of first time prison sentences for persons found guilty of DV-related offences. Using the same methodology as Trevena and Weatherburn, DV offenders who receive a first time prison sentence are matched with DV offenders who receive a suspended sentence and average time to first reoffence is compared.

METHOD

DATA SOURCE

Proven NSW Local Court appearances for DV-related offences finalised between January 2009 and December 2013 were extracted from the Bureau's Reoffending Database (ROD). Data in ROD is linked longitudinally by person (see Hua & Fitzgerald, 2006), and each record contains a summary of the person's contact with the criminal justice system, including all court appearances (since 1994) and any time in custody (since 2000). A DV-related offence was defined here as any offence which the court recorded as domestic violence related under the *Crimes (Domestic and Personal Violence) Act 2007*. These offences were identified in the ROD dataset as those with a relevant DV lawpart.

SAMPLE

The primary comparison is the length of 'free' time in the community before committing a DV-related offence for people who received a custodial sentence compared with those who received a suspended sentence for the index matter. Of the 61,307 proven appearances for DV-related offences finalised during the 5-year study period, we identified 11,486 in which either a fulltime prison sentence (with a total sentence of up to 12 months) or a suspended sentence with a total sentence of up to 24 months (with or without supervision) was imposed by a NSW Local Court. Appearances for persons who had previously received a custodial penalty (for any offence, n=6,044) were excluded from the sample. Only one appearance per person was considered. If a person had more than one eligible appearance only the first was included. Of the 5,068 eligible people identified, 373 were excluded for one or more of the following reasons: under 18 at the time of the principal offence (n=4), more than 365 days in custody before the index date (n=37: for people in custody on the index date only days before that custody episode were counted), missing information about remoteness or disadvantage (n=312), or a principal offence committed before 10 March 2008 (n=39). This left a total of 4,695 unique individuals in the sample.

DEPENDENT VARIABLE

The main dependent variable was number of free days before the first DV-related reoffence proven in court. This was calculated as the time from the index date (or date of release from custody, if any) until the date of the next new DV-related offence which was proven in court. Only offences committed after the index date (or release date) and before 31 December 2014 were counted as a reoffence and only offences finalised in the court before 30 June 2015 were included. The observation period during which someone could reoffend finished when the person committed a new DV-related offence, returned to custody, died, or on 31 December 2014, or three years after the finalisation date, whichever happened first. The primary outcome was time to the first new DV-related offence: we also looked at time to the first offence of any type (excluding offences committed in custody) and time to the first violent DV-related offence.

EXPLANATORY VARIABLES

Variables that were included in the propensity score matching regression model were those available in ROD that were thought to be related to whether the person received treatment (whether they got a prison sentence) as well as related to the outcome (reoffending). Variables included demographic information, the person's previous criminal history, features of the index appearance, and LSI-R score. These are described in more detail below.

Demographic variables

The demographic variables included were:

- Gender.
- Age (age in years at the index date: 18-24 years, 25-31 years, 32-39 years or 40+ years).
- Indigenous status (whether the person had ever identified as Indigenous in any contact with ROD or not. 10 people with missing Indigenous information were included in the "not Indigenous" category).
- Remoteness of postcode of residence (major city, inner regional, or more remote).
- Socio-economic disadvantage for postcode of residence (above or below the median disadvantage within the sample).

Prior criminal history

Details of each person's previous contacts with the criminal justice system (as at the index date) were:

- Total number of court appearances in the previous 5 years (0, 1-2 vs. 3 or more) in which at least one offence was proven.

- Number of days in custody, including time on remand, before the finalisation date (excluding the current custody episode if there was one: 0, 1-4, 5 or more).
- Any proven domestic violence-related offences in the previous 2 years (yes/no for violent DV offence, breach of ADVO, or other proven DV offence).
- Whether they had a record of any of the following proven offences in the previous 5 years: violence (ANZSOC division 01, 02, 03, or 06), property (ANZSOC divisions 07, 08, or 09), drug (ANZSOC division 10), traffic (ANZSOC division 14), or breach of a justice procedures (ANZSOC division 151, 152, or 153) offences. Each coded as yes or no.

