ARTICLE

Rape Myths and Invisible Crime: The Use of Actuarial Tools to Predict Sexual Recidivism

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This article aims to show that the statistical tools currently used to predict risk in convicted sex offenders are based on a biased sample that renders them unreliable. It examines the profile of rape, including rape that drops out of the criminal justice system before conviction. It then examines studies of rape profiles in the general population. It looks at New Zealand sentencing and parole law. It examines the structure of the actuarial tools used by Corrections New Zealand to assess recidivism risk in sex offenders. It then compares the profile of reported rape, and the profile of offending established by studies of unreported rapists, to the risk factors identified in those actuarial tools. The analysis suggests that the actuarial tools are likely to further entrench the same factors that already wrongfully diminish the probability of conviction in many rape cases, because cases exhibiting those factors are more likely to be perceived as low risk. Finally, it suggests that with more research, actuarial tools could be used to counteract some of the factors associated with low reporting, prosecution and conviction rates. It argues that most of the issues with the actuarial tools currently in use are due to the use of offenders as a sample for establishing the tool. As an alternative, it suggests research on the population at large, which could be used to establish a more accurate risk scale. When combined with sufficient individualised information, such as psychologist interviews, this approach could present a reliable statistical profile, and when combined with individual assessment, could be a more useful predictive tool. That tool could then be used to focus the attention of the system on the subset of crime, which is under-reported and under-prosecuted but which still has a high reoffending rate. In this way, the tool could be used to compensate for bias in the criminal justice process.

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I Introduction

Sexual crimes are difficult to investigate and prosecute. They are underreported, and subject to attrition throughout the criminal justice process.1 Victims often decline to give evidence, or withdraw from the process.2 It is difficult to prove beyond reasonable doubt the absence of reasonable belief in consent. This fact is because social factors combine to create widespread assumptions that rapists fit a certain profile: that some victims bring rape upon themselves; that only stranger rape is truly unavoidable; that lack of physical resistance or injury implies consent; or that innocent men often rape accidentally in party, date or relationship contexts. These myths influence the police and juries, despite directions to disregard them.3

Despite worldwide attempts at legislative reform, false distinctions between real and other rape endure in some official publications and policies. For example, until 2013 the FBI kept full statistics for forcible rape as a subset of violent crime, but only kept arrest data for other kinds of rape. This implies that other rape is less significant or nonviolent.4 The Conflict Tactics Scale, used to determine the prevalence of abuse in relationships, considers some types of sexual coercion “minor” and others “major”.5 This categorisation correlates with rape myths: for example, rape by coercion is minor but if physical force is applied it is major.6 These distinctions ignore the fact that most sexual offences occur between people who know each other, drawing on existing relationships and power dynamics. These distinctions also ignore the fact that sexual violation is an inherently violent crime because it always involves violation of the victim’s bodily autonomy. The victim may even see non-violent rape committed using coercion, threats, or stupefying substances as a greater violation, because it involves the destruction of trust in a person, a sense of safety in a location, or in the case of substances, the victim’s control over his or her own mind.

Even when these stereotypes are addressed, they are often replaced with a legal approach incompatible with sexual violence prevention. The underpinnings of criminal and sentencing law serve a different paradigm of violence, one where crimes are relatively reliably reported, and reporting does not carry serious social consequences for most victims. The mixed objectives of the criminal law (punishment, treatment, and prevention)


2 Triggs and others, above n 1. Cases charged did not proceed due to victim withdrawal.

3 At 80–84. See also Louise Ellison and Vanessa E Munro “Better the devil you know? ‘Real rape’ stereotypes and the relevance of a previous relationship in (mock) juror deliberations” (2013) 17 E&P 299.


6 At 309.
are contradictory. This is a problem that is particularly acute regarding sexual violence. Punishment of *more severe* sexual crime may push crime with an equal or greater prevalence or likelihood of reoffending, to the lower end of the scale. In addition, accurate evaluation of some factors taken into account in sentencing requires a representative sample of offenders for comparison. Sexual crime has a very low reporting rate and a non-representative sample is reported, making accurate comparisons of certain factors difficult. An important example is the assessment of recidivism rates, which is critical at both sentencing and parole, often relying on actuarial tools formulated using samples composed of convicted offenders. However, there is research available on unreported and unconvicted crime that could compensate for the biased sample.

Due to the difficulty and scarcity of empirical research into sexual crime, and the individualised nature of sentencing, I take a qualitative rather than quantitative approach. I focus on male perpetration of rape against female victims, as this is statistically the most common iteration of rape as well as the most widely researched. However, many of my conclusions will apply to other types of rape, such as rape against male victims and, to a lesser extent, rape of minors. In terms of research, I rely on only a few studies, but they have been selected for their comprehensive and representative nature, and their incorporation of previous research. I use the term *invisible crime* to refer to crime that is systematically under-reported, under-prosecuted, and under-convicted. Invisible crime is ignored in official risk calculation. Invisible crime that never reaches trial is also ignored in crime statistics, and even policy.

**II Sentencing for Sexual Crime**

**A Sentencing guidance for sexual violation**

New Zealand distinguishes between different types of sexual violation in name, although theoretically not in substance. Sexual violation by rape is defined as unlawful sexual connection effected by the penetration of the victim’s genitalia by the offender’s penis. Other unlawful sexual insertions or mouth-to-genital contact are defined as sexual violation by unlawful sexual connection. The same sections of the Crimes Act govern both types of sexual violation, and the statutory language is a mirror image, so that the consent requirements are identical. Both have a maximum penalty of 20 years imprisonment. Theoretically, each type of sexual violation should be taken as seriously as the other.
The tariff case *R v AM (CA27/2009)* guides sentencing for sexual violation. All sentencing is based on the particular circumstances of the offending, including the culpability of the offender and the impact of the offending on the victim. In sentencing for sexual violation, the violence of the offending is relevant to the offender’s culpability and the harm done to the victim. Despite noting that neither is “worse” than the other, *R v AM* prescribes different sentencing bands for sexual violation by rape, and other forms of sexual violation. This is because sexual violation other than rape was seen to comprise a wider range of activity in terms of severity and culpability. One set of bands (*the rape bands*) deals with lead offences of rape, penile penetration of the mouth or anus, or violation using objects. Objects are included because their potential to cause physical injury makes them more analogous to rape than to other forms of unlawful sexual connection. These bands range from 6-20 years. The other set (*the USC bands*) deal with lead offences of sexual violation by unlawful sexual connection other than those covered under the rape bands. Sentences range from 2-18 years. The combination of factors was critical, so in sentencing judges should not focus on the mode of penetration. Non-rape sexual violations could be more serious than rape, if they had the potential to inflict greater injury. Serious digital penetration or forced oral sex could approach the sentences imposed for penile penetration or penetration with an object, though ultimately the lower effective maximum sentence indicates that the most serious rapes will be considered worse than the most serious unlawful sexual connection.

Factors indicating increased culpability for both kinds of sexual violation include planning and premeditation; violence, detention and home invasion; vulnerability of the victim; harm to the victim; the presence of multiple offenders; the scale of offending (for example, multiple instances of offending, long-term victimisation or cruelty); multiple victims; breach of trust; and degree of violation. Factors indicating decreased culpability include a mistaken and unreasonable belief in consent that is not grossly negligent (in contrast with cases where the offender knows there is no belief in consent), and the presence of consensual sexual activity immediately before the offending (depending on the timing and similarity of the prior activity, as well as other circumstances indicating culpability). A prior relationship between the offender and the victim is not a mitigating factor. The victim’s wishes, which in practice usually involve calls for leniency, may be taken into account to some extent. However, judges will bear in mind rape is a public wrong, and always consider the risk that the victim’s wishes might reflect illegitimate social pressure. This concession was seen as reducing the risk that victims might fail to complain because of the fear of an imposition of a harsh sentence.

14 *R v AM (CA27/2009)*, above n 7, at [36] and [65]-[75].
15 At [65].
16 At [90].
17 At [113].
18 At [70] and [73].
19 At [76].
20 At [37]-[52].
21 At [53]-[54]. See also *R v Hill CA94/02*, 21 October 2002.
22 *R v AM (CA27/2009)*, above n 7, at [61].
23 At [62]-[64].
B An illustration of rape myths

R v AM takes into account the culpability of the individual offender and the harm to the individual victim, to the extent these can be discerned from the crime and surrounding circumstances. The court attempted to avoid entrenching rape myths, but some are still latent within the factors listed. Certain aspects of the offence are treated as more important than others. Arguably, these are based on generalisations about the nature of the crime. Perhaps more importantly, other elements said to be relevant to sentencing cater to legal orthodoxy at the expense of empirical justification.

Consistency and proportionality are privileged over public safety. For example, s 8 of the Sentencing Act 2002 designates consistency to be a principle of sentencing.\(^{24}\) Prevention of reoffending is not a principle of sentencing, although previous convictions must be taken into account if they are numerous, similar, serious, recent, or relevant enough to be considered aggravating factors in respect of the conduct for which the offender is being sentenced.\(^{25}\) The effect of this prioritisation of principles over practicalities, coupled with the difficulties of applying other preventive measures for sexual crime, is counterproductive from a public safety viewpoint. I contend that it is difficult, if not impossible, to adequately address the purposes or principles of sentencing if our understanding of rape is based on an account which omits invisible crime. Although actuarial tools are not widely used in sentencing, the same misunderstandings which underpin them also undermine the robust application of the principles of sentencing.

R v AM was alert to the existence of rape myths. It avoided overtly blaming victims and reinforcing stereotypes of which type of rape was most serious. However, aspects of the guidelines nonetheless play into existing inequities and misconceptions. Such myths are problematic because they affect the criminal justice system's attitude to rape, reducing the chance that a victim to whom the myths apply will report a crime against her. Once a crime is reported, the myths may also affect the sentence initially given, which can have flow-on effects at parole. For example, a sentence of two years or less will lead to automatic release after half the sentence has been served, therefore a sentence of home detention may be considered.\(^{26}\) An offender serving a longer sentence must undergo a hearing, and cannot receive home detention, as this is only available where the effective sentence imposed is to be less than 12 months.\(^{27}\) Additionally, the criminal justice process's mistaken adherence to rape myths can make victims feel dismissed. Sentencing and parole occur after conviction, so victim mistreatment at those stages cannot cause attrition to the same extent as it might at other stages of the criminal justice process. However, it can discourage victims, and those who witness their difficulties, from reporting sexual crime in the future.

Perhaps the most serious rape myth evident in R v AM, and a factor that the Court of Appeal recognised might be misapplied, was the inclusion of a mistaken and unreasonable belief in consent as a factor reducing culpability. The judgment notes that belief in consent is not a mitigating factor, and a grossly negligent belief in consent will not reduce culpability. This seems a fine distinction that may be seized upon by the defence, especially in relationship rape cases.

\(^{24}\) Sentencing Act, s 8(e).
\(^{25}\) Section 9(1)(j).
\(^{26}\) Parole Act 2002, ss 21 and 28.
\(^{27}\) Section 86; and Sentencing Act, s 80A.
Similarly, the availability of prior consensual sexual activity as a factor reducing culpability is potentially problematic. The Court phrased this factor carefully, specifying that it did not apply to relationships generally, only where the preceding activity was genuinely similar and close enough in time to reduce culpability. Its inclusion nonetheless seems to play into the idea that sex within a relationship is a special case as regards to consent, or that consent may, in some circumstances, be assumed rather than established for each sexual act. It is difficult to see how this factor could be used except to establish genuine but unreasonable belief in consent, which is not a defence. Moreover, despite the Court’s expectation that it would have little effect on sentencing, it seems that the presence of this factor, when officially recognised, could distract from harm to the victim. The difference in this context may be evident to legal professionals, but the low prosecution-to-conviction ratio where the rapist is the victim’s partner or boyfriend suggests that juries may conflate this narrow exception with a broader, pre-existing assumption that rape within a relationship is rare. This is especially worrying because relationship rape is the type most likely to drop out of the court system, and is strongly correlated with other forms of domestic violence.

