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PREDICTING RECONVICTIONS FOR SEXUAL AND VIOLENT OFFENCES USING THE REVISED OFFENDER GROUP RECONVICTION SCALE

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The Offender Group Reconviction Scale (OGRS) predicts, from a limited number of criminal history and demographic factors, the probability that an offender will be reconvicted within two years of release from prison or from the start of a community penalty for any standard list offence. A revised version of OGRS is now used, which also predicts reconvictions for sexual and violent offences. These Findings examine the advantages and limitations of the revised OGRS, particularly in relation to predicting sexual and violent reconvictions.

KEY POINTS

- ▶ The revised version of the OGRS is shown to be more accurate in its prediction of reconvictions for certain age groups with respect to general offending.
- ▶ A history of burglary is found to be a factor in the prediction of reconviction for both general, sexual and violent reconvictions.
- ▶ The OGRS is now able to classify sexual and violent offenders according to their level of risk.
- ▶ Of offenders with no previous history of sexual or violent offences, 10% are reconvicted for such offences.

BACKGROUND

The Offender Group Reconviction Scale (OGRS) is a statistical risk score which provides an estimate of the probability that a convicted offender will be reconvicted at least once within two years of release from custody or from the start of a community sentence, for any type of offence. It has been used since November 1996. The score provides probation officers with an assessment tool when writing pre-sentence reports. In addition, the OGRS is widely used as a research tool to evaluate the effectiveness of offender treatment programmes.

The OGRS is based on a logistic regression analysis of data on a large sample of offenders who have been convicted in the recent past and whose subsequent two-year history of reconvictions has been traced through the Home Office Offenders Index. It is therefore limited to 'standard list' offences; that is, all indictable and the more serious summary offences.

The original OGRS was based on a sample of 14,000 offenders discharged from prison or sentenced to a community penalty in 1990 and used six simple demographic and criminal history factors. It was generally a very good predictor of reconviction but was poor among certain age groups, particularly those aged between 13 and 17 years and offenders aged over 50. The revised version aimed to:

- improve reconviction rate predictions for young offenders
- predict the reconviction rates for future sexual and violent offences.

The new model is based on a sample of over 30,000 offenders discharged from prison or sentenced to a community penalty in 1995. Some variables remain the same but others are added to provide a stronger prediction of likely reconviction at two years. The variables used in the revised OGRS are shown in Table 1.

Table 1 Variables used as predictors in the revised OGRS

- offender's age in years at time of sentence
- gender
- number of youth custodial sentences
- current offence group (This was based on only standard list offences and broke down offences into 27 detailed offence categories)
- age at current conviction (this was split into ten age bands)
- age at first conviction
- the Copas rate variable
- history of burglary (whether the offender has a current or previous history of burglary)
- history of breach (whether the offender has a current or previous history of a breach).

Note: The Copas rate is the rate at which offenders are convicted, i.e. an offender with five convictions within five years between first and current conviction will have a higher rate of conviction than an offender with five convictions within ten years.

The covariates were weighted to reflect their involvement in reconviction.

The OGRS is available as a Windows-based program. Probation service staff enter the correct information and the OGRS will calculate a percentage probability of reconviction. The probability score represents the average reconviction rate from a group of offenders who match the individual offender on the factors used in the model. For example, a male offender, aged 24, who received his first conviction at the age of 16, with a current conviction for domestic burglary, three previous convictions and a previous history of burglary would have an OGRS score of 49%. In other words, an average of 49 out of every 100 offenders with these same characteristics would probably be reconvicted for a further offence within two years.

GENERAL IMPROVEMENTS IN THE OGRS

The revised OGRS is more accurate in its prediction of reconvictions among young offenders. Some variables remain, such as the rate of conviction (the Copas rate) which is a very strong predictor of reconviction (Copas and Marshall, 1998). But it also makes use of additional variables such as a history of burglary. A more detailed offence breakdown adds to the model's predictive power.