Characteristics of index finalisation

The characteristics of the index event included in the regression model were:

- Year (2009, 2010, 2011, 2012, or 2013).
- Whether the principal offence was related to domestic violence.
- Guilty plea (yes or no).
- Whether the person had legal representation (coded as yes, or no/unknown).
- Whether there were any concurrent domestic violence offences.
- Number of all proven concurrent charges (0, 1, 2-3, or 4 or more).
- ANZSOC category of the principal offence at the index finalisation, violence (ANZSOC division 01, 02, 03, 06), breach of justice procedures (ANZSOC division 15), or any other (yes/no for each).
- Whether there were any of the following types of proven offences at the index finalisation: violence (ANZSOC division 01, 02, 03, 06), property (ANZSOC division 07, 08, 09), drug offences (ANZSOC division 10), breach of justice procedures (ANZSOC division 151, 152), DV-related violent offences (DV-related lawparts within ANZSOC category 02) or *Breach of ADVO* (DV-related ANZSOC category 1531) (yes/no for each).
- Seriousness of the principal offence, as measured by BOCSAR's Median Sentence Ranking (see MacKinnell, Poletti, & Holmes, 2010) - a scale of severity in which smaller values indicate a more serious crime.

LSI-R score

The Level of Service Inventory – Revised (LSI-R) is widely used in the NSW correctional system as a rating scale for issues associated with reoffending, including static risk factors such as gender and race, and dynamic risk factors such as drug use and association with criminal peers (Andrews & Bonta, 1995). If a person had received an LSI-R assessment up to 36 months before their index date or up to 3 months afterwards, the score was categorised as Low, Medium-Low, Medium or Medium-High/High and included as a predictor. If no LSI-R was administered or the LSI-R was administered more than 36 months before and more than 3 months after the index date, the LSI-R was categorised as missing. Where there was more than one assessment within this period, the assessment closest to the index date was used.

STATISTICAL ANALYSIS

In the first step, a logistic regression model was used to calculate each person’s likelihood of being sentenced to prison (propensity score), as predicted by all of the variables described above. Propensity scores ranged from 0 (unlikely to be sentenced to prison) to 1 (very likely to be sentenced to prison). Next, we identified pairs of people (one with a prison sentence and one with a suspended sentence) who had similar propensity scores, and these pairs became the matched prison and suspended groups. Finally, we compared time to reoffend across the matched groups.

RESULTS

DESCRIPTION OF SAMPLE

In the initial sample, 2,974 people received a suspended sentence, and 1,721 received a prison sentence. Both groups contained substantial proportions of males (89% and 91% respectively) and people who identified as Indigenous (25% and 31% respectively). Compared with the prison group, a much smaller proportion of offenders in the suspended sentence group had three or more prior proven court appearances (33% and 45% respectively), had spent more than 5 days in custody in the previous 5 years (17% and 30% respectively), recorded four or more proven concurrent charges at the index appearance (25% and 41% respectively) and scored medium-high on the LSI-R (36% and 47% respectively). Further details of demographic and other information are shown in Table A1 in the Appendix.

PROPENSITY SCORE MATCHING

To identify matched pairs of people in each group, we used one-to-one nearest neighbour matching without replacement, performed using SAS Enterprise Guide Version 7.1. For each person in the imprisoned group, the person in the suspended sentence group with the most similar probability was selected as a matching control. Matching was sequential in a single pass, with both groups first sorted into a random order. A calliper of 0.1 meant that someone was only considered as a potential match if their propensity score was within +/- 0.1 of the imprisoned person’s score. Matching without replacement meant that each

Figure 1. Propensity scores of people in suspended (left) and prison (right) groups who were (darker) and were not (lighter) able to be matched

