

Police bail and risk of re-offending

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Aim: To determine whether the police are remanding offenders with a low risk of re-offending.

Method: First a model of juvenile re-offending was developed based on offender characteristics available to the police at the time of the bail decision. This model was then used to predict the probability of re-offending for a sample of 23,667 juveniles, 29.1 per cent of whom had been remand by the police. The others had either been released on bail or unconditionally released. The probabilities were grouped into deciles and compared for the police remand and the non police remand groups.

Results: After determining the risk of reoffending for the sample of juvenile defendants, it was clear that on average those held on police remand had a high risk of re-offending. However the police are granting bail to a number of high risk offenders.

Conclusion: There is no evidence that the police are remanding juveniles who are at a low risk of re-offending.

Keywords: Juvenile offending, police remand, re-offending, bail.

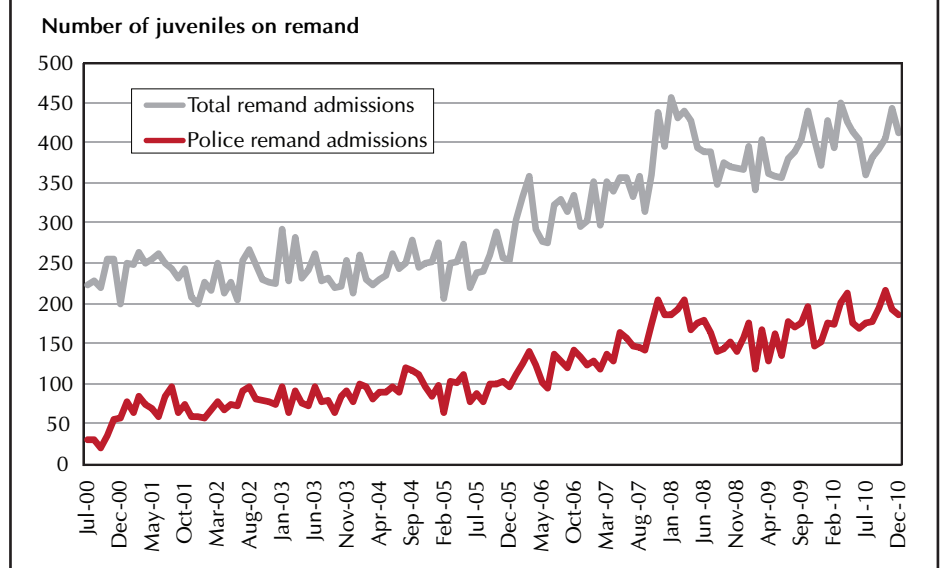
Introduction

The number of juveniles refused bail by police has been steadily increasing since 2000 (see Figure 1). Between 2007 and 2008, the juvenile remand population grew by 32 per cent, from an average of 181 per day to 239 per day. Considerable uncertainty surrounds the cause or causes of this increase. Whatever its cause, the rise in the juvenile remand population is costly. Between 2007 and 2008, the annual recurrent cost of keeping juveniles on remand rose from approximately \$36.7 million to \$47.2 million.

One of the factors police must take into account when deciding whether or not to refuse bail is the likelihood of any further offending. The *Bail Act 1978* stipulates a large number of factors that police may take into account but in deciding what weight to give these factors police have little more than experience to guide them. The bail assessment process is therefore fraught with difficulty. If police adopt too conservative an approach to bail, they

will end up refusing bail to large numbers of defendants who are at low risk of offending. If, on the other hand, they adopt too liberal an approach to bail, they will end up granting bail to large numbers of defendants who are at high risk of offending.

Figure 1. Number of juveniles remanded by police by month, July 2000 to December 2010



Detaining juveniles who are at low risk of re-offending may cause psychological harm, disrupt the child's family life and/or harm their school performance. Releasing juveniles who are at high risk of re-offending puts the general community at risk.