Other factors listed in the guidelines present subtler concerns. For example, force is an aggravating factor. This implies that the other common method of rape, victim intoxication, is less serious, at least where the rapist is not responsible for the stupefaction. While research on the subject is limited, it suggests that this is usually untrue. Force is used in a slight majority of reported cases, but usually results in non-serious injuries. Moreover, rape by force appears more likely to be reported, meaning that non-violent rape may actually form the majority of all rapes. Rape by intoxication is as common or almost as common, less frequently reported, and when reported is often subject to evidential difficulty. On the other hand, forcible rape and rape which causes injury are less subject to attrition, and indeed injuries can be useful as evidence. Including force as an aggravating factor will tend to lead to heavier sentences, for the type of rape which is already more likely to be reported and properly addressed by the system.

It may also be problematic to take account of the victim’s preferences as to sentencing, although this is intended to counter difficulties inherent in reporting and prosecuting sexual crime. The Court was cognisant that victims might face social pressure to withdraw from the criminal justice process if they shared a social group with the offender. It reminded judges that sexual crime is a public wrong. However, it considered that ignoring victims’ wishes could be patronising, and it could potentially discourage victims from coming forward if their requests for leniency were not respected. Attrition is a valid concern. On the other hand, it must be asked how significantly sentencing will affect victims’ decisions to follow through with prosecutions. Rape and sexual violation are serious crimes, and offenders are usually sentenced to imprisonment. In effect, the victim’s say will often affect only the length of the term, not the choice of penalty. Would a reduction really have much effect, considering that any term of imprisonment carries a

28 R v AM (CA27/2009), above n 7, at [54]–[60].
29 At [60].
30 Triggs and others, above n 1, at 64.
31 At 21 and 30.
32 At 27–28.
33 At 81–84.
34 R v AM (CA27/2009), above n 7, at [62]–[64].
heavy social stigma? Research suggests this is unlikely. Additionally, given that victims do not have their own representation in a trial between the Crown and the offender, they are unlikely to know how sexual sentencing operates. The more fundamental problem, however, is that this may represent a superficial view of social pressure as regards to relationship and acquaintance rape. While victims are often pressured to drop charges, and that pressure is a serious concern; arguably the more pressing issue in relation to rape prosecutions is the view that rape, especially acquaintance or relationship rape, is not a real crime worth prosecuting. Participants in the Crime and Safety Survey commonly cited this belief as a reason they did not report, either because they thought that what had happened to them was not criminal, or because they thought that others would not perceive it as such. The issues with \textit{R v \textsc{am}} should not be seen as specific to sentencing, but as symptomatic of the system’s understanding of rape as a whole.

\textbf{C. The issue}

The criminal justice system’s failure to account for unconvicted sexual crime causes principled and practical problems at the sentencing and parole stages. At sentencing, it perpetuates rape myths, and minimises the prevalence of rape in the community. This leads to victim dissatisfaction and attrition which exacerbates low conviction rates. Although difficult to confirm, it is likely that the perception of rape as a rare crime that occurs only in certain ways, dissuades victims of \textit{atypical} rape from reporting it. At a more general level, minimisation of the prevalence of rape and misunderstanding of the nature of the crime impedes progress in legislative and policy measures, intended to combat it.

Unconvicted crime is arguably more important to decision-making at the parole stage, than at sentencing. While sentencing decisions are based largely on the culpability of the individual offender and require adherence to procedural requirements such as consistency and proportionality, the paramount consideration in parole proceedings is the safety of the community. As a result, the risk of reoffending is a key factor. This risk is however usually formulated as \textit{reconviction} risk, ignoring those crimes that never come to the attention of the courts. With actuarial tools now being used at sentencing and parole to \textit{empirically} predict offenders’ risk of reoffending, rape myths may become reified: falsely understood as proven to predict risk, when in fact they may predict only the system’s response to certain cases.

Rape that is seen as \textit{atypical} is more likely to escape conviction. I argue that the invisibility of this type of crime means that when a conviction does occur, an offender is likely to receive a short sentence, relative to offenders whose crimes fit the profile that the system expects. In addition, the effective sentence served is likely to be further reduced when parole is taken into account, because differential conviction rates show that atypical offenders have lower reconviction risk. This may result in earlier release and relatively

36 Ministry of Women’s Affairs Restoring Soul: \textit{effective interventions for adult victim/survivors of sexual violence} (October 2009) at 68–69.
37 A woman who has been victimised multiple times may understand the sentencing process, but this reinforces the idea that the system should prosecute rape as a public crime, in an impartial, evidence-based manner. Research suggests such women may not report because of trauma at the hands of authorities and during the court process; sentence length is less significant. See Ministry of Women’s Affairs, above n 36, at 37–41 and 68–69.
38 Morrison, Smith and Gregg, above n 1, at 39, 48 and 139.
39 Ministry of Women’s Affairs, above n 36, at 37–41 and 68–69.
40 Parole Act, s 8; and Sentencing Act, ss 7–8.
lower scrutiny at parole. An accurate understanding of an individual’s crime is required in order to accurately assess many of the purposes and principles of sentencing. This necessarily involves an understanding of the nature and prevalence of the crime in society, in order to contextualise the offending. Failure to account for unconvicted crime has significant implications for community safety and rehabilitation, which are, respectively, the key principles in the Parole Act and Sentencing Act.\(^{41}\) The question then, is how the criminal justice system might adapt the tools already at its disposal in order to properly contextualise convicted sexual crime—and begin counteracting some of the factors which lead to high prevalence and low conviction rates.

### III Rape Perpetration: Prevalence and Patterns

#### A Invisible crime

The term *invisible crime* refers to types of crimes that are committed which, due to systemic or societal issues, are unlikely to be convicted. The lack of conviction may be due to under-reporting, Police decisions not to investigate or prosecute once the crime is reported; or low conviction rates at trial.

In the context of sexual violation, rape using intoxication rather than force, rape by people other than strangers and family members, and rape by men with no previous criminal records are less likely to be convicted. These factors have a cumulative effect, so that if a woman is sexually violated by a man who is a stranger, uses force, inflicts injury, and has a previous criminal record, is much more likely to be convicted, than if the man were her current boyfriend, used intoxication, implicit fear, without inflicting physical injury and had no criminal record.\(^{42}\) Not coincidentally, the categories which contribute to invisibility correlate with those where rape has historically been understood either as impossible, or as partially or entirely the victim’s fault; the idea that rape is committed by monstrous, violent criminals and not by unexceptional people; the idea that women who become intoxicated put themselves at risk and so are partly or wholly to blame for their own victimisation; the idea that women who are not physically injured must not have fought back, and so must have consented; and the idea that it is impossible to rape one’s wife, or by logical extension, one’s partner or girlfriend. Although these ideas are now discredited, they have a long history, and still hold moral sway in many sections of society.\(^{43}\)

It is clear that these factors lower the odds of prosecution and conviction, and they likely also affect the chance a victim will report a crime to the police. Many women who do not report sexual violation claim that they consider the matter private, or feel ashamed.\(^{44}\) Shame implies the victim felt partly at fault, and both of these reasons suggest that rape is not perceived as a public wrong in the same way as other violent crime. It is also suggested that even in a survey context, there may be many victims who denied being affected.\(^{45}\) Low reporting rates make it impossible to accurately estimate how many sexual violations occur in the population. Consequently, it is extremely difficult to target remedial

\(^{41}\) Parole Act, s 7; and Sentencing Act, ss 7–8.

\(^{42}\) Triggs and others, above n 1, at 48.

\(^{43}\) See Daly and Bouhours, above n 1, at 565–567; and Nicola Gavey *Just Sex?: The Cultural Scaffolding of Rape* (Routledge, London, 2005) at 18–50.

\(^{44}\) Morrison, Smith and Gregg, above n 1, at 48.

\(^{45}\) At 24.
measures against the impact of rape myths. It is therefore crucial to use research on offenders to fill the gap and better target available resources.

B A profile of reported rape

It is necessary to analyse the research on sexual violation to address the justice system’s response to the crime. Ideally, as well as offender culpability and victim impact, prosecution and sentencing decisions would consider best practice for rehabilitation with regard to the particular offending. In reality, however, this approach is complicated. Critically, low reporting rates and a dearth of reliable research make it difficult to evaluate prevalence, typology, or indeed, the success of rehabilitation.

Reporting rates for sexual violation are difficult to measure and vary by country, but estimates are usually well below 25 per cent. In New Zealand, the 2009 Crime and Safety Survey estimated the rate at seven per cent, and a 2009 Ministry of Women’s Affairs report at nine per cent. In contrast, reporting rates for crime in general, hover around one-third, while reporting rates for serious crime are higher, as are rates for property crime (because a police report is often a precondition for making an insurance claim). The 2009 Crime and Safety Survey estimated the reporting rate for assault at 32 per cent. The Survey’s definition of assault included minor incidents, which are relatively unlikely to be reported, and unlike Police statistics, counted each instance of domestic violence separately. This would have depressed the apparent reporting rate shown by the Survey. The fact that the serious crime of sexual violation displays a significantly lower reporting rate is concerning.

Statistics indicate that a sexual offender usually knows their victim, a trend that is also international. In New Zealand, Sue Triggs and others conducted a comprehensive study of 1,955 file notes on sexual crime reported to police. These file notes represented all offences that the police had recorded as sexual violation against an adult female between 1 July 2005 and 31 December 2007. Sexual crime against minors (aged under 16) was not included in the sample; nor was minor or non-contact sexual crime, such as flashing. Of the 1,955 cases reported to police, 251 ended in a conviction. This represented 42 per cent

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46 Sentencing Act, s 8.
48 Morrison Smith and Gregg, above n 1, at 45; and Ministry of Women’s Affairs, above n 36.
49 At 16–18.
50 At 1.
51 At 35 and 165.
53 At 35.
54 At 35 and 165.
of cases charged, 13 per cent of cases reported, and using the reporting rates discussed above, roughly one per cent of all cases of the crime.\textsuperscript{56}

Relationship data was available for 73 per cent of the cases. In just over two-thirds of these, the victim had a previous relationship with the offender. In roughly one-third, that previous relationship was a romantic one.\textsuperscript{57} Stranger assaults accounted for only 15 per cent of cases; people whom the victim had met within the last day accounted for 16 per cent.