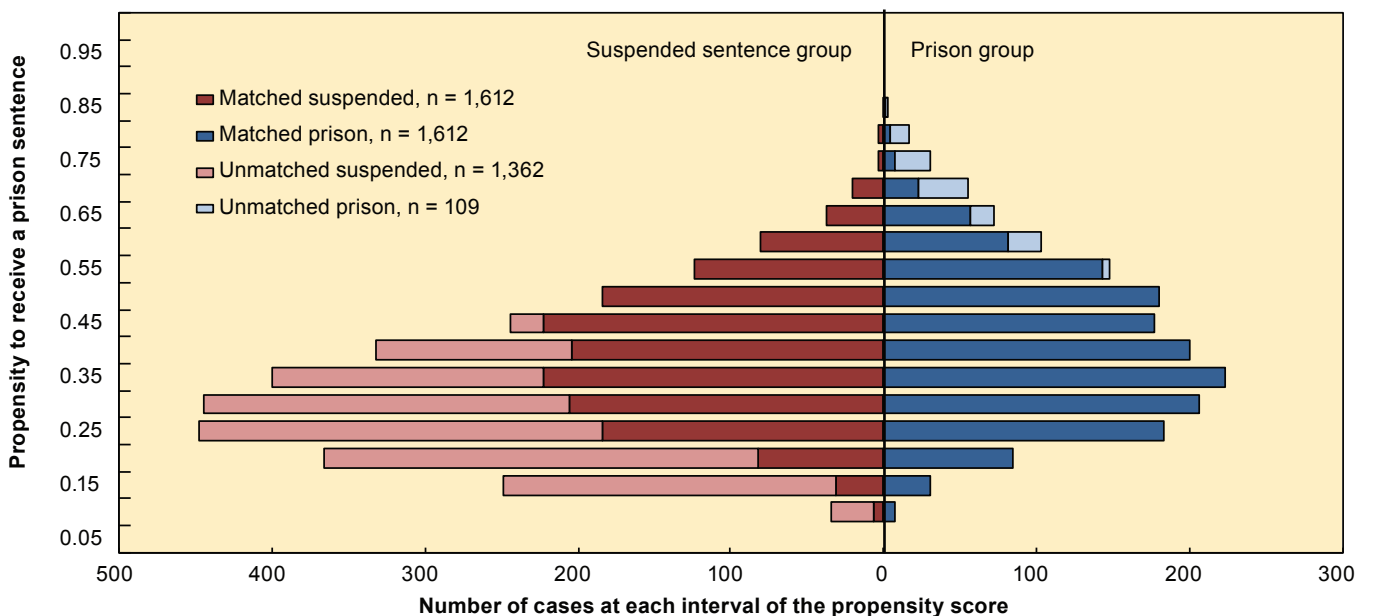


Figure 2. Percentage point differences between suspended and prison groups for categorical variables, before (left) and after matching (right)



person in the suspended group was selected as a match only once. Of the 1,721 people in the prison group, 94% (n=1,621) were able to be matched to someone in the suspended sentence group (see Figure 1).

Equivalence between the two matched groups was assessed in three ways. Rosenbaum and Rubin's (1985) Standardised Bias estimates were calculated for each variable, before and after matching. The Standardised Bias is calculated by dividing the difference between group means by the pre-matching pooled variance: absolute values greater than 20 indicate a high level of bias. Before matching the highest bias value was 34.8: after matching all individual bias estimates were below 4.4. In addition, average values of each predictor and dummy variable were calculated before and after matching, and t-tests were used to estimate the statistical significance of differences between the average values of the two groups. Of the 52 comparisons, 35 were significant before matching and 0 were significant after matching. Finally, percentage point differences between the two groups were calculated before and after matching (see Figure 2). All three measures indicated that the matching process had successfully created groups with similar levels of all of the covariates used.

SURVIVAL ANALYSIS

The number of free days before the first DV-related reoffence was estimated separately for the prison and suspended groups

using Kaplan-Meier survival functions (see Table 1). In the initial unmatched sample, people who got a suspended sentence were less likely to have a DV-related reoffence after one year (17.6% compared to 21.3% for people with a prison sentence), and after 3 years (30.5% and 33.7% respectively), and this difference was significant, with a Hazard Ratio (HR) of 1.17 (95% CI 1.04-1.32, p=0.008). After matching, time to reoffend did not differ across groups. The proportions of people who had reoffended after 1 year in the matched samples were 20.3% and 20.3% for the suspended and prison groups, respectively, and 34.2% and 32.3% after 3 years, respectively, with a Hazard Ratio (HR) of 0.96 (95% CI 0.84, 1.10, p=0.569). These results are illustrated in Figure 3 (before matching) and Figure 4 (after matching).