The study reported here examines the extent to which NSW Police are refusing bail to low risk juvenile defendants and/or granting bail to high risk juvenile defendants. The general approach is to take a large sample of juvenile defendants and build a statistical model that allows us to calculate each juvenile's risk of re-offending. We then apply this model to a second large sample of juveniles and compare the distribution of risk of re-offending among those refused bail by police to the distribution of risk of re-offending among those granted bail by police. If the police are good at assessing risk of re-offending we should find most of those refused bail have a high (> 50%) chance of re-offending, while most of those granted bail should have a low (<50%) chance of re-offending. If police are conservative in their approach to bail we should find a large proportion of low risk juveniles being refused bail. If they are liberal in their approach, we should find a large proportion of high risk juveniles being granted bail.

Method

The data was drawn from the Bureau's Reoffending Database (ROD) which contains all formal police cautions, youth justice conferences and court appearances, as well as demographic information about offenders and previous offending history.

Re-offending was defined for the purposes of this study as any proven offence other than a justice procedure offence that was finalised by the end of September 2010 (the most recent data available). Justice procedure offences were excluded because there has been past criticism that convictions for these offences are influenced by policing practices. Note that the period over which re-offending is assessed is considerably longer than the average time juveniles refused bail spend on remand (a median time of 1 day and an average of between 9.9 and 13.2 days between July 2005 and June 2010).

Two datasets were drawn. The first (dataset A) consisted of all juveniles who appeared before a court for a case that was finalised between 2004 and 2006. If a juvenile appeared multiple times over the period only their first appearance was retained. This dataset contained 12,111 juveniles, of whom 8,243 had re-offended by September 2010. The second (dataset B) consisted of all juveniles who had been identified by the Department of Juvenile Justice (DJJ) as being refused bail by the police over the period January 2007 to December 2009. A comparison group of all other juveniles who had a court appearance finalised during that period was added to the dataset (this included juveniles who had been released on bail by the police as well as those unconditionally released). If a juvenile appeared more than once during the period only their first appearance was retained. This dataset contained 23,667 juveniles, 6,896 (29.1 per cent) of whom were remanded by police. Note that juveniles in dataset B only appeared once.

Therefore if a juvenile was in the police remand sample they could not also be in the non-remand sample for a different offence.

The analysis was carried out in two stages. First a logistic regression model was built using dataset A, with '*reconviction for an offence, not including breach of a justice order*' as the outcome variable. Previous research (Smith & Jones 2008), had found the following variables are correlates of reoffending:

- Age
- Gender
- Indigenous status
- Principal offence in the current case
- Number of concurrent offences in the current case
- Prior offences (regardless of whether they resulted in a formal police caution, youth justice conference or court appearance)
- Prior control orders

This model was then used to determine the probability of reoffending for a second group of juveniles (dataset B), containing both offenders who had been refused bail by the police and offenders who had been granted bail by the police (regardless of whether they were subsequently remanded by the court).

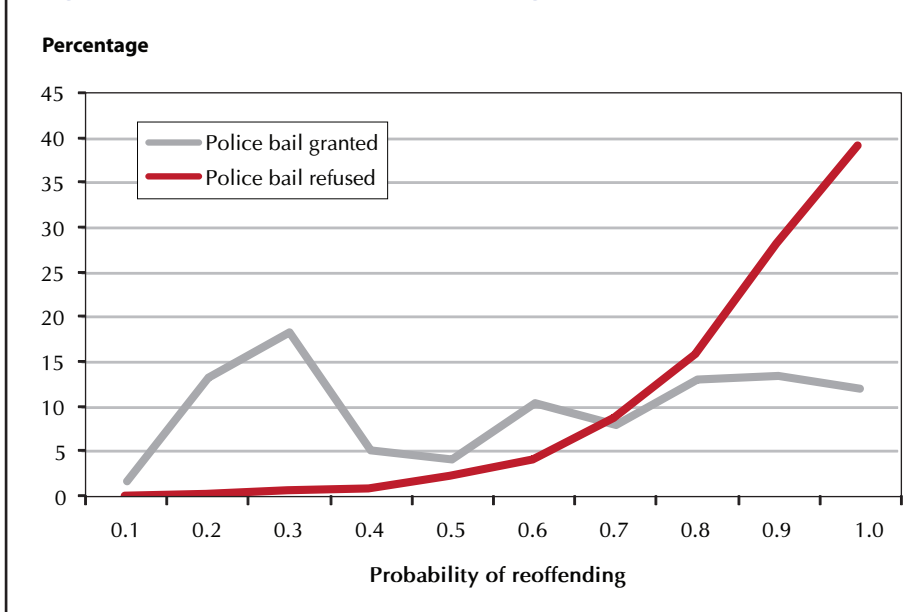
Results

Table 1 shows the parameters (and associated standard errors) for the logistic regression model developed using dataset A as outlined in the previous section. Appropriate model diagnostics have been included. The most important of these diagnostics

