

# Comparing Sex Offender Risk Assessment Measures on a UK Sample

Leam A. Craig  
Kevin D. Browne  
Ian Stringer

**Abstract:** *The purpose of this study on 139 sex offenders was to consider the application of six measures of risk: Static-99, SACJ-Min (Structured Anchored Clinical Judgment Scale-Minimum), RRASOR (Rapid Risk Assessment for Sexual Offence Recidivism), Risk Matrix 2000-Sexual/Violent, and SVR-20 (Sexual Violence Risk-20) and to compare risk assessments conducted by a Regional Secure Unit (RSU) and the Probation Service. Levels of risk for the RSU sample ranged from 1% to 42% low risk to 1% to 66% high risk compared with the Probation sample of 8% to 43% low risk to 4% to 70% high risk. Offenders with adult victims obtained significantly higher scores using the RM2000/S and SACJ-Min than did those with child victims who obtained significantly higher scores on the RRASOR. Sex offenders referred to a RSU scored significantly higher on RRASOR and RM2000/S than did sex offenders supervised by the Probation Service. Forensic practitioners may be better served if risk measures assess specific subcategories of sexual offenders.*

**Keywords:** *sexual offenders; actuarial and clinical risk assessment; probation; regional secure unit*

An offender's dangerousness can be conceptualised in a number of different ways, however the central concern is usually risk of reoffending. Prediction in general and sexual aggression, in particular, is an extremely difficult task due to the complex and multifactorial nature of this type of crime (Borum, 1996). If the probability of dangerousness is overestimated (false positive or Type I error predictions), low-risk offenders are placed in treatment that is expensive and prolonged. When released into the community, sex offenders deemed as presenting a high risk of reoffending are often the subject of substantially more restrictions than compared to those deemed at low risk of reoffending. Not surprising, the higher the perceived risk, the greater the cost in terms of personal commitment, management, and exposure to treatment. However, worse is the possibility of underestimations (false negative or Type II error predictions) where dangerous offenders are released without treatment and the risk that a new sexual offence will be committed (Epperson, Kaul, & Hesselton, 1998).

---

NOTE: Correspondence should be addressed to Professor Kevin Browne, Centre for Forensic and Family Psychology, University of Birmingham, Edgbaston, Birmingham B15 2TT, United Kingdom; e-mail: K.D.Browne@bham.ac.uk.

International Journal of Offender Therapy and Comparative Criminology, 48(1), 2004 7-27  
DOI: 10.1177/0306624X03257243  
© 2004 Sage Publications

According to Monahan (1996), prediction can be improved with the use of actuarial methods by using criteria that have been empirically validated. Therefore, forensic practitioners are increasingly turning to empirically derived actuarial risk instruments. The accuracy of clinical judgment and actuarial measures has been debated (Grubin, 1999), and it is widely accepted that actuarial measures outperform clinical judgment (Grove, Zald, Lebow, Snitz, & Nelson, 2000; Hood, Shute, Feilzer, & Wilcox, 2002). Indeed Goggin (1994) found that the mean correlation coefficient for prediction of recidivism using actuarial methods was 0.22, whereas for clinical methods productivity it was 0.08.

However, the use of actuarial measures is not without criticism. To predict relatively rare (low base rate) events, such as sexual offences, increases the possibility of making false positive errors to high. The caveat when discussing the predictive accuracy of actuarial risk assessments is that of the impact base rates of recidivism. Any risk classification compares prediction with actual outcome using  $2 \times 2$  contingency tables. However, as Hart, Webster, and Menzies (1993) pointed out,  $2 \times 2$  contingency tables oversimplify what is a multifactorial event, and all outcomes cannot be dichotomised (e.g., actual rape, attempted rape, threatened rape, etc.).