Other outcome measures had similar patterns of results (see Table 1). For the outcome of time to the first offence of any type (unmatched sample), people with suspended sentences were less likely to have reoffended than those with prison sentences after 1 year of free days (32.1% and 39.2% respectively) and after 3 years (54.7% and 63.3% respectively). However in the matched analysis the difference was smaller (37.4% and 37.9% respectively after 1 year, and 60.5% and 62.4% after 3 years) and this difference was not significant (HR 1.04, 95% CI 0.94-1.14, p=0.428). The proportions of people with new violent DV-related offences were relatively small (around 7% after 1 year and around 15% after 3 years), and the comparisons between prison and suspended sentences were not significant, either before or after matching (see Table 1).

Figure 3. Before matching: estimated proportion of offenders committing a new DV-related offence across free time since index appearance for prison and suspended sentence groups, with 95% confidence intervals

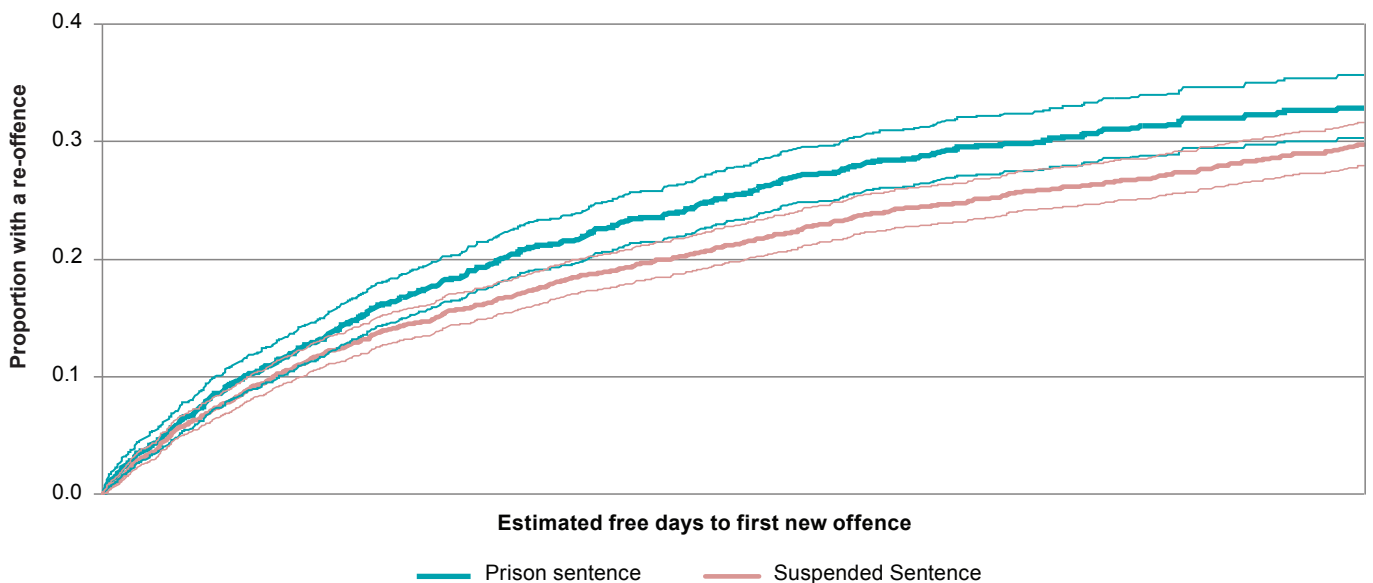
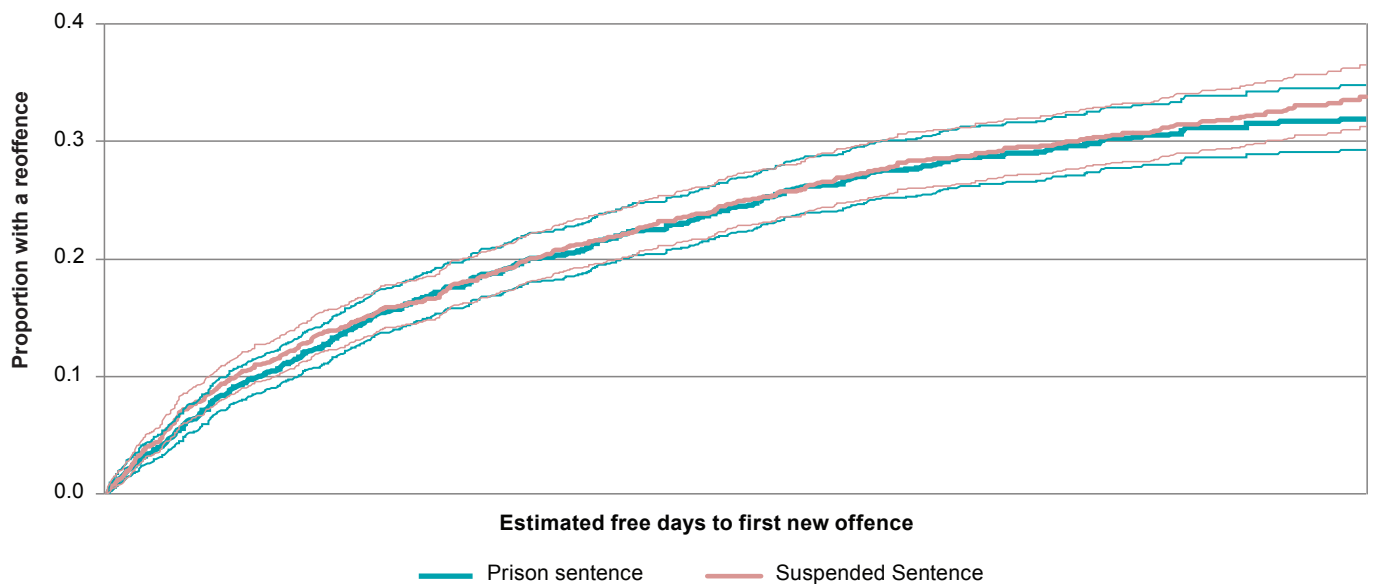