Offence categories

There are now 27 separate offence categories (nine were used originally) which makes it possible to distinguish the subtle differences in reconvictions between offences. For instance, it is known that those convicted of sexual offences against children have a low reconviction rate as there are problems with obtaining convictions for this type of offence, whereas indecent exposure has a relatively high conviction rate. If these offences are combined into a single sexual offence category (as in the previous version of OGRS) the model would produce a weight which would be too high for child sexual offenders and too low for indecent exposure.

Age bands

The revised version groups offenders into ten age categories, ranging from a band of 10 to 13 years to a band of 50 years and over. This is a significant improvement over the previous version of OGRS in its predictions for offenders aged under 18.

Burglary

History of burglary has been found to be a strong predictor of reconviction. Even after controlling for all other factors in the model, a history of burglary was still found to predict reconvictions. There are two possible explanations. First, offenders who specialise in burglary are highly prolific in the number of offences they are likely to commit. Therefore, there is a high probability of being caught even though the police clear-up rate for these crimes is relatively low (at around 20%). Second, evidence suggests that police forces target known offenders. Operations such as 'Bumblebee', for example, targeted known burglars.

Breaches

A previous history of a breach of a court order was also found to significantly improve the effectiveness of the model.

PREDICTING THE RISK OF RECONVICTION FOR SEXUAL AND VIOLENT OFFENDERS

The OGRS model for predicting sexual and violent convictions is based on a sample of over 23,000 offenders on the Home Office Offenders Index sentenced to a community penalty or discharged from custody in 1995 with either a current and/or previous history of sexual or violent offending.

The aim was to produce a model that predicted reconvictions for 'standard list' sexual and violent offences within two years of offenders' release from prison or from the start of a community penalty. It was intended for the use of probation officers to assess the risk of sexual or violent offenders (defined by a previous or current conviction for sexual or violent offences) being reconvicted for a further sexual or violent offence within two years. The model therefore only applies to offenders with previous or current convictions for these types of offence. The variables used are listed in Table 2.

Table 2 Variables used as predictors in the revised OGRS for sexual/violent offenders

Variables used include five from the general OGRS model:

- gender
 - current offence group
 - age at current conviction
 - the Copas rate variable
 - history of burglary
- plus two other variables:
- number of violent convictions
 - number of sexual convictions.

Table 3 1995 OGRS sample showing profile of sexual and violent offenders compared with other offenders

Offender profile	Sexual/violent offenders	Other offenders
	Average	Average
Number of previous convictions for burglary	2.2	1.1
Rate of convictions	53.6	45.1
Age at sentence	28.5	27.9
Age at first conviction	18.7	22.3
Number of convictions	7.3	3.3
Number of reconvictions for sex/violent offences	0.2	0.1

From the 1995 OGRS sample, the average number of convictions for all types of offence among sexual and violent offenders was 7.3 convictions (see Table 3). The average for all other offenders was only 3.3 previous convictions. This may partly be explained by age, as the sexual and violent offenders in the sample were slightly older than average (28.5 years against nearly 27 years), and have therefore had more time to commit offences. However, the Copas rate variable calculates the frequency of offending in relation to the length of criminal career. This was 54 for sexual and violent offenders but only 45 for all other offenders. This suggests that offenders who commit sexual and violent offences are highly criminal individuals.

The importance of burglary in predicting future sexual/violent convictions is demonstrated in Table 3, with sexual and violent offenders recording on average twice as many convictions for burglary as all other types of offender. There are a number of possible explanations. It may be that some offenders set out intending to commit a burglary but also look for, or take advantage of, an opportunity to commit another crime, such as rape. This view is supported by Scully and Marolla (1985) in their study of over 100 rapists. They identified one group who saw the rape as an 'added bonus' to another crime.

LIMITATIONS OF THE OGRS IN RELATION TO SEXUAL AND VIOLENT RECONVICTION

The problem with predicting sexual and violent convictions on a two year follow-up is that, relative

to other offenders, they have a low reconviction rate. This is due to a number of factors including:

- low levels of reporting for this type of crime
- ability of offenders to conceal their crimes
- low proportion of reported crimes that the CPS feel able to prosecute
- low conviction rate
- length of court proceedings (if the offender is prosecuted).