The Triggs study also collected data on a number of other variables relating both to victims and offenders. Most notable was the information on age, alcohol consumption, and the use of violence. The highest rates of reported sexual crime were observed for victims aged under 20, and after this point there was a sharp drop. Over half of all victims were younger than 25.\textsuperscript{58} Data on alcohol use was collected in approximately half of all cases. In 79 per cent of these, the offender had consumed alcohol or other drugs, and in 75 per cent, the victim had too. These figures correspond to a minimum of 39 per cent and 30 per cent of total cases, respectively.\textsuperscript{59} In 13–16 per cent of all cases, the victim was unsure whether she had been violated, and almost all of those victims had consumed alcohol or other drugs.\textsuperscript{60} There were only a few instances where the victim alleged her drink had been spiked (62, or three per cent of the total).\textsuperscript{61} The file notes did not reliably track victims’ level of intoxication, nor whether they had been pressured or encouraged by the offender into consuming alcohol or other drugs.\textsuperscript{62} Male victims made up only a small proportion of the sample, of about five per cent.\textsuperscript{63}

In almost all cases, one offence was committed against one victim, by one offender. The victim was threatened in 9–16 per cent of cases, and force was used in 28–64 per cent of cases. The figure is uncertain because of inconsistent reporting in the file notes, but researchers’ cross-tabulation suggest that use of force was likely to have occurred towards the top of this range (41–64 per cent of cases). The victim was injured in 27–30 per cent of cases. Injuries were usually superficial, such as bruising or grazes, but in 18 per cent of cases where injuries occurred, the injuries were serious. 33 cases, or roughly 1.5 per cent of the total, required a hospital visit.\textsuperscript{64} These broad figures appear to represent a reduction from past studies where use of force was reported.\textsuperscript{65} 60 per cent of offenders had a prior criminal history, but only 11 per cent had a prior conviction for a sexual offence. A further 26 per cent had a previous conviction for violence, and the other 23 per cent had only non-violent convictions.\textsuperscript{66}

Taking the Triggs data holistically, the typical victim was a woman aged around 23, who may have been drinking. This victim was assaulted by an offender whom she knew, and used some force, or threat of force, but had inflicted no significant physical injury. The

\textsuperscript{56} At 57. The one per cent estimate comes from multiplying these percentages with the estimated reporting rate above.

\textsuperscript{57} At 17.

\textsuperscript{58} At 16 and 30.

\textsuperscript{59} At 28.

\textsuperscript{60} At 28.

\textsuperscript{61} At 28–29.

\textsuperscript{62} At 28–29.

\textsuperscript{63} At 16.

\textsuperscript{64} At 27–28. Estimates have a margin of error because the police did not consistently record these factors.

\textsuperscript{65} Compare M Stace “Rape complaints and the police” (Department of Justice, Rape Study: research reports, volume 2, 1983) as cited in Triggs and others, above n 1, at 27–28 and 92.

\textsuperscript{66} Triggs and others, above n 1, at 31.
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The offender may have had some criminal history, but probably no history of violent or sexual crime. This kind of case involves many factors that trigger the myth that date rape or acquaintance rape is not real rape. Consequently the prospects of reporting the crime, having it successfully investigated by the police, and obtaining a conviction, may all be hindered.

The Triggs study hypothesises that overrepresentation of young women in reported rape statistics may be due to the fact that intimate partners often rape older women. This makes the women, therefore, less likely to report the crime. They note that the proportion of reported rapes committed by strangers has fallen, as the reporting of acquaintance and partner rape has increased. However, victims still disproportionately withdraw their complaints for offences involving current or ex-partners before and during the court process. Once charged, offences involving strangers and family were least likely to be withdrawn. If these attrition trends hold true at the reporting stage, one would expect that a greater proportion of unreported rapes involved substances rather than violence, and offenders known to the victim. Consequently, the difference between the profiles of rapes committed, compared to rapes dealt with by the criminal justice system, would be more pronounced than the available statistics indicate.

C. A profile of undetected offenders

Reliable data on offender characteristics is difficult to obtain, because convictions occur in only a small minority of rapes. As a result, the sample set of any study dealing exclusively with convicted offenders is very small, and probably distorted. The Triggs study dealt with alleged, rather than convicted, offenders, broadening its scope. It also gathered some data on offender characteristics. However, because the reporting rate is low and likely biased towards violent offences committed by strangers, the study still featured a self-selecting and a probably non-representative sample.

Studies dealing with victimisation, such as the Crime and Safety Survey, may present a more accurate picture of total offending, but are nonetheless likely to be distorted by the reluctance of certain victims to label their experiences as criminal. The high proportion of victims interviewed in the survey that considered sexual crime “wrong, but not a crime” or “just something that happens”, explains this reluctance. Additionally, studies of victims cannot reliably link each instance of rape to a perpetrator. While interviewing victims can provide a longitudinal sample of victims, identification and reporting issues make them inappropriate for tracking recidivism among offenders. Nor can they explain offenders’ motivations, or track the proportions of offenders who recognise their actions as criminal. These limitations are reasonably well recognised, and translate to other areas of criminal law and criminology. For example, studies of undetected drug users are common. For reasons that are unclear, however, only a few studies have addressed undetected perpetrators of sexual crime.

David Lisak and Paul Miller’s 2002 study of undetected rapists was a rare exception. The study attempted to surmount the obstacles associated with victim reporting, and drew

67 In New Zealand and internationally, particularly compared to the Stace study, above n 65, as cited in Triggs and others, above n 1, at 16 and 19. See also Langton and others, above n 47, at 4. The authors suggest a relationship with the offender could deter reporting (for example, for fear of causing trouble).
68 At 49–50 and 64.
69 At 64–65.
70 Morrison, Smith and Gregg, above n 1, at 39.
some revealing conclusions. Lisak and Miller defined undetected rapists as men in the community who, during a survey, admitted to behaviour defined legally as sexual assault. Although limited to male students at a United States university, this study had a relatively large sample size and, where verifiable, its conclusions are consistent with similar studies, including a recent study of United States Naval recruits by Stephanie McWhorter and others. Being one of few such studies, its conclusions are useful despite sampling limitations. Participants were told they were to answer a survey on “childhood experiences and adult functioning” and asked a series of questions, including two which described, without labelling as such, forcible rape and rape of a victim incapacitated by substances.

Unlike the Triggs study, the question on intoxication did specify a high level of incapacitation: the wording used asked whether the victim had been “too intoxicated (on alcohol or drugs) to resist [the rapist’s] sexual advances (for example, removing their clothes)”. This denotes a high level of intoxication, and might exclude situations where the victim was too intoxicated to consent, meaning the sexual contact was non-consensual but retained enough coordination that the men surveyed would not consider this description met.

The questions also included the Abuse-Perception Inventory, which measures interpersonal violence committed by the subject. The Inventory was used to cross-reference rape with acts of nonsexual interpersonal violence. The questionnaire was followed by a corroborating interview, which found that no participant who admitted to rape had done so mistakenly. 6.4 per cent of the participants admitted to rape. Of those, approximately 63.3 per cent had committed multiple rapes. The mean number of rapes committed by a multiple rapist was 5.8, and the median was three. 14 per cent of the repeat rapists, or just below 10 per cent of all the rapists, had committed more than eight rapes, indicating a high degree of recidivism. The age range was similar to the sample used in developing the Automated Sexual Recidivism Scale, discussed below.

The majority of the rapists (80.8 per cent) reported raping incapacitated women. A smaller proportion admitted to using threats or overt force to coerce sexual intercourse or oral sex, or in attempted rape. These groups overlapped to some extent, but each rapist was given one categorisation for the purposes of analysis. While rapists who used overt force reported committing more rapes than those who used intoxication, the difference was not statistically significant. The implication is that the use of force, as opposed to intoxication, does not predict future sexual violence.

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71 David Lisak and Paul M Miller “Repeat Rape and Multiple Offending Among Undetected Rapists” (2002) 17 Violence and Victims 73.
72 At 76–77.
73 Stephanie K McWhorter and others “Reports of Rape Reperpetration by Newly Enlisted Male Navy Personnel” (2009) 24 Violence and Victims 204. Studies of convicted sex offenders where amnesty has been offered for honest accounts of past behaviour also reveal high rates of unreported recidivism. See examples at 205; and Lisak and Miller, above n 71, at 74.
74 Lisak and Miller, above n 71, at 77.
75 At 77.
76 At 77.
77 At 78.
78 At 76–77.
79 At 78.
80 At 78.
81 At 78.
82 At 78.
83 At 80.
Rapists were responsible for a disproportionate amount of nonsexual violence. From a sample of 1,882 men, the researchers documented 3,698 violent acts. Each non-rapist was responsible for a mean of 1.41 of these, while the single-act rapists were each responsible for 3.98 and the repeat rapists for 13.75.\textsuperscript{84} Despite representing less than five per cent of the sample, the repeat rapists were responsible for 28 per cent of the violence.\textsuperscript{85} The single-act rapists, representing less than 2.5 per cent of the sample, were responsible for almost five per cent of the violence. Whether a rapist used overt force or intoxication appeared irrelevant to the amount of nonsexual violence they committed; there was no statistically significant difference between intoxication and overt-force rapists, only between single-act and repeat rapists.\textsuperscript{86} In this respect, too, then, the Lisak and Miller study indicated that the use of overt force was no more of a risk factor than the use of intoxication, although they also suggested that this might be partly due to the small sample size, and that more research was necessary.\textsuperscript{87}

The 2009 study conducted by McWhorter and others of 2,925 naval recruits found similar results. The recruits were surveyed in June 1996 and June 1997, using a behavioural questionnaire similar to that of Lisak and Miller. This sample was non-representative because naval recruits are screened for mental and physical health, education and criminal records before recruitment, so participants would be expected to be healthier and perhaps better adjusted than the general population.\textsuperscript{88} 13 per cent of the participants admitted to perpetrating at least one attempted or completed rape. Among those, 63 per cent had perpetrated more than one, with a mean of 6.36 incidents per perpetrator.\textsuperscript{89} 29 per cent of rapists had perpetrated rape in the year before they took the survey, in their first year of military service, and for 14 per cent, that perpetration was not their first. This translated to nine per cent of men who perpetrated rape before they entered military service, two per cent who perpetrated rape during the first year of service, and two per cent who perpetrated rape both before and during the first year of service.\textsuperscript{90} Repeat rapists had committed 95 per cent of the total reported incidents of attempted or completed rape.\textsuperscript{91} Interestingly, there was no relationship between any demographic variable and the number or violence of reported rapes, only between the number of reported rapes and their severity.\textsuperscript{92} Also, considering the effects of attrition during the course of the study, the researchers suggested that their estimations of perpetration rates were probably conservative.\textsuperscript{93}

Most men who admitted perpetrating rape had used drugs or alcohol rather than force. Only 23 per cent of all the rapists used force alone.\textsuperscript{94} Most rapists (77 per cent) had raped someone they knew, a variable that the Lisak and Miller study did not track, but which accords with the Triggs study from New Zealand.\textsuperscript{95} Most men reported a single victim type and a single method of perpetration, but among those men, who targeted

\textsuperscript{84} At 78.
\textsuperscript{85} At 80.
\textsuperscript{86} At 80.
\textsuperscript{87} At 81.
\textsuperscript{88} McWhorter and others, above n 73, at 213.
\textsuperscript{89} At 209 and 212.
\textsuperscript{90} At 217–218.
\textsuperscript{91} At 214.
\textsuperscript{92} At 214–125.
\textsuperscript{93} At 219.
\textsuperscript{94} At 209–210 and 216.
\textsuperscript{95} At 209–210 and 218.
strangers, most targeted strangers and acquaintances, and only seven per cent of all the rapists targeted strangers alone.\textsuperscript{96} 51 per cent of rapists perpetrated rape against acquaintances using substances only. This figure excludes men who raped both acquaintances and strangers, and those who used both force and intoxication.\textsuperscript{97}

Interestingly, in the McWhorter study, all men who attacked using force alone attacked acquaintances, and all who attacked strangers using force, also used intoxication. The study did not find a single instance of stranger rape where force alone was used.\textsuperscript{98} This strongly suggests that while the image of forceful stranger rape is the dominant image of rape, the stereotype elides the existence of more common, and more socially harmful types of rape. While the McWhorter and the Lisak and Miller studies are the most recent and the most detailed, other research supports the conclusion that most rape is committed by multiple rapists against acquaintances rather than strangers, whilst using intoxication rather than force.\textsuperscript{99}

Whether or not a rapist used force or intoxication; he was likely to be a recidivist and to be disproportionately violent when compared to the rest of the population. Bearing in mind that the majority of participants in the Lisak and Miller study were in their twenties, and that rapists continue to commit crime for a longer time period than other violent criminals, this tends to point to a conclusion that the majority of rapists commit large number of rapes throughout their lifetimes.\textsuperscript{100} Looking at this conclusion, it appears that imprisonment or effective rehabilitation could have a major impact on the overall number of rapes committed, even if (for imprisonment) that effect is only achieved by isolating rapists from potential victims. Stricter or more effective sentencing could be achieved either at the sentencing stage, based on the original calculation of the sentence or non-parole period, or at the parole stage by using more accurate recidivism risk calculations to determine the time actually served.