Furthermore, as with actuarial risk instruments,  $2 \times 2$  tables encourage absolute judgments failing to consider qualifying statements. All actuarial risk instruments are ultimately derived from base rates, which are usually recorded as reoffence or recidivism. Therefore, a base rate of 10% usually means that 10% of a group of sexual offenders can be expected to reoffend within a given time period. However, it is well documented that this base rate will increase with time (Hanson, 2001). Conversely, low base rates can have the opposite effect, increasing the probability of making a false positive error where the clinician overestimates the level of risk. To overcome this, predictive accuracy is measured using the receiver operating characteristic (ROC) analysis area under the curve (AUC) that is not distorted by variations in the base rate of recidivism.<sup>1</sup>

In spite of the growing body of research advocating the use of actuarial assessment, Litwack (2001) and Rogers (2000) urged caution over the uncritical acceptance of actuarial measures. Litwack (2001) argued that research to date has not demonstrated that actuarial methods of risk assessment are superior to clinical methods because most clinical determinations of dangerousness are not predictions of violence, and it is very difficult to compare clinical and actuarial assessments of dangerousness. Litwack offered a critique of the *Violent Risk Appraisal Guide* (VRAG) (see Quinsey, Harris, Rice, & Cormier, 1998) as not having been validated in a manner that would make it appropriate for use in determining when individuals should be confined on the grounds of their dangerousness. In response, Harris, Rice, and Cormier (2002) compared the predictive accuracy of clinical judgment with that of the VRAG on a subsample of forensic psychiatric patients ( $n = 148$ ). The VRAG performed significantly better at predicting violent recidivism over a 6-month period (ROC AUC = 0.80) than did clinical judgment (ROC AUC = 0.70). Although clinical judgment and the VRAG achieved high

sensitivity in identifying truly dangerous people, the VRAG did so at the cost of fewer false alarms, with similar results for a 1-year follow-up (Harris et al, 2002). When predicting homicide (base rate = 0.7%), VRAG obtained significant results over clinical judgment.

Given the positive results of actuarial instruments over clinical judgment, Janus & Meehl (1997) suggested that the predictive accuracy of clinical judgment threatens risk-based legal sanctions for sex offenders. With regard to actuarial risk measures of sexual offence recidivism, statistical prediction instruments appear to work well at predicting general or nonsexual violent recidivism, however are less effective at predicting sexual recidivism specifically (Craig, Browne, & Stringer, 2003a). Several actuarial risk assessments have been developed based on assumptions of factors associated with recidivism through reviews (Hanson & Bussière, 1998) and meta-analytical reviews of the literature on sexual offending (Sexual Violence Risk-20 [SVR-20]; Boer, Wilson, Gauthier, & Hart, 1997; Witt, DelRusso, Oppenheim, & Ferguson, 1996; Rapid Risk Assessment for Sexual Offence Recidivism [RRASOR], Hanson, 1997). However, in a review of the reliability of 10 actuarial and 2 clinically guided sex offender risk assessments, Craig et al. (2003a) reported the correlation of prediction and sexual offence recidivism outcome ranging from  $r = 0.09$  (Statistics Information on Recidivism Scale [SIR]) (Bonta, Law, & Hanson, 1996) to  $r = 0.45$  ROC AUC 0.77 (Minnesota Sex Offender Screening Tool-Revised [MnSOST-R]) (Epperson et al., 2000). The accuracy using the ROC ranged from ROC AUC = 0.60 (Rice & Harris, 1999) for the Violent Risk Assessment Guide (VRAG) (Quinsey et al., 1998) and the Multifactorial Assessment of Sex Offender Risk for Recidivism (MASORR) (Barbaree, Seto, Langton, & Peacock, 2001) to ROC AUC = 0.92 for Static-99 (Thornton, 2002).

Although recent progress in risk assessment established the validity of actuarial measures, there continues to be some debate about the application of these instruments. Indeed, it has been suggested that factors such as sexual deviance and psychopathy (Barbaree, Langton, & Seto, 2002) and treatment-related information (Seto, Barbaree, & Langton, 2002) significantly affect risk assessments and recidivism; yet these predictors are not included in some risk instruments. Indeed, by its very nature, human behaviour is not a static event, and an individual's risk will change based on situations and changes in circumstances, such as sex offender treatment interventions (Craig, Browne, & Stringer, 2003b).