Table 1. Estimated reoffending rates for people with suspended sentences and prison groups after 1 and 3 years, and hazard ratios, for UNMATCHED and UNMATCHED samples

		Unmatched Suspended	Unmatched Prison	Matched Suspended	Matched Prison
Any DV reoffence (free days)	Est. 12-month % reoffending	17.6	21.3	20.3	20.3
	(95% CI)	(16.2, 19.0)	(19.2, 23.4)	(18.3, 22.3)	(18.2, 22.4)
	Est. 36-month reoffending	30.5	33.7	34.2	32.3
	(95% CI)	(28.6, 32.3)	(30.8, 36.5)	(31.6, 36.9)	(29.5, 35.1)
	Hazard ratio	1	1.17	1	0.96
	(95% CI)		(1.04, 1.32)		(0.84, 1.10)
	p-value		0.0075		0.5693
Any reoffence (free days)	Est. 12-month % reoffending	32.1	39.2	37.4	37.9
	(95% CI)	(30.4, 33.8)	(36.8, 41.6)	(35.0, 39.8)	(35.4, 40.4)
	Est. 36-month % reoffending	54.7	63.3	60.5	62.4
	(95% CI)	(52.7, 56.6)	(60.4, 66.2)	(57.8, 63.2)	(59.4, 65.4)
	Hazard ratio	1	1.28	1	1.04
	(95% CI)		(1.18, 1.39)		(0.94, 1.14)
	p-value		<.0001		0.428
Violent DV reoffence (free days)	Est. 12-month % reoffending	6.8	7.4	7.8	7.0
	(95% CI)	(5.9, 7.8)	(6.0, 8.8)	(6.4, 9.2)	(5.6, 8.4)
	Est. 36-month % reoffending	14.9	15.8	16.3	14.9
	(95% CI)	(13.3, 16.4)	(13.4, 18.3)	(14.1, 18.6)	(12.6, 17.2)
	Hazard ratio	1	1.10	1	0.95
	(95% CI)		(0.92, 1.33)		(0.77, 1.17)
	p-value		0.2901		0.6486

Figure 4. After matching: estimated proportion of offenders committing a new DV-related offence across free time since index appearance for prison and suspended sentence groups, with 95% confidence intervals



DISCUSSION

The current study found that DV offenders who received a first time prison sentence took, on average, the same length of time to reoffend upon release from custody as their matched counterparts who served a suspended sentence in the community. This was true for our measure of general reoffending, as well as our measures of DV reoffending and violent DV reoffending. This suggests that short prison sentences (less than 12 months) are no more effective in deterring DV reoffending than suspended sentences. This result is consistent with the earlier analyses conducted by Trevena and Weatherburn (2015) examining the deterrent effect of short prison sentences for all offenders, irrespective of the type(s) of offence for which they were found guilty.