D A profile of successfully prosecuted rape

Taking these studies together, and bearing in mind the inherent difficulties with data gathering meaning that conclusions may be tentative, approximately half of rapes seem to involve violence other than that inherent in the crime, and more than half of rapes involve some degree of intoxication (whether the victim chose to become intoxicated or not). The Lisak and Miller study suggests that, from a recidivism and public safety standpoint, violent and other rape are equally serious, and should be treated as such by the justice system. That is supported by the fact that, in most cases where violence occurs, physical consequences for the victim consist of scrapes, cuts or bruises, rather than more serious injuries, such as vaginal or anal bleeding and broken bones. That is, these seem to be the kind of injuries that may be incidental to the use of threats, or to the act of rape itself, rather than representing a particular intention to injure the victim physically. Looking

\textsuperscript{96} At 215 and 216.  
\textsuperscript{97} At 216.  
\textsuperscript{98} At 212 and 215–218.  
\textsuperscript{100} Arul Nadesu “Reconviction Rates of Sex Offenders: Five year follow-up study-Sex offenders against children vs offenders against adults” (January 2011) Department of Corrections <www.corrections.govt.nz>.
at the McWhorter study in particular, crimes fitting the traditional view of violent stranger rape appear rare.

These studies point to a series of common conclusions. Whether a rape is accomplished by force or incapacitation appears largely irrelevant to the risk of rape re-perpetration. Rapists tend to have high rates of recidivism. The imposition of heavier sentences upon those more likely to reoffend, will prevent reoffending for at least the duration of the sentence, and it seems to be a good place to start. Full rehabilitation should be the eventual goal, but increased conviction and sentencing of rapists would significantly reduce the prevalence of sexual violation in the community, and would expose more offenders to Corrections rehabilitation programmes.

However, the profile of convicted rape appears to be quite different from the profile of reported rape, which itself is different from rape profiles at large within the community. This will have significant implications at sentencing. Cases involving current or ex-partners had high prosecution rates, but very low conviction rates: eight per cent of recorded cases for current partners or boyfriends, and 13 per cent for ex-partners or boyfriends. The eight per cent conviction rate for current partners was the lowest of any offender group, and also involved the lowest conviction-to-prosecution ratio of any offender group, by far. 46 per cent of recorded cases were prosecuted; the highest rate, but only 16 per cent of cases prosecuted resulted in convictions. The next-lowest figure was for acquaintances of the victim, where 34 per cent of convictions resulted in a conviction. This demonstrates either, some specific evidentiary difficulty, or perhaps more likely, a jury assumption that men do not rape their current partners, leading them to require more proof than otherwise required. Cases involving friends, dates, or other acquaintances, and people the victim had just met, had low prosecution rates, and correspondingly low conviction rates (12 per cent and nine per cent respectively). When cases were prosecuted, they had a reasonable chance of leading to a conviction.101

Rapes perpetrated by strangers had a high conviction rate as a proportion of total recorded cases (20 per cent). That is despite the fact that a relatively low proportion of cases are prosecuted, due to the difficulty of offender identification. 68 per cent of cases prosecuted led to a conviction; the highest prosecution-to-conviction rate in the study, in contrast to the 16 per cent rate for current partners. Only family rapes had a higher conviction rate, similar to stranger rapes, 68 per cent of cases prosecuted led to a conviction. However, since it was easier to identify family members than strangers, this corresponded to an overall report-to-conviction rate of 30 per cent; the highest in the study.102

Where an offender had a criminal record, prosecution and conviction rates were both affected. The presence of a criminal record had a significant effect on the probability of both prosecution and conviction. Interestingly, however, where the previous criminal record was sexual, there was only a slight increase in the conviction rate, compared to where the record was nonsexual, but violent. 32 per cent of alleged offenders with no criminal record were prosecuted, while 53 per cent of those with a violent record and 54 per cent of those with a sexual record were prosecuted. 35 per cent, 50 per cent, and 45 per cent of those prosecutions, respectively, led to convictions. This corresponded to overall conviction rates of 11 per cent, 27 per cent, and 24 per cent, respectively.103 The effect of violent offending record is particularly interesting, given Lisak and Miller’s

101 Triggs and others, above n 1, at 82.
102 At 82.
103 At 82.
findings on the rates of general violence among recidivist rapists. This factor may be an additional point in favour of their recommendation to target rapists’ other violence as a method of reducing risk.\textsuperscript{104}

The use of force, threat or injury, and the severity of injury, was associated with increased prosecution. The use of force, threat or injury was associated with convictions in 20 per cent of recorded cases, as opposed to seven per cent where these factors were not present. Particularly where the injury was moderate to severe, the presence of force, threat or injury raised the prosecution rate, and consequently the conviction rate. The conviction rate for cases with no injury was nine per cent, for mild injury it was 16 per cent, and for moderate to severe injury it was 29 per cent. Where only prosecuted cases were considered, the conviction rates for mild injury and no injury were similar: 38 per cent and 40 per cent, respectively. However, the presence of a moderate or severe injury raised the conviction rate significantly to 57 per cent of cases prosecuted.\textsuperscript{105} These figures are unsurprising, as they accord with popular understandings of rape. It is perhaps encouraging that conviction rates are similar whether or not the victim has been physically injured, but this, equally, may be due to the police’s role in prosecution selection; selecting only cases likely to end in conviction.

Due partly to inconsistent record keeping by the police, the Triggs study did not track the impact of victim intoxication as an independent factor. It was only tracked as a factor associated with their other areas of focus. However, they did establish that approximately 10 per cent of victims were intoxicated at the time of the alleged rape, and 39 per cent had consumed some amount of alcohol or other drugs, although some of the victims within the latter category were not noted specifically as being intoxicated.\textsuperscript{106} Analysis of Police files suggested that where the victim was intoxicated, cases were less likely to be prosecuted.\textsuperscript{107} Where victims were intoxicated, police often expressed doubts about the accuracy of their accounts of the event.\textsuperscript{108} Additionally, since intoxication often led to memory loss, in such cases the offender was often not identified.\textsuperscript{109} The idea that an intoxicated victim is untrustworthy is particularly worrying, given that significant intoxication will render people unable to legally consent. The researchers identified at least 10 cases where the file note suggested that the victim had been legally unable to consent, but which had been classified by police as “no offence”.\textsuperscript{110} Other factors not specifically tracked, but associated with rape myths and low prosecution rates, included delayed reporting, victim mental illness or intellectual disability, previous complaints by the victim, and attempts by victims to conceal some aspect of their own behaviour, such as drinking or drug taking.\textsuperscript{111}

The effects of these variables are almost exactly as an observer schooled in rape myths might expect, and they help explain why the profile of convicted rape is so different to the profile exposed by studies of undetected rapists. Violent stranger rape is much more likely to be prosecuted and convicted than relationship or acquaintance rape not involving violence. The presence of a previous sexual or violent conviction increases the probability

\textsuperscript{104} Lisak and Miller, above n 71, at 81. Both comorbid physical violence and battering and historical sexual violence.
\textsuperscript{105} Triggs and others, above n 1, at 82.
\textsuperscript{106} At 28–29.
\textsuperscript{107} At 77.
\textsuperscript{108} At 48.
\textsuperscript{109} At 42.
\textsuperscript{110} At 45.
\textsuperscript{111} At 48.
of a successful prosecution. Given the research explained above, and the fact that rapists in general tend to be abnormally violent, the effect of a previous violent conviction may be helpful to victims of all kinds of rape. However, previous sexual convictions are likely to result from the kind of behaviour which is most successfully prosecuted and convicted; that is, the kind of behaviour that conforms to traditional dialogues about rape. Therefore, while previous convictions are helpful to some victims, they may also reinforce the same trends in sexual crime prosecution. This reinforcement is to the victim’s detriment, of intoxication-based or acquaintance-perpetrated sexual violence.

IV The Use of Actuarial Tools in Criminal Justice

A Principled issues and sentencing

Actuarial tools are, by their nature, general. They can predict outcomes across a group, but cannot accurately predict whether any given individual will reoffend. Harris and others compare this to giving a cancer prognosis, where doctors can predict survival rates for patients of a certain age, with given risk factors, treatments, and a particular type of cancer, but cannot predict which individuals will die.\(^\text{112}\)

This can lead to arbitrary outcomes for individual offenders. Traditionally, criminal and sentencing law focused on the deeds, circumstances, and culpability of an individual offender, in one situation.\(^\text{113}\) It was retrospective, in the sense that it emphasised holding the accountability of the individual offender for the crime already committed.\(^\text{114}\) To respond to individual crime in a just manner, the law developed principles of sentencing: penalties should be knowable in advance, consistent as between offenders who committed similar crimes, and proportional to the seriousness of the offending.\(^\text{115}\)

Other aspects of the system harmonised with this understanding of the role of the criminal law. For example, crime was formulated as a matter between the state and the offender, because it was seen as a public wrong, not a matter that injured only the victim.\(^\text{116}\) This formulation contributed to consistency and proportionality because decisions to prosecute and to convict were made by impartial authorities, rather than depending on victims’ wishes.\(^\text{117}\) Underlying these principles is natural justice: the right to be penalised only according to evidence properly tested under the law.\(^\text{118}\) These principles endure in New Zealand in the purposes of sentencing.\(^\text{119}\)

With the improvement of technology, and the rise of rehabilitation, the emphasis of the criminal law began to shift. In addition to personal accountability, ideas of prevention

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\(^{112}\) Grant T Harris and others “A Multisite Comparison of Actuarial Risk Instruments for Sex Offenders” (2003) 15 Psychological Assessment 413 at 421.


\(^{114}\) Hall, above n 113, at [1.3].

\(^{115}\) See Andrew Ashworth Sentencing and Criminal Justice (6th ed, Cambridge University Press, Cambridge, 2015) at 96 and 100; and Hall, above n 113, at [1.3] and [8.1]-[8.5].

\(^{116}\) Ashworth, above n 115, at 75.

\(^{117}\) At 75.

\(^{118}\) At 75 and 96.

\(^{119}\) Sentencing Act, ss 7-8.
became powerful. The scope of the criminal law broadened to include property offences (traditionally the domain of tort law), as well as inchoate offences and offences of omission. Therefore, the criminal law now punished offences where no harm had actually occurred, and where offenders had not actually performed a misdeed, but had simply omitted to perform a duty. This was the context in which recidivism risk became a factor in sentencing, and in which both individual assessments and statistical assessment tools began to be used.