The aim of this study was twofold: to consider the application of sex offender risk-assessment measures on offenders with adult or child victims, and to compare risk levels between two referral agencies, namely the Probation Service and a UK Regional Secure Unit (RSU). Estimates of risk were completed on all offenders using the six risk assessments for sexual offenders; the Structured Anchored Clinical Judgment Scale (SACJ) (Thornton, 1997; see Grubin, 1998), the Rapid Risk Assessment for Sex Offence Recidivism (RRASOR) (Hanson, 1997), Static-99 (Hanson & Thornton, 2000) and Risk Matrix 2000-Sexual/Violence (Thornton, Friendship, Erikson, Mann, & Webster, 2003), and the Sexual Vio-

lence Risk-20 (SVR-20) (Boer et al., 1997). The SVR-20 was included in this study over other risk instruments as it includes a broader range of risk factors (psychosocial, sexual, and future plans) and because it was designed as an aid to clinical judgment and risk management of sexual offenders. Seven risk assessment scales were excluded from this study as these scales were not in regular use within Her Majesty's Prison and Probation Services and because of a lack of data on phallometric measures of sexual deviancy recorded in one of those instruments.

## METHOD

### PARTICIPANTS

In this study, 172 sexual offenders were identified for inclusion, 33 were excluded due to limited personal history from which it was not possible to accurately score levels of risk across all six risk measures. The remaining sample consisted of 139 male offenders convicted of committing a sexual offence. There were 51 nonprison sexual offenders (mean age = 41.7 years,  $SD = 15.0$ , range 16 to 57 years) and 88 sexual offenders referred to a UK RSU (mean age = 36.3 years,  $SD = 13.6$ , range 13 to 61 years). The samples were split into two offence categories based on the age of their victims; sexual offenders against children younger than 16 years ( $n = 112$ )—offences included indecent assault, gross indecency with a child, unlawful sexual intercourse, buggery, possession, making and distributing indecent images of children—and sexual offenders against adult female victims ( $n = 27$ )—offences included rape, attempted rape, indecent assault, exhibitionism, and theft of women's underwear.

### PROCEDURE

Probation Service case file information included presentence reports, witness and victim statements, list of previous convictions, psychology and/or psychiatric reports, parole and treatment reports (where applicable), and contact logs. The presentence, psychology/psychiatric, and treatment reports were the most valuable data source, providing details that were beneficial to the objectives of this study.

### SETTING

The UK RSU is a forensic psychiatric facility that holds medium-risk adult psychiatric patients and offenders with mental disorders. The RSU provided an assessment resource for local agencies dealing with offenders with nonmental disorders. It also coordinated an outpatient sex offender treatment programme for

offenders with nonmental disorders referred from local agencies, from which the sample for this study was taken. For the purposes of data collection, no direct contact with offenders was necessary.

## RISK MEASURES AND SCORING PROCEDURE

*SACJ-Min.* David Thornton's (1997) Structured Anchored Clinical Judgment Scale (SACJ) (Grubin, 1998) uses a stepwise approach, which is broken down into three steps; only the first two steps of the assessment were used in this study, as amended for the police service (SACJ-Min), which are actuarially based and can be derived from file information. The first step categorised offenders into one of three levels of risk (high, medium, and low) based on convictions; previous or current sexual offences, previous or current nonsexual violent offences, and more than three past convictions of any sort. The second step considered eight items: stranger victims, any male victims, never married, convictions for noncontact sex offences substance abuse, placement in residential care as a child, deviant sexual arousal, and psychopathy (Hare, 1991). The presence of two or more aggravating factors raises the initial risk level. The final part of the scale is based on progress in prison and positive or negative treatment outcomes. The final step of the assessment was not considered in this study. In developing Static-99, Hanson and Thornton (2000) reported SACJ-Min correlations of 0.23 (ROC AUC = 0.67) with sexual offence recidivism, and 0.22 (ROC AUC = 0.64) with any violent recidivism. Risk levels from Step 1 of the assessment are determined by total scores, 1 = lower risk, 2 = medium risk, and 3+ = high risk.