The same three caveats raised by Trevena and Weatherburn (2015) in relation to their reoffending analysis apply in equal measure to the current study. These include that (1) matching was only based on the observable characteristics of offenders and it possible that the groups examined here differed on some unmeasured covariate (2) the conclusions were based on an analysis of prison sentences of less than 12 months and suspended sentences of less than 24 months and may not generalise to lengthier custodial sentences, and (3) the deterrent effect of custody may have been diminished by the fact that a proportion of our prison group had served some time in custody (on remand) prior to the index custodial episode. Additionally, because time under supervision (either whilst on parole or whilst serving the suspended sentence in the community) was not taken into account in the reoffending analysis, it is possible that the two groups differed in their level of surveillance during the follow-up period. Having said this, no offenders in the prison group and only 10 per cent of offenders in the suspended sentence group had total sentences exceeding 12 months (none had sentences in excess of 24 months). Any impact of supervision on reoffending rates would therefore be small, particularly for the latter part of the 36-month follow-up period.

It is also important to keep in mind that only the specific deterrent effect of custodial penalties has been measured in our analysis. Specifically, this analysis was concerned with the impact of the current prison experience only for those people who have been sentenced to prison for DV related offences. Our results say nothing about whether or not the mere existence or imposition of prison for DV offences deters the broader community from committing these types of crimes.

Furthermore, our study was not designed to measure the incapacitation effect of short prison sentences for DV offenders. While our results suggest that prison exerts no impact on future DV offending once an offender is released from custody, it is possible that short prison sentences could still serve to protect

the victim and the community whilst the offender is behind bars. Any incapacitation effect exerted in this context is likely to be relatively small given that most prison sentences imposed for DV offences are short in duration. Nevertheless, it remains an important consideration in sentencing matters where there is substantial risk of harm to the victim or community if the offender were to be released.

This work has important implications for public policy. It suggests that increasing the proportion of DV prisoners who are imprisoned for short periods is unlikely to have a significant impact on future DV reoffending. What may be more important for achieving significant reductions in DV is the type of interventions or the levels of supervision that DV offenders receive once they are released from custody or, if serving a non-custodial sanction, whilst they are in the community. While there is very little work that has been conducted in this area in NSW, evidence is emerging from the North American literature suggesting that non-Duluth¹ group-based treatments such as those based on cognitive-behavioural therapy, relationship enhancement or substance abuse treatment may be promising treatments for DV offenders. Interventions relying on increased surveillance or supervision of DV offenders require further, more rigorous, evaluation (Miller, Drake, & Nafziger, 2013).

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NOTES

1. Duluth based treatment models are based on the assumption that domestic violence "...is a gender-specific behaviour which is socially and historically constructed. Men are socialized to take control and to use physical force when necessary to maintain dominance" (Ganley, 1996). Duluth group-based treatments do not address any other factors associated with domestic violence such as mental illness, substance abuse, anger, stress or dysfunctional relationships.