The Sentencing Act sets out the purposes of sentencing in New Zealand. They are to hold the offender accountable; to promote responsibility for harm done; to provide for the victim’s interests; reparation; denunciation; deterrence; protection of the community; rehabilitation and reintegration. Some objectives are offender-focused, promoting internal change. They require a genuine understanding of the wrong committed and the reason this wrong has been punished. Others are focused on protecting the victim and the community. They reflect the modern approach to sentencing, and require mitigation of the potential to reoffend. For serious violent crime, or repeat offending, this often involves removal from the community via custodial sentences. Rehabilitation spans both categories, and by reforming the offender it protects the community after the formal sentence ends. However rehabilitation programmes are usually administered in custodial settings, and successful rehabilitation will require offenders to understand the reality of their actions.

An understanding of how the crime is committed is necessary to target sentences, in order to achieve the purposes of sentencing. For example, it will be difficult to make an offender understand the gravity of his crime if it is treated as a first-time opportunistic offence, when it is actually one in a string of premeditated offences. Likewise, the focus in rehabilitation will be different for a first-time opportunistic offence, as opposed to a recidivist offender using premeditation. Therefore, to fulfill the purposes of sentencing, it is important to base decisions on an accurate picture of offending including, but not limited to, recidivism risk.

Recidivism risk is generally considered at sentencing, although it may not be specifically named as a factor. In R v AM, for example, the court specifically addressed Corrections’ assessment of AM’s recidivism risk. If the traditional, rather than the actuarial, approach is taken, then instead of directly addressing risk, the judge may use proxies such as regret and understanding of the crime. These are focused on the individual, but are popularly understood as measures of ongoing criminality. Additionally, the history of offending is a mandatory factor to be considered at sentencing, and is significant in analysis of recidivism risk. In sexual violation sentencing, the presence of multiple victims, or prolonged victimisation of the same individual, is an aggravating factor.


Ashworth and Zedner, above n 120, at 27 and 95–102.

At 47–50; and Brown, above n 120, at 16–20.

Sentencing Act, s 7.

R v AM (CA27/2009), above n 7, at [143].

Sentencing Act, ss 7–10.

Section 9(1)(j).

R v AM (CA27/2009), above n 7, at [47]–[48].
The traditional approach is not risk-focused, so its ability to mitigate the offending risk is naturally limited. However, even where the actuarial approach is applied, it is only one factor among many. Most principles of sentencing relate to the individual offender and the circumstances of the crime, rather than the feelings of the victim or public safety. This reflects the function of criminal law in holding offenders to account, and the legal reality that criminal cases are between the victim and the offender, but between the state and the offender.

An assessment of recidivism risk is inherently prospective, and therefore diverges from the traditional retrospective focus of the criminal law. Scholars have argued that statistical tools are necessarily impersonal, and examine the profile of the offender rather than the offender’s past actions. They see this as a breach of due process: the offender is effectively punished for belonging to a group, not for his actions, and that punishment is rationalised using specialist evidence. This evidence can be difficult to challenge in a court context, even if there are confounding factors making its accuracy uncertain, in regards to the particular offender.

Advocates of actuarial tools answer these criticisms by pointing out that tools are validated by empirical research, and are more effective than traditional assessment methods. It is true that the observed accuracy of actuarial tools is often as good as, or better than, traditional psychological assessment or risk scoring measures. It can be argued, however, that they are qualitatively different to such measures. Even if traditional tools are less accurate, they at least focus on characteristics personal to the offender, which is important both from a due process perspective and in the context of a criminal justice system, suffering from entrenched systemic discrimination. Actuarial tools, by contrast, assess risk on a population level, and are capable, at most, of showing that a given offender belongs to a group that tends to reoffend more than another group. All those involved in the criminal justice process should therefore be wary of confusing correlation with causation, and labelling any offender a high-risk individual based solely or mainly on an actuarial analysis.

Unsurprisingly, R v AM did not address the effect of unreported rape on serious crime profiles. Nor did it establish guidelines for the use of risk assessment tools at sentencing for sexual crime. However AM himself was assessed before trial using the Automated Sexual Recidivism Scale and the Stable-2007-two of Corrections’ primary risk assessment tools for sexual offenders. The assessment was not criticised, and was taken into consideration by the court in deciding whether to impose a minimum period of imprisonment, under s 86 of the Sentencing Act. This indicates that the court thought there was a place for such assessments at the sentencing stage. They are helpful at least in determining non-parole periods, even if their omission from the discussion of sentencing principles suggests they might not be a significant factor in determining the overall sentence.

I do not argue that actuarial analysis of reoffending risk is necessarily bad, nor contrary to the fundamentals of the criminal law. Indeed, extra measures used properly should be helpful. Objective evidence, carefully collected and properly analysed, could aid crime

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128 See, for example, Ashworth and Zedner, above n 120, at 125–130.
129 At 125–143.
131 R v AM (CA27/2009), above n 7, at [143].
132 At [147]–[160].
prevention and possibly also encourage equal treatment, counteracting discrimination among individuals involved in the criminal justice system. However, certain baseline requirements must be met. The assessment must be focused on the individual, based on robust research, and constantly cross-checked, to ensure changing circumstances are addressed. The tool should be reliable, and should only be one of many methods of risk evaluation. Even if the measure is proven to be equally effective across a given population as traditional assessment, it should be targeted and supplemented by other individualised tools, which look at the offender as an individual. This is so that the individual’s particular circumstances are addressed. Criminal cases are not a matter of the state in opposition to offenders as a population. Rather, they are individual instances of the state in opposition to a single offender. If the process used to determine his sentence disadvantages a given offender, the Crown cannot answer the disadvantage by stating that another offender was better off, due to the same process. It must prove the efficacy of the process used for each offender.

If actuarial assessments are flawed, or are used as the main tools to assess an offender’s personal circumstances and risk level, they are likely to produce situations where the principles of sentencing are breached. An assessment that presents an aggregate risk for a given crime type and applies it to individuals without further refinement, addresses neither the particular circumstances of the individual offender, nor the crime. As a result, it is likely to breach several principles of sentencing. For example, it cannot be demonstrably proportional. It is unlikely to effectively hold the offender accountable for harm done, since it is not based specifically on that offender’s behaviour. Nor is it likely to promote in the offender a sense of responsibility for the harm. On the contrary, it may contribute to the perception that the system is blind to offenders’ circumstances and needs. It can only denounce and deter criminal conduct on a general level, rather than denouncing and deterring the specific deeds of the specific offender. Even well-researched and robust risk assessment tools must be combined with other methods, such as psychiatric assessments and personal interviews, in order to adequately address the offender’s particular situation.

If the research behind the tools is flawed, however, these potential problems will be exacerbated. The validity of the assessment may be called into question, even if it is combined with other assessment methods. Where an actuarial assessment is developed based on a biased or otherwise non-representative sample, there is a danger that it will be aimed at a hypothetical version of the crime that has a different profile to crime actually committed. The conclusions are likely to be inapplicable to many offenders. For example, if a tool associates stranger rape with higher rates of recidivism than acquaintance rape, but in fact higher reporting and conviction rates for stranger rape can explain the difference, then the tool will give a false high assessment of risk for stranger rapists, and a false low assessment of risk for acquaintance rapists. Even where other assessment tools are used to cross-check and individualise the actuarial tool, that assessment of risk will nonetheless have an effect. Also, this is because the tool is still considered important in itself, and the risk level calculated by the tool may prime staff conducting interviews and other assessments to perceive stranger rapists as high-risk offenders. Consequently, the

133 Sentencing Act, s 7.
134 Section 7(1)(a).
135 Section 7(1)(b).
136 Section 7(1)(e)-(f).
objectives of sentencing will be affected. Even if the understanding of due process applicable to the case allows the use of actuarial tools, that specific tool may not withstand close scrutiny.

B Parole

Invisible crime is arguably more important at parole than at sentencing. Whereas sentencing deals with the culpability of the individual offender, and the principles of sentencing are crucial, at parole the emphasis is on the safety of the community. This makes it easier to apply risk assessment tools, but means that an unreliable tool may have a correspondingly large impact. A tool that misses a certain type of crime is likely to present an artificially low estimate of risk for the offenders who commit that kind of crime, and may mean that they are released prematurely or after insufficient rehabilitation. However, a well-calibrated tool, which uses a representative sample of crime to draw conclusions about the behaviour of offenders in general, could conceivably be used to mitigate the effects of bias in the criminal justice system. Corrections staff (at parole), and perhaps even police (at investigation) could focus additional scrutiny on those types of crime which have low conviction rates but not correspondingly low prevalence in the population.

The Parole Act applies to all sentences of imprisonment.\textsuperscript{137} For sentences of imprisonment of two years or less, offenders are automatically released half way through the sentence.\textsuperscript{138} For sentences longer than two years, an offender becomes eligible for parole after he or she has served one third of the sentence, unless a longer non-parole period is imposed.\textsuperscript{139} At that point a hearing is held to determine whether an offender should be released, released with conditions, transferred to a different type of sentence, or held in prison.\textsuperscript{140}

In all parole proceedings, the paramount consideration is the safety of the community.\textsuperscript{141} The parole board must also consider the offender’s right to the least restrictive detention and/or release conditions that are consistent with the safety of the community; the offender’s right to be provided with relevant information so as to be able to mount a case; the principle that all available relevant information should be considered; and the victim’s own submissions.\textsuperscript{142}

In terms of enabling the use of actuarial tools, the Parole Act has a simple framework. Parole Board decisions involve balancing the safety of the community against the offender’s right to freedom.\textsuperscript{143} The safety of the community supersedes the offender’s rights.\textsuperscript{144} Undue risk and, by extension, the Board’s assessment of community safety, depends upon both the likelihood of reoffending, as well as its nature and seriousness.\textsuperscript{145} Section 117 allows the Board to accept any evidence it wishes, even if the evidence would be inadmissible in a court of law. Section 7(2)(c) provides that decisions must be made on the basis of all the relevant information available to the Board at the time. These sections,

\textsuperscript{137} Parole Act, ss 6, 9 and 18.
\textsuperscript{138} Section 86.
\textsuperscript{139} Section 84.
\textsuperscript{140} Sections 21, 28 and 29.
\textsuperscript{141} Section 7(1).
\textsuperscript{142} Section 7(2).
\textsuperscript{143} Section 7.
\textsuperscript{144} Section 7(1).
\textsuperscript{145} Section 7(3).
when read together, make it clear that data on risk is critical, whether that is the risk posed by the individual offender or actuarial data on the generic risks posed by that type of offender.

As a result, it might be thought that the principles of sentencing are irrelevant. However, the Act requires that community safety be balanced against the offender’s right to be detained only as long, and released subject to conditions only as onerous, as is necessary for the protection of the community.\(^\text{146}\) This amounts to a protection, albeit an expressly weakened one, of the offender’s rights to freedom of movement and freedom of association under the Bill of Rights Act 1990.\(^\text{147}\) The Parole Board must have regard to the Bill of Rights Act when interpreting the Parole Act, and in exercising its discretion under it, although the former will take priority over the latter.\(^\text{148}\) This means that the balancing exercise required by s 7 will be informed, to some extent, by Bill of Rights jurisprudence. It is suggested that, with regard to statistical tools, this should occur under ss 7(a) and (c): the balancing of the offender’s right to freedom against public safety, and the obligation on the Board to make decisions based on all available information. Section 7(c) requires that, where high-quality applicable actuarial data is available, it must be considered. However, as with sentencing, there is controversy over the extent to which individual assessments, rather than epidemiological data, should be emphasised.