Table 1. Parameters, standard errors and diagnostics of the logistic regression model

Variable	Parameter estimate	Standard error
Intercept	0.280	0.087
Aged 15	-0.263	0.094
Aged 16	-0.476	0.084
Aged 17	-0.732	0.079
Male	0.692	0.056
Indigenous	0.660	0.069
Indigenous unknown	-1.999	0.072
Serious violent offence	-0.393	0.066
Two concurrent offences	0.152	0.071
Three or more concurrent offences	0.240	0.086
One prior caution	0.682	0.063
Two or more prior cautions	1.082	0.060
Prior conference	0.176	0.067
Prior control order	1.287	0.093
Area under ROC curve = 0.818		
Hosmer-Lemeshow = 12.8 (df = 8), p-value = 0.1186		
Deviance = 889.2 (df = 1459), p-value = 1.0000		

Figure 2. The probability of re-offending by remand status



is the area under the Receiver Operating Characteristic (ROC) curve. The area under the curve (AUC) ranges between 0.5 (where the model's predictive power is no better than chance) and 1.0 (where the model's predictions are perfect). In the present case the AUC value is quite high (0.818), suggesting that the model provides quite accurate predictions of risk of re-offending.

Using the parameters in the above model, re-offending probabilities were determined for all defendants in dataset B. Figure 2 shows the distribution of predicted probability of re-offending (grouped into deciles) for the bail refusal and bail granted groups. It is clear that most of the bail refusal group have high reoffending probabilities. Only 8 per cent of the bail refused defendants had a probability of re-offending of less than 60 per cent, whereas 67 per cent of defendants had a probability of 80 per cent or higher. In the bail granted group the distribution of re-offending risk was more even. Just over half of this group had a re-offending probability of less than 60 per cent, while a quarter had a re-offending probability or 80 per cent of higher. In short, police do not appear to be refusing bail to many low risk defendants. They are, on the other hand, granting bail to a number of high risk defendants.

Discussion

The aim of this study was to determine the extent to which police are refusing bail to low risk defendants and/or granting bail to high risk defendants. When it comes to judging risk of re-offending, police do not appear to adopt an overly restrictive

approach. Few of those they refuse bail to are at low risk of re-offending. Indeed, some of those they grant bail to are at fairly high risk of re-offending.

The fact that police grant bail in a number of cases where the defendant is at high risk of re-offending does not necessarily mean police are failing to meet their obligations under the *Bail Act 1978*. For one thing, police do not have the analytical tools required to conduct an actuarial risk assessment on each juvenile they detain. For another, the period over which re-offending risk is considered here extends well beyond the period that will elapse before a juvenile on bail is brought before the Children's Court. It is also important to remember that actuarial instruments may be much better than intuition or

experience in judging the future risk of offending but they are nonetheless far from perfect. Some defendants deemed to be 'high risk' do not actually go on to re-offend. This puts police (and courts) in a difficult position. In any given case they must weigh the risk of a juvenile offending on bail against the risks and costs associated with placing an unconvicted juvenile in custody who, even if subsequently convicted, may not receive a custodial sentence.

It is, finally, also important to remember that bail refusal is not the only way of dealing with young people charged with criminal offences who are judged to be at risk of further offending. Other options include placing them under the care and supervision of their parents or placing them in supported accommodation under the supervision of officers from the Department of Juvenile Justice.

References

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- Snowball, L., Roth, L. & Weatherburn, D. (2010). Bail presumptions and the risk of bail refusal: An analysis of the NSW Bail Act, *Bureau Brief* (No. 49). Sydney: NSW Bureau of Crime Statistics and Research.