REFERENCES

- Andrews, D., & Bonta, J. (1995). *The Level of Service Inventory - Revised*. Toronto: Multi-Health Systems.
- Australian Bureau of Statistics. (2013). *Directory of Family and Domestic Violence Statistics*, cat. no. 4533.0. ABS, Canberra.
- Day, A., Chung, D., O'Leary, P., Justo, D., Moore, S., Carson, Ed., & Gerace, A. (2010). Integrated responses to domestic violence: Legally mandated intervention programs for male perpetrators. *Trends and Issues in Crime and Criminal Justice*, No. 404, 1-8.
- Domestic Violence Death Review Team (2015). *NSW Domestic violence death review team annual report 2012-2013*. Retrieved 10 February 2016 from the NSW Coroner's Court website: http://www.coroners.justice.nsw.gov.au/Documents/dvdr_t_2013_annual_reportx.pdf.
- Feder, L., & Wilson, D.B. (2005). A meta-analytic review of court-mandated batterer intervention programs: Can courts affect abusers' behaviour? *Journal of Experimental Criminology*, 1, 239-262.
- Ganley, A. (1996). Understanding domestic violence. In: W. Warshaw & A. Ganley (eds.), *Improving Health Care Response to Domestic Violence* (pp. 15-44). San Francisco: *Futures Without Violence*. Retrieved from http://www.futureswithoutviolence.org/userfiles/file/HealthCare/improving_healthcare_manual_1.pdf
- Hua, J., & Fitzgerald, J. (2006). *Matching court records to measure reoffending*. (Crime and Justice Bulletin No. 95). Retrieved 10 February 2016 from the NSW Bureau of Crime Statistics and Research website: <http://www.bocsar.nsw.gov.au/Documents/CJB/cjb95.pdf>
- MacKinnell, I., Poletti, P., & Holmes, M. (2010). *Measuring offence seriousness*. (Crime and Justice Bulletin No. 142). Retrieved 10 February 2016 from NSW Bureau of Crime Statistics and Research website: <http://www.bocsar.nsw.gov.au/Documents/CJB/cjb142.pdf>
- Miller, M., Drake, E., & Nafziger, M. (2013). *What works to reduce recidivism by domestic violence offenders?* (Document No. 13-01-1201). Olympia: Washington State Institute for Public Policy.
- Mills, L.G., (1998). Mandatory arrest and prosecution policies for domestic violence: A critical literature review and the case for more research to test victim empowerment approaches. *Criminal Justice and Behavior*, 25(3), 306-318.
- Nagin, D., Cullen, F., & Jonson, C. (2009). Imprisonment and re-offending. In M. Tonry, (ed), *Crime and Justice: An Annual Review of Research* (vol. 38), Chicago: University of Chicago Press, 115-200.
- NSW Bureau of Crime Statistics and Research. (2015). *New South Wales Recorded Crime Statistics – Quarterly Update June 2015*. Retrieved 10 February 2016 from the NSW Bureau of Crime Statistics and Research website: http://www.bocsar.nsw.gov.au/Documents/RCS-Quarterly/NSW_Recorded_Crime_June_2015.pdf
- Ringland, C., & Fitzgerald, J. (2010). *Factors which influence the sentencing of domestic violence offenders*. (Bureau Brief No. 48). Retrieved 10 February 2016 from the NSW Bureau of Crime Statistics and Research website: <http://www.bocsar.nsw.gov.au/Documents/BB/bb48.pdf>
- Rosenbaum, P., & Rubin, D. (1985). Constructing a control group using multivariate matched sampling methods that incorporate the propensity score, *American Statistician*, 39(1), 33-38.
- Sherman, L.W., & Berk, R.A. (1984). *The Minneapolis Domestic Violence Experiment*. *Police Foundation Reports*. Retrieved 15 April 2016 from Police Foundation website: <http://www.policefoundation.org/wp-content/uploads/2015/07/Sherman-et-al.-1984-The-Minneapolis-Domestic-Violence-Experiment.pdf>
- Sherman, L.W., Smith, D.A., Schmidt, J.D., & Rogan, D.P. (1992). Crime, punishment and stake in conformity: Legal and informal control of domestic violence. *American Sociological Review*, 57, 680-690.
- Trevena, J., & Weatherburn, D. (2015). *Does the first prison sentence reduce the risk of further offending?* (Crime and Justice Bulletin No. 187). Retrieved 10 February 2016 from the NSW Bureau of Crime Statistics and Research website: <http://www.bocsar.nsw.gov.au/Documents/CJB/Report-2015-Does-the-first-prison-sentence-reduce-the-risk-of-further-offending-cjb187.pdf>

APPENDIX

Table A1. Demographic characteristics before matching, for people with prison and suspended sentences