In a challenge, the effect most likely will be that the Board must show there is sufficient data suggesting that the particular offender will pose a danger to the community, in order to justify continued imprisonment, or the imposition of release conditions. The tools used in New Zealand have been validated and shown to achieve a level of predictive accuracy similar to individual assessments across a population of inmates. However, it is suggested that the Board should be able to show that the tool satisfies the requirements set out above, as well as a substantive analysis of the prisoner’s individual circumstances. This is in order to prove that the assessment is valid as a predictor of that individual’s behavior, not just of his group. The use of the tool will then be justified with reference to that particular individual. Even if the tool used is accurate and well targeted to the specific crime and offender type, the use of traditional means of assessment, such as individual psychological analysis by a qualified clinical psychologist or psychiatrist, can only improve the analysis. This is likely because they may identify unexpected variables that generalised analysis may miss. If the tool is not well targeted—for example, if it targets a group of crimes (such as sexual crimes), rather than one specific crime (such as rape), or if it is based on a small or otherwise unreliable sample—then a cross-check against traditional predictive measures may help to identify points of inaccuracy, or ineffective targeting with respect to that offender. This is on occasions where the structure of the statistical tool may produce a misleading result.

C Practical issues

Statistical tools often suffer from issues with sampling and bias, which may affect the validity of their conclusions. Some of these issues are linked to the fact that New Zealand, as a small jurisdiction, bases many tools on those developed overseas. In countries like the United States, there is a larger population of offenders so an adequate sample size can be obtained from offenders released in one year, while in New Zealand, an adequate

\(^\text{146}\) Section 7(2)(a).
\(^\text{147}\) New Zealand Bill of Rights Act 1990, ss 17–18.
sample might only be obtained after tracking released offenders over multiple years. Consequently, many of the tools available to New Zealand authorities come from large overseas jurisdictions, with varying amounts of local input. The tool used for sexual crime in New Zealand was developed overseas, cross-checked internationally, and modified slightly for the New Zealand context.

Tools based on overseas populations necessarily use samples with different sociocultural profiles to New Zealand offenders. They are therefore likely to be insensitive to cultural and social differences between New Zealand and their place of origin. The most notable difference is the special status of Māori in New Zealand. Māori are not necessarily comparable to overseas minority groups (for example, African-Americans), nor do factors that affect white-majority populations, necessarily affect Māori in the same way. Robert Webb, for example, postulates that a substantial proportion of Māori offending is attributable partly or wholly to the interaction between Māori culture, particularly its collective nature, and a history of dispossession, cultural imperialism and erasure. Because these factors, as well as enduring social deprivation and inequality, interact uniquely with Māori culture. Therefore, the Māori experience is not transferable to other minorities who have faced different issues and have different cultural backgrounds. The concerns relating to Māori-specific influences is particularly significant because Māori make up more than 50 per cent of prison population, and so are disproportionately affected by criminal justice measures.

Additionally, the offender’s past criminal activity is an important factor in most or all actuarial analyses of risk. When it comes to past convictions, offenders’ individual circumstances may be taken into account. Some tools also use court appearances to fine-tune risk calculations. However, offending which has been tested and convicted in a court of law is the only offending for which data is reliably available, and is decisive in actuarial tools used for offender management. This data is used as a proxy for the offender’s predisposition to commit crime. It is also used in contrast with a clinical setting; the practitioner in charge of treatment could use the patient’s admitted behaviour, but the behaviour must be reported, prosecuted, and convicted in order to reach Corrections assessors reliably. With sexual violence, factors unrelated to the seriousness of the crime often determine whether a given offence is prosecuted. These include many personal to the victim rather than the offender. This may not measure predisposition to offend, but rather predisposition to offend against victims with the personal and social capital to have the offence successfully prosecuted. Conversely, looking at the absence of social capital,

150 At 280.
151 Robert Webb “Risk Factors, Criminogenic Needs and Māori (paper presented to Sociological Association of Aotearoa conference: Knowledge, Capitalism, Critique, Auckland University of Technology, December 2003). For further analysis, see the notable works of Juan Tauri and Moana Jackson; regrettably, I am unable in this article to adequately analyse the factors possibly contributing to overrepresentation of Māori in the prison population.
153 For example, the STATIC-99 has a conversion chart for charges to convictions. See also Andrew Harris and others “STATIC-99 Coding Rules” (2003) STATIC-99 Clearinghouse <www.static-99.org> at 35.
there is evidence that minority groups are discriminated against at sentencing and parole. They are more likely to have custodial sentences imposed, are sentenced to longer terms on average, and are less likely to apply for, and receive, parole.\textsuperscript{155} Since almost all actuarial tools measure conviction, most measure imprisonment, and many also look at sentence length. These variables will affect their risk assessments.

One response to this might be to include court appearances in the risk calculation. This could mitigate issues associated with juries’ perceptions of offenders, although it would do little to address differences in reporting by victims, and prosecution by the police. It might be possible to go even further to consider reported but unprosecuted crime, as well as offenders’ own admissions of either previous sexual offending, or offending with high comorbidity with sexual violence. The obvious objection is on natural justice grounds: offending not proven legally should not determine a sentencing. Currently, Corrections uses court appearances occasionally and offenders’ own admissions occasionally. Thus, general controversies over whether actuarial tools affront due process are still in play.\textsuperscript{156}

Rendering a tool more accurate will go some way to addressing the general issues. More importantly, implicitly, this kind of data is asserted to be reliable enough to be a useful contribution to an assessment, if it is used by Corrections for \textit{any} offenders. Thus, it should be used for all offenders. Yet it appears that such data is used on an ad hoc basis.\textsuperscript{157} For the sake of proportionality and consistency between offenders, there should be a set test of reliability. Once that test is passed; this information should be used to assess all offenders for whom it applies.

Additionally, there are serious general issues of sampling and bias that arise when crime has a low reporting and conviction rate. Low conviction rates leading to a biased sample of imprisoned offenders is the primary risk associated with these issues. Non-representative population imprisonment might, in turn, lead to a skewed assessment of recidivism risk, which reflects the biases of the criminal justice system more than the actual risk a certain offender may pose.

The principal diagnostic tools used for sexual crime in New Zealand are based on studies of United States prison inmates, modified by studies of New Zealand inmates over a long period of time.\textsuperscript{158} All the general attendant selection bias problems with the United States information, including treatment of race, apply to sexual offences. With regard to sexual offences, however, all the tools suffer from a more fundamental problem: the sample they are based on is roughly one per cent of all offending.\textsuperscript{159} Academic studies, too, often focus on re-arrest or reconviction.\textsuperscript{160} Moreover, the profile of convicted sex offenders is not representative. \textit{Forcible rape} is much more likely to be treated seriously

\begin{thebibliography}{9}
\item \textsuperscript{155} Bronwyn Morrison \textit{Identifying and Responding to Bias in the Criminal Justice System: A Review of International and New Zealand Research} (Ministry of Justice, November 2009) at 53–56.
\item \textsuperscript{156} “Response to Questions Regarding Use of Actuarial Tools for Sexual Crime”, above n 154, at 3.
\item \textsuperscript{157} At 3.
\item \textsuperscript{158} At 1–2. See also Skelton and others, above n 149.
\item \textsuperscript{159} This figure is extrapolated from reporting, charge and conviction rates. Triggs and others, above n 1, at 82; Morrison, Smith and Gregg, above n 1, at 35 and 45; Statistics New Zealand “Charges prosecuted by offence type fiscal year”, above n 1; and Statistics New Zealand “Annual Recorded Offences for the Latest Calendar Years (ANZSOC)”, above n 1.
\item \textsuperscript{160} See, for example, Patrick A Langan, Erica L Schmitt and Matthew R Durose “Recidivism of Sex Offenders Released from Prison in 1994” (November 2003) Bureau of Justice Statistics <www.bjs.gov>. This is probably because funding and data are available for studies of convictions, via national corrections services.
\end{thebibliography}
by the criminal justice system, from arrest to conviction.\textsuperscript{161} The Department of Corrections reports that rapists have a comparatively low recidivism rate, and correspondingly few rapists have previous sexual crime convictions; those identified as recidivists by Corrections (as opposed to first-timers) significantly increase the average rate.\textsuperscript{162} When these facts are combined with other factors relevant to sentencing, especially the emphasis on past convictions and the violence of the crime, they may result in quite a distorted picture of recidivism risk.

The use of actuarial tools assumes that statistical analysis of convicted offenders can accurately protect an individual offender’s future risk. There are significant criticisms of this premise in general, on both principled and practical grounds. Even where tools are shown to be as accurate as individual assessments across a given population, it is possible that the tool unfairly disadvantages (or advantages) certain individuals, compared to an individual assessment. On a practical level, criticisms often centre on the non-representative nature of the offenders sampled. For example, assumptions often made in smaller jurisdictions are: that tools developed elsewhere will be transferable to different cultural and social environments; the question of whether the data collected is specific enough to predict reoffending for specific crimes, or whether it operates based only on broad categories; and on the possibility that certain tools, or tools as a whole, conflate correlation with causation.

\section*{V Sexual Crime Prediction in New Zealand}

\subsection*{A Sampling and distortion: issues with predicting behaviour}

Actuarial tools rely on reliable reporting and conviction. All tools require crime to be reported before it is taken into account, but most only take into account conviction data. Therefore, they rely on two major assumptions. First, a significant and representative sample of moderate to serious crime must be both reported and convicted. Secondly, since actuarial tools attempt to categorise recidivism risk, one must be confident that if a person re-offends after their first release, that re-offence will more likely lead to a report and conviction. Additionally, there must be a reasonably high reporting rate overall. Otherwise, the model risks presenting a warped picture of offending. This would imply that offenders who commit crimes less likely to lead to conviction are less dangerous, rather than simply more evasive.

For many types of crime, it is appropriate to assume that enough serious offences will be reported and convicted to render the statistical model viable. For example, although not all thefts will be reported, the more serious a theft is, the more likely a victim will report it. We can be relatively certain that the most serious thefts will be reported. Owners take theft of high-value items seriously, because of the harm caused. Also police and owners are alerted to the possibility that the perpetrator may steal again. There is no real stigma to reporting theft, even if the owner failed to take precautions to reduce risk, such as installing a car alarm. Similarly, although not all assaults are reported, the most serious assaults generally will be (with the possible exception of domestic assault), which also

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\textsuperscript{161} See, for example, Shane D Muldoon, S Caroline Taylor and Caroline Norma “Patterned Characteristics of Continued and Discontinued Sexual Assault Complaints in the Criminal Justice Process” (2013) 24 Current Issues in Criminal Justice 395 at 411–414; and Daly and Bouhours, above n 1.
\textsuperscript{162} Nadesu, above n 100.
\end{footnotesize}
suffers from a particular stigma and a related low reporting rate, and to which much of this article will also be applicable). Either the harm done will be serious enough that the victim is sent to hospital, in which case the process may be set in motion automatically, or the victim or a witness will decide to contact the police. Moreover, the victim knows that they can do so, because physical injury is taken seriously by the criminal justice system. Victims are rarely blamed for not taking measures to avoid physical assault. Once prosecuted, the most serious thefts and assaults will receive the most severe sentences. Given a range of thefts or assaults, it is relatively easy to judge which are the most serious. A higher reporting rate would mean that a greater proportion of crime was reported, and there would be reduced potential for distortion of recidivism risk, consequently. The reporting rates for almost all crime are higher than those for sexual crime. But even where rates are low, a reliable reporting pattern tends to allow a profile of high-risk crime to be formulated, and that in turn will allow recidivism risk to be calculated relatively accurately at sentencing and parole.