Violent offences are less likely to be reported to the police than other types of crime (around 37% against 40% of all crimes reported in the 1998 British Crime Survey). The levels of reporting for sexual offences are even lower, at around only 20% (Mayhew et al., 1989).

The length of court proceeding between charge/summons and completion is particularly relevant for sexual offences. For instance, a survey by the Lord Chancellor's Department found that it takes on average 233 days from charge/summons to the end of court proceedings for indictable sexual offences, against only 135 days for all indictable offences. This could mean that many sexual convictions fall outside the two year reconviction follow-up.

Context of offending

For the reasons outlined above, the average reconviction rate for sexual and violent offenders convicted of a further sexual or violent offence is only 20%. This low base rate of reconviction makes it difficult to interpret the difference between OGRS probability scores for offenders who pose low, average and high risks of reconviction.

The example of an offender who, according to the revised OGRS prediction, has a 40% probability of being reconvicted for a further sexual or violent offence illustrates the problem. On the face of it, this sounds as though the offender has quite a low chance of being reconvicted. However, if we know that this rate is twice that of the average offender, this figure seems very high.

In the revised OGRS the scores for sexual and violent offending have been translated into 'some', 'moderate', 'raised' or 'high' risk bands. This makes it easier to interpret the level of risk. Table 4

Table 4 Banded risk scores and actual reconviction rates for sexual and violent offenders reconvicted for a further sexual or violent offence within two years of release from prison or from the start of a community penalty in 1995

Risk band	Risk score	Actual reconviction rate
Some risk	0 to 10	6%
Moderate risk	11 to 16	15%
Raised risk	17 to 25	21%
High risk	25+	34%
All risk	0 to 100	20%

demonstrates the break down of the group scores and the average reconviction rate of offenders in each of the four risk groups. The lowest risk group is 'some' not 'low' risk. It is important to stress that even those in the lowest risk group have some risk of reconviction – 6% of those in this low risk group were reconvicted within two years.

Previous history

A significant proportion of offenders will be reconvicted for sexual or violent offences despite having no previous or current history for these types of offence. From a sample of almost 21,000 prisoners discharged in 1995, 8,626 offenders had no previous or current history of sexual or violent offences (41%). Of this group, 847 were reconvicted for a sexual or violent offence within two years (10%). Of the 12,200 offenders in the sample who had a history of sexual offences and violence, 19% were reconvicted. These figures show that a previous history of sexual and violent offences is a strong predictor of sexual or violent reconviction. Prisoners discharged with a previous or current history of sexual or violent offending are almost twice as likely to be reconvicted at two years than those with no history. However, a number of offenders are reconvicted for sex and violent offences without a previous or current history for these types of crime.

OGRS is not a prediction about individuals

OGRS is an estimate of what rate of reconviction might be expected from a *group* of offenders who match an individual on the set of factors used in the model. OGRS is not able to identify *which* individuals will be reconvicted. The OGRS for sexual and violent offenders aims to identify four groups who represent

differing levels of risk but the model cannot tell us which individuals within these groups will be reconvicted. It can only tell us that there will be a higher proportion of people in the 'high' risk group who will be reconvicted than there are in the lower risk groups. OGRS could therefore be used as a screening tool, to target further assessment at higher risk groups of offenders.

CONCLUSION

The original OGRS was criticised as simplistic for not taking into account social and behavioural factors. These same criticisms can still be applied to the new versions of OGRS because social and behavioural information is not available from the Offenders Index. However a recent study (May, 1999) concluded that while some social factors are associated with reconviction, their power of prediction is slight once criminal history factors have been taken into account. This is not to underplay the role of social factors. Criminal history is probably such a strong predictor of reconviction because it acts as a proxy for the underlying social and behavioural problems associated with offending.

The OGRS for sexual and violent reconvictions is a useful screening tool that can identify groups of offenders at differing levels of risk. It also has the advantage over other assessment tools in that it is relatively cheap and easy to apply, and does not require users to have any specialist training.

This research will also feed into the preparation of a new offender assessment system currently being developed by the prison and probation services.

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