Variable		Suspended sentence n (%) 2,974 (63)	Prison n (%) 1,721 (37)	Total n (%) 4,695 (100)	
Gender	Female	324 (11)	151 (9)	475 (10)	
	Male	2,650 (89)	1,570 (91)	4,220 (90)	
Age	18-24	640 (22)	462 (27)	1,102 (23)	
	25-31	720 (24)	446 (26)	1,166 (25)	
	32-39	758 (25)	404 (23)	1,162 (25)	
	40+	856 (29)	409 (24)	1,265 (27)	
Indigenous Status (ever identified)	Not Indigenous/missing	2,219 (75)	1,180 (69)	3,399 (72)	
	Indigenous	755 (25)	541 (31)	1,296 (28)	
ARIA	Major City	1,701 (57)	934 (54)	2,635 (56)	
	Inner Regional	876 (29)	531 (31)	1,407 (30)	
	More remote	397 (13)	256 (15)	653 (14)	
SEIFA	More disadvantaged	1,478 (50)	863 (50)	2,341 (50)	
	Less disadvantaged	1,496 (50)	858 (50)	2,354 (50)	
Number of prior court appearances	0	572 (19)	227 (13)	799 (17)	
	1 or 2	1,425 (48)	714 (41)	2,139 (46)	
	3+	977 (33)	780 (45)	1,757 (37)	
Days in custody over previous 5 years	0	1,811 (61)	863 (50)	2,674 (57)	
	1-4	658 (22)	348 (20)	1,006 (21)	
	5+	505 (17)	510 (30)	1,015 (22)	
In previous 2 years: any DV violent offences	Yes	498 (17)	313 (18)	811 (17)	
	any DV breach of AVO	Yes	501 (17)	343 (20)	844 (18)
	any other DV offence	Yes	218 (7)	141 (8)	359 (8)
In previous 5 years: any breach offences	Yes	1,025 (34)	737 (43)	1,762 (38)	
	any drug offences	Yes	350 (12)	272 (16)	622 (13)
	any property offences	Yes	397 (13)	348 (20)	745 (16)
	any traffic offences	Yes	1,032 (35)	689 (40)	1,721 (37)
	any violent offences	Yes	1,449 (49)	962 (56)	2,411 (51)
Index year	2009	568 (19)	337 (20)	905 (19)	
	2010	614 (21)	355 (21)	969 (21)	
	2011	584 (20)	302 (18)	886 (19)	
	2012	555 (19)	314 (18)	869 (19)	
	2013	653 (22)	413 (24)	1,066 (23)	

Table A1. Demographic characteristics before matching, for people with prison and suspended sentences - continued

Variable		Suspended sentence n (%)	Prison n (%)	Total n (%)
		2,974 (63)	1,721 (37)	4,695 (100)
DV-related principal offence	Yes	2,052 (69)	1,036 (60)	3,088 (66)
Pleaded guilty	Yes	2,240 (75)	1,214 (71)	3,454 (74)
Legal representation	Represented	2,331 (78)	1,378 (80)	3,709 (79)
Number of proven concurrent charges	0	543 (18)	187 (11)	730 (16)
	1	682 (23)	280 (16)	962 (20)
	2-3	1,007 (34)	549 (32)	1,556 (33)
	4+	742 (25)	705 (41)	1,447 (31)
Any proven concurrent DV charges	Yes	1,474 (50)	1,017 (59)	2,491 (53)
Principal offence involving	Violence	1,681 (57)	887 (52)	2,568 (55)
	Breach	992 (33)	623 (36)	1,615 (34)
	Other	301 (10)	211 (12)	512 (11)
Any proven offences at finalisation involving	DV: Acts causing injury	2,053 (69)	1,133 (66)	3,186 (68)
	DV: Breach of AVO	1,613 (54)	1,098 (64)	2,711 (58)
	Violence	2,229 (75)	1,263 (73)	3,492 (74)
	Any breach	882 (30)	610 (35)	1,492 (32)
	Drugs	130 (4)	114 (7)	244 (5)
	Property	136 (5)	171 (10)	307 (7)
LSIR score	Missing	780 (26)	504 (29)	1,284 (27)
	Low	277 (9)	77 (4)	354 (8)
	MedLow	833 (28)	328 (19)	1,161 (25)
	Med	904 (30)	603 (35)	1,507 (32)
	MedHigh-High	180 (6)	209 (12)	389 (8)
Total sentence length	0-6 months	611 (21)	648 (38)	1,259 (27)
	7-12 months	2,069 (70)	1,073 (62)	3,142 (67)
	13-24 months	294 (10)	0 (0)	294 (6)
Mean (sd) seriousness of primary offence ^a		65.2 (21.9)	61.7 (23.7)	63.9 (22.6)

^a Note that a lower seriousness score is associated with a more severe offence

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