Excluding extreme cases where victims experience physical harm amounting to serious assault as well as sexual violence, one cannot be confident that sexual crime will come to the authorities’ attention. With a reporting rate of around 10 per cent, and around one-third of those offences actually charged, sexual violation is one of the least-reported crimes. Combining reporting and attrition data with conviction data leads to a conclusion that only around one per cent of rapes result in a conviction. As a comparison, approximately 15 per cent of assaults lead to a conviction. Not only is the reporting rate low, but as discussed above, the crimes that are reported are not necessarily the most serious. Often, they are simply those for which it would be most difficult to blame the victim, or for which physical evidence is most easily gathered. In addition to the sexual-crime-specific confounding factors, which distort the selection of crimes used to inform the tools, there are also general biases inherent in the criminal justice system as a whole, which tend to warp the sample of offenders targeted.

The Department of Corrections uses actuarial tools in sexual crime sentencing to assess the static factors that contribute to an offender’s recidivism risk. The primary tool is the Automated Sexual Recidivism Scale (ASRS). It is based on a similar tool developed overseas and validated internationally, the STATIC-99. Corrections psychologists also conduct interviews, and use non-actuarial checklist-type tools designed to assess dynamic and acute factors that might affect recidivism risk. These include the STABLE-2007, ACUTE-2007 and the Violence Risk Scale-Sexual Offender Version.

163 Morrison, Smith and Gregg, above n 1, at 43–46.
164 This figure is extrapolated from reporting, charge and conviction rates.
165 See Morrison, Smith and Gregg, above n 1, at 32–35. These figures are approximate, but they demonstrate the trend, especially as assault is also under-reported. This data was obtained by extrapolating from reporting, charge and conviction rates. See Morrison Smith and Gregg, above n 1, at 35 and 45; Statistics New Zealand “Charges prosecuted by offence type”, above n 1; and Statistics New Zealand “Annual Recorded Offences for the Latest Calendar Years (ANZSOC)”, above n 1. This trend holds true overseas; see Truman, Langton and Planty, above n 47, at 4.
166 “Response to Questions Regarding Use of Actuarial Tools for Sexual Crime”, above n 154, at 1–2. See also Harris and others, above n 153.
167 “Response to Questions Regarding Use of Actuarial Tools for Sexual Crime”, above n 154, at 1–2. See also Harris and others, above n 153.
The ASRS is administered via a computer program that mines data from the Corrections computer system and assigns a risk score, which can be analysed by Corrections psychologists.\(^{169}\) It measures the following factors that elevate the risk score: the number of unique, prior sentencing dates for sexual offences; total number of unique, prior sentencing dates; convictions for non-contact sexual offences; prior sentences for non-sexual violence; index non-sexual violence; any convictions for male sexual victims; and youth. This list omits three STATIC-99 factors, not because they were considered prognostically irrelevant, but because Corrections had not reliably collected data on them.\(^{170}\) The missing factors are cohabitation or an intimate relationship, stranger victims, and unrelated victims. Additionally, whereas the STATIC-99 can include charges that did not lead to convictions in the analysis, as well as a conversion table for the relative risk scores of charges as opposed to convictions, the ASRS deals only in convictions.\(^{171}\)

The omission of three factors rendered the ASRS a substantively different instrument from the STATIC-99. The only question, without which the STATIC-99 can be validly administered, is whether the offender has lived with an intimate partner for two years or more.\(^{172}\) Accordingly, Corrections needed to verify whether the ASRS effectively predicted reconviction. Rather than applying the ASRS to a new cohort of offenders, and waiting to see whether they were reconvicted, the researchers took a retrospective approach. They used as their sample 1,064 sex offenders released from prison in 1987, 1992, and 1997.\(^{173}\) These groups comprised the five, ten and fifteen-year follow-up samples, respectively. They spanned a range of sexual offences, from non-contact exhibitionist offences, to sexual violation. Sentences ranged from two months’ imprisonment up to preventive detention.\(^{174}\) Sexual offences against children were also included in the sample.\(^{175}\) 50 per cent of the offenders were New Zealand European/Pakeha, 40 per cent Māori, and 10 per cent Polynesian: an over-representation of Māori compared to the general population.\(^{176}\) One can also infer from prosecution rates that intoxication and acquaintance rape were almost certainly underrepresented in this sample, as compared to their prevalence in the population.

B Further limitations

(1) Development of the ASRS: statistical issues with predicting reconviction

The STATIC-99 was designed to assess the recidivism risk posed by adult male sexual offenders, and is used internationally.\(^{177}\) Recidivism is defined as reconviction for a new sexual offence.\(^{178}\) Offenders are scored on 10 variables; most are yes-or-no questions, where a yes adds one point to the total score. However, some variables, such as previous sexual offences, are scaled.\(^{179}\) The total numerical score assigned to an offender is then placed into a risk category.

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169 At 2. See also Skelton and others, above n 149, at 280–281 and 284–285.
170 Skelton and others, above n 149, at 280–281.
171 At 280–281; and Harris and others, above n 153, at 11.
172 Harris and others, above n 153, at 25.
173 Skelton and others, above n 149, at 280.
174 At 280.
175 At 280.
176 At 280.
177 Harris and others, above n 153, at 11.
178 At 4.
179 At 35.
The STATIC-99’s own coding rules identify two disadvantages:180

The weaknesses of the STATIC-99 are that it demonstrates only moderate predictive accuracy (ROC = .71) and that it does not include all the factors that might be included in a wide-ranging risk assessment.

Other studies have shown an ROC (receiving operating characteristic) as low as 0.59 for rapists’ sexual recidivism.181 An ROC curve maps the correspondence of true positives and true negatives against false positives and false negatives in such a way that a score of 0.5 indicates a prediction no more effective than chance. The maximum score is one; a score of one would indicate that the tool predicts every outcome perfectly.182 While actuarial tools can improve on clinical predictions, this seems highly context-dependent and the difference is smaller than might be expected.183 This should be borne in mind also in the assessment of the ASRS.

The use of historic offender data is concerning from a statistical point of view. Testing appears to have been conducted as impartially as possible under the circumstances. Rather than using the profiles of convicted offenders to develop the tool, the researchers developed the tool first, before measuring its conclusions against the actual recidivism rates observed from their selected sample. The researchers identified the postdiction as a limitation, and this arrangement tests the validity of the tool’s conclusions.184 However, it is still subject to the possibility of confounding variables, such as the effect of legal or social changes during the period, or of changes to Corrections practice.185 Crucially, the retrospective approach also limits researchers’ ability to tailor the tool. The ASRS omitted three factors that the STATIC-99 tested, because Corrections had not, up to that point, collected that information. If it had been designed and then tested using a prospective validation study, those factors could have been included. This is because Corrections could have begun to collect the data from the point when the tool was developed. Additionally, the researchers could have collected information on factors which were not assessed on the STATIC-99, but which were thought to be potentially useful. A study of total population prevalence of rape might provide insight into exactly which factors should be considered, as will be seen later.

The authors also noted the 2006 study had not examined the impact of victim characteristics, some offender characteristics (for example age, ethnicity and degree of psychopathy), or the effect of treatment.186 The reference to victim characteristics is particularly important. While the authors may have been thinking of the “victim characteristics” assessed by the STATIC-99 (whether the victims are strangers, and whether they are related to the offender), it is suggested that further research could go further, by incorporating the effect of other victim characteristics on conviction rates in order to obtain a more accurate picture of offending. One issue the study does not adequately address is the extent of the bias created in using a sample comprised entirely

180 At 3.
181 Harris and others, above n 112, at 420. The tool more accurately predicted child molesters’ recidivism, increasing its overall ROC.
182 Dolan and Doyle, above n 130, at 304–305.
183 At 303–306.
184 Skelton and others, above n 149, at 284.
185 Such changes did occur; this article is too short to examine them. This issue might also affect predictive studies but can more easily be notified and compensated for.
186 Skelton and others, above n 149, at 284.
of imprisoned offenders. The authors note that the true recidivism rate may be higher than that detected by their analysis. However, they do not address the possibility that their sample may have distorted the relative recidivism rates of different types of crime. As we have seen above, the profile of the victim has a significant effect on whether her case will proceed to trial, and whether any trial will lead to a conviction. Accordingly, this affects the likelihood of a conviction.

To test the conclusions of the 2006 study, a further study was conducted in 2010 by two of the original authors. It found that the recidivism rates predicted by the ASRS, and those actually observed, were “quite similar”. The verification study involved 2,435 sexual offenders of all types, including 868 who had offended only against adults at their release, and 402 who had offended against both children and adults. The ROC area for adult-victim offenders was 0.64, and for offenders with both adult and child victims it was 0.69. The 0.64 figure, in particular, is not a high correspondence, even when ignoring the serious selection issues outlined above.

(2) Implications for particular groups

The omission of stranger victims seems to be an improvement on the STATIC-99, as discussed above, because McWhorter and Lisak and Miller research suggests that those who attack strangers are not necessarily more prolific offenders than those who attack people they know. The Triggs study also suggests that the apparent difference in recidivism rates might be fully explained by the fact that stranger rapes are more likely to be reported, convicted, and prosecuted. Therefore, treating stranger rape as a risk factor, and by extension treating acquaintance rape as a non-risk factor, this could give an inaccurate picture of the actual likelihood of offending.

The other omitted factors, however, are associated with research that does suggest that they predict risk. The question whether an offender has had any unrelated victims may be associated with unreliable prosecution, in the sense that incest rapes have a high conviction rate, but, unlike stranger rapes, it seems likely that the difference in typology is sufficient to lend this factor higher predictive accuracy. There is also significant research that suggests functional long-term relationships are protective factors regarding crime in general and sexual crime in particular. It is also important that Corrections ascertain that such a relationship is not physically (or sexually) abusive. Not all relationships are created equal; abusive relationships do not confer the same protective benefits, and rape does occur within relationships.

One potential issue with the STATIC-99 and ASRS is that offenders with male victims are considered higher-risk than those with female victims only. The 2010 validation study

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187 At 284.
189 At 545.
190 At 550.
192 Hanson and Morton-Bourgon, above n 191, at 31; and Mann, Hanson and Thornton, above n 191, at 199 and 201–202.
of the ASRS found male child victims were associated with higher recidivism rates compared to female child victims. However, it did not mention male adult victims as compared to female adult victims.\(^{193}\) It cited a 2003 study that examined a sample of almost 400 offenders who had attacked a child, an adult female, or both.\(^{194}\) The focus was not on adult-male-victim offenders. Indeed, since female-victim rape is much more common than male-victim rape, one might wonder how many offenders in the sample had any adult-male-victims. The Triggs study found higher conviction rates for male victims based on a small sample, and cited a Victoria study, which found the same.\(^{195}\)

Though the data is far from reliable, it suggests that the apparent recidivism risk associated with male victims may be partly because such attacks are more likely to lead to conviction, than attacks on women. It is also possible that studies involving both child and adult victims have shown that attacks on male-child-victims are associated with reoffending. Due to the fact those studies involved offenders who attacked both adults and children, this conclusion applied to all rapists.\(^{196}\) The ASRS was developed in the context of parole law reform for sexual offending against children.\(^{197}\) Although some offenders offend against both children and adults, it is generally accepted that the two are qualitatively different offences. The ASRS study notes the difference in typology, yet it developed a single tool.\(^{198}\) It may therefore be less sensitive to factors specific to adult-victim offending than it should be, and factors specific to child-victim offending may be misapplied to adult-victim offending for which reliable actuarial data is lacking.

The initial studies, and subsequent reviews, of the ASRS raise serious concerns about the methods used. The validation study indicates that the ASRS correlates as closely with actual reconviction as traditional prediction methods, on average.\(^{199}\) It is accepted that the ASRS may accurately predict reconviction or reimprisonment across a population. But why does the correlation exist? There are three possible scenarios; is it because the scale predicts offending? Does the tool track factors associated with, but not causative of, offending? Or does it simply predict the response of the system that created it? In the second scenario, the tool will be of limited use, and in the third, it is unlikely to add anything useful to the systemic response to crime.

Considering the formulation of the tool, and the statistics on unreported and unconvicted perpetration, the second and third scenarios seem more likely. The authors recognised that the ASRS should only be used as a population measure, not for individual assessment. This is because it would be “less than accurate” when predicting the behaviour of any individual.\(^{200}\) They also realised the tool would not catch all sexual violence. However, they seem not to have accounted for the qualitative differences between sexual crime that is commonly reported, and sexual crime that is typically not.\(^{201}\) The ASRS dispensed with the most obvious problematic aspect of the STATIC-99 Namely, the assumption that apparent recidivism rates for stranger rape could be attributed to the

\(^{193}\) Vess and Skelton, above n 188, at 546–548.
\(^{194}\) Harris and others, above n 112, at 415.
\(^{196}\) Vess and Skelton, above n 188, at 543 and 546–549.
\(^{197}\) Skelton and others, above n 149, at 280 and 282.
\(^{198}\) At 282 and 285.
\(^{199}\) Vess and Skelton, above n 188, at 551–553.
\(^{200}\) Skelton and others, above n 149, at 285.
\(^{201}\) At 285.
crime itself, and not to the responses of victims or agents of the criminal justice system. However, this was not the result of any reasoned analysis, but due to the fact that data was not available from the Corrections computer system. For the same reason, the ASRS dropped two other factors, which may have been helpful, and could not include additional potentially useful factors in the assessment.

Corrections data also shows that reconviction rates for sexual criminals are relatively low. When they are reconvicted, it is usually not for sexual crime. Correspondingly, few people convicted for sexual crime have prior sexual crime convictions.\textsuperscript{202} 35 per cent of rapists released from prison are re-imprisoned within two years. This is lower than the overall re-imprisonment rate; the only crimes with a lower reconviction rate are drink driving, homicide, and child sex offences. Most reconvictions are for non-sexual crimes, to the extent that Corrections attribute low reconviction rates of child sex offenders, to the fact that child sexual offending is less linked to general violence than adult sexual offending.\textsuperscript{203} Only eight per cent of convicted rapists (less than a quarter of those convicted, are re-imprisoned for further sexual violence. The trend of low reconviction rates holds true after five years, although the absolute numbers increase.\textsuperscript{204} The Lisak and Miller and McWhorter studies suggest that the proportionally low rates of reconviction for sexual crimes are likely not because of the dramatic decrease in their sexual violence, but rather due to the strong correlation between sexual and non-sexual violence, and the fact that there is a much higher reporting rate for non-sexual violence. That is, when a sexual offender is released and commits both sexual and violent crimes, the violent crime is much more likely to be reported, prosecuted, and lead to a conviction. The comorbid non-sexual violence identified by Lisak and Miller appears to be responsible for most recovictions.\textsuperscript{205} Non-sexual violence is also a major determinant of an offender’s overall recidivism risk level as assessed by the ASRS.\textsuperscript{206}

In one sense, this means the parole system is working. Lisak and Miller specifically recommended the use of physical violence as a proxy for sexual violence. Reconviction of sex offenders for non-sexual violence mirrors this recommendation, and tends to remove non-reformed sexual offenders from the community. To some extent, this meets the Parole Act’s guiding principle of protection of the community from further harm. But this is only one of the purposes of the Sentencing Act, and even in the narrow context of protection by removal of the offender from the community, it is likely to be insufficient. Since sexual violation is a very serious crime, sentences for other crimes will often be shorter. Sentences and rehabilitation will be focused on non-sexual violent offending, which will impede the ability to correct that behaviour and often give a false impression that the behaviour is less serious than it truly is. It is likely (though not certain, especially where there is domestic violence) that the victim of physical violence will not be the same person as the victim of sexual violence. This will thwart the victim-focused purposes of sentencing. Given the blame-shifting common in society and among offenders, it is particularly important to promote a sense of responsibility in the offender, for the harm

\textsuperscript{202} Triggs and others, above n 1, at 24.
\textsuperscript{204} Nadesu, above n 100.
\textsuperscript{205} Nadesu, above n 203.
\textsuperscript{206} Skelton and others, above n 149.
he or she has caused. Reconviction for other crime cannot promote a sense of responsibility for unreported, unprosecuted or unconvicted sexual crime. It cannot adequately address this problem.

**VI The Potential of Actuarial Tools**

The problem is twofold. First, how to sentence an offender based on actual harm and culpability, rather than on received wisdom or social pressure. Secondly, how to incorporate public protection into sentencing and parole, given that low reporting rates pose a serious obstacle to the reliability of traditional and actuarial approaches. The most important change that must occur in solving these problems is an increase in the reporting rate. That aspect is too complex to address in an article of this length, but studies of attrition in the criminal justice system, and of rape typology, suggest that there may be other ways to achieve an improvement. How effective those methods will be is unclear; I do not argue that it is certain that the suggestions given below will have a significant effect, nor that actuarial tools are necessarily the way forward. However, it is my contention that basing actuarial analysis on robust research is more effective and responsible than making do with what is currently available. So long as actuarial tools are being used, they should be made as robust as possible, used in a way that is supported by data, and if possible, paired with education that may help address the underlying issues behind the reporting rate. For those purposes, the key to improvement is research.

Actuarial tools are used in criminal justice to quickly assess the likely risk presented by an offender. For most crimes, this is useful at sentencing and parole, but not particularly relevant to the decision to prosecute. It is relatively easy to tell what is a serious assault, or a serious theft, and the most serious crimes are reliably convicted. For some crimes, however, that is not so. With rape in particular, perceived risk differs significantly from real risk. As a result, rapists who are perceived as higher-risk because they attack strangers and use violence, among other features, are more likely to be reported, prosecuted and convicted. Meanwhile, rapists who are perceived to be low-risk are even less likely to be reported and convicted than the low overall reporting and conviction rates would suggest. Consequently, the prison population is composed disproportionately of offenders whose perceived risk is high, regardless of their actual risk, and actuarial tools based on that population are likely to perpetuate this distortion.

However, if substantial research were undertaken that showed the actual prevalence of rape in the community, the tools might be able to achieve their original aim of ensuring that crime and justice policy is based on verifiable data and not on assumptions about criminality. The most obvious place where such data could be incorporated is at sentencing, to counteract rape myths such as those latent within $R v AM$. The use of actuarial tools at this stage remains controversial. Additionally, while recidivism risk can be treated as an aggravating factor, it is only one among many, and is often addressed through proxies, such as regret and previous criminal record, rather than directly.

Regardless of whether a tool is used, however, the research behind it will be valuable in providing an accurate understanding of typology. This is necessary at each stage of the criminal justice process, even using the traditional approach, in order to contextualise and understand criminals’ behaviour. At trial and sentencing, behaviour must be placed in the right cultural context. Sexual violence is often misunderstood by juries, and sometimes also by judges. Like domestic violence, it is prevalent in the population, often recurs, and should be understood as a special type of crime if it is to be tried appropriately and
sentenced in accordance with the Sentencing Act. This includes educating judges and juries about prevalence, methods, typical victim reactions, and reasons victims might react in unexpected ways. In terms of the purposes of sentencing, this will apply not only to rehabilitation and protection of the community, but also in the accountability of the offender, promoting a sense of responsibility for harm, and deterring the commission of similar offences.\textsuperscript{207} Whether the research is used within a tool, or merely to place the offending in context, it can be valuable at this stage.

Parole will likely be a more appropriate place to incorporate any actuarial tool derived from this research. The Parole Act allows the Board to consult any information it deems fit, and requires decisions to be made on the basis of all relevant information.\textsuperscript{208} This means that issues of admissibility do not arise, so long as the tool is well-formulated. In fact, if it provides new information, the Board may be required to consider it. The paramountcy of safety makes it easier to justify the use of risk assessment, and if statistical assessment is more effective than individual assessment, or if they function best in tandem, it is easy to argue that the use of actuarial data is justified. It does not seem a stretch to suggest that the Parole Board should consider public safety in a broad sense, focusing on actual harm rather than confining it to the likelihood of further convictions. Objections on the basis of due process might have force at sentencing, but at parole they are unlikely to succeed. The use of population studies will likely ameliorate due process issues associated with the current use of actuarial tools. This renders the tools more accurate, therefore diminishing the impact of confounding factors such as race and victim characteristics, among others. An understanding of how the offence occurred will also be critical to Corrections’ ability to track potential reoffending. Research into typology may assist Corrections in tailoring rehabilitation and prevention programmes to cast a wide net. It may reveal a strong correlation between certain types of physical violence and sexual offending, for example, enabling rehabilitation targeted at the comorbid physical violence to incorporate a sexual violence prevention element. This could help rehabilitate offenders imprisoned for physical violence, but whose sexual offending is undetected.

The area where most rape falls out of the system, however, and where the greatest change is needed, occurs long before sentencing and parole. This article has addressed, and proposed, solutions for the one per cent of offending that is included in the samples currently used for actuarial tools. This is because only one per cent of offending is convicted. The obvious drawback is that, if the improved tools are limited to sentencing and parole, they will only apply to one per cent of crime in the future. Discussions about the low rape conviction rate tend to focus on the low reporting rate, which is a legitimate response. As seen above, low reporting is the biggest contributor to low conviction. However, low reporting is a perennial issue that has never been resolved, despite years of research and effort internationally.

Research on rape prevalence cannot directly counteract low reporting rates, but perhaps it could be used by Police to double-check decisions whether to investigate and prosecute. It might be possible to use a variant of actuarial tools, to see how common certain types of cases are, and perhaps counteract some of the misconceptions that lead to such low prosecution rates for relationship and intoxication rape in particular. A simple set-format tool might be more accessible for police than extensive qualitative research

\textsuperscript{207} Sentencing Act, ss 7(1)(a), (b) and (f).
\textsuperscript{208} Parole Act, ss 7(2)(c) and 117.
into rape typology. If such a tool had an impact on prosecution rates, the effect might change attitudes towards victims, which could in turn reduce attrition during the criminal justice process.

Low reporting is a continuing problem. Solving it will require years of work and a culture change in wider society, as well as in the criminal justice system. Even if the only effect of additional research is to improve slightly the accuracy of the predictive tools already in use, the objective seems a worthy one. However, it may be that there are additional benefits: actuarial tools may be able to function as a stopgap, helping to compensate for some of the defects in the system as it currently exists, and perhaps eventually helping to facilitate the ultimate goals of reliable rape reporting and prosecution. Surely, it is worth improving upon the tools that are already available, to see the affect of a reliable statistical approach.