*RRASOR.* Developed in Canada by Hanson (1997) using predominantly North American samples, RRASOR considers four factors that account for unique variance: prior sexual offences, age, victim gender, and relationship to victim. Based on assigning points to the presence of such variables, the scale ranges from 0 (*first time incest offenders, over the age of 15*) to 6 (*extrafamilial boy victim paedophiles with 4 or more previous convictions and released prior to the age of 25*). In a validation sample, RRASOR correlated 0.28 (ROC AUC = 0.68) with sexual offence recidivism and 0.22 (ROC AUC = 0.64) with any violent recidivism (Hanson & Thornton, 2000). Barbaree et al. (2001) reported ROC AUC = 0.76 ( $r = 0.26$ ) for sexual recidivism and ROC AUC = 0.65 ( $r = 0.20$ ) for violent recidivism. In a cross-validation study, Sjöstedt and Långström (2000) followed up 1,400 sex offenders on average for 4 years and reported sexual recidivism correlations of 0.22 (ROC AUC = 0.72) using RRASOR. In a later study using RRASOR, Sjöstedt and Långström (2002) studied reconviction rates in 51 rapists and reported ROC AUC of 0.73 and 0.62 for sexual and nonsexual violent recidivism, respectively. As there are no risk categories for RRASOR, levels of risk were scored as follows: 0 = low risk; 1, 2 = medium-low risk; 3, 4 = medium-high to high risk; 5, 6 = high risk.

*Static-99.* Static-99 (Hanson & Thornton, 2000) was developed from combining SACJ-Min and RRASOR. It contains 10 items concerned with four broad categories associated with increased likelihood of committing further sexual offences: sexual deviance measured by whether the offender has offended against males, ever been married, and has committed a noncontact sexual offence; range of potential victim measured by whether the offender offended against unrelated or stranger victim; persistent sexual offending measured by number of previous sexual convictions; and antisociality as measured by current or previous nonsexual violence or four or more previous criminal convictions. Static-99 is scored dichotomously (1 = present, and 0 = absent), which is translated into one of four risk categories: low, medium low, medium high, and high. For the prediction of sex offence recidivism, Static-99 (ROC AUC = 0.71,  $r = 0.33$ ) was more accurate than the RRASOR (ROC AUC = 0.68,  $r = 0.28$ ) or SACJ-Min (ROC AUC = 0.67,  $r = 0.23$ ) (Hanson & Thornton, 2000). Static-99 also showed moderate predictive accuracy for violent (including sexual) offence recidivism (ROC AUC = 0.69,  $r = 0.32$ ). Sjöstedt and Långström (2000) reported ROC AUC of 0.76 for sexual recidivism and 0.74 for nonsexual violent recidivism, respectively, using Static-99. Similarly, Beech, Becket, and Fisher (2002) reported ROC AUC = 0.73 for sexual recidivism using Static-99 over a 4-year follow-up. Translating Static-99 scores into risk categories followed the published recommendations: 0, 1 = low risk; 2, 3 = medium/low; 4, 5 = medium/high; and 6+ = high risk.

*SVR-20.* Boer et al.'s (1997) Sexual Violence Risk-20 (SVR-20) is designed to assess the risk of sexual violence by selecting 20 factors, divided into three main sections: (a) psychological adjustment—sexual deviation, victim of child abuse, cognitive impairment, suicidal/homicidal ideation, relationship/employment problems, previous offence history (nonsexual violent, nonviolent), psychopathy, substance use problems, and past supervision failure; (b) sexual offending—high-density offences, multiple offences, physical harm to victims, use of weapon, escalation, and cognitive distortions; and (c) future plans—whether the offender lacks realistic plans and has negative attitudes toward instruction. The presence of each item was scored on a 3-point scale (0 = item does not apply; 1 = item applies somewhat; 2 = item definitely applies). Items can be summed to produce a total score as an actuarial measure of risk for sexual violence. As there are no published translations of scores into risk categories, levels of risk were determined from the range and frequency of the raw scores following a normal distribution profile. Sjöstedt and Långström (2002) reported ROC AUC of 0.49 and 0.64 for sexual and nonsexual violent recidivism, respectively, for total SVR-20 scores. The SVR-20 global risk score obtained the highest ROC AUC score for sexual recidivism at 0.56, whereas the SVR-20 psychosocial adjustment score obtained the lowest ROC AUC = 0.47. However, the SVR-20 psychosocial adjustment obtained the highest ROC AUC (0.71) for nonsexual violent recidivism, whereas the SVR-20 global risk score obtained the lowest (ROC AUC = 0.53). Risk cate-

gories were scored as follows: 0, 1 = low; 2, 3 = medium low; 4, 6 = medium high; and 7+ = high risk.

Risk Matrix 2000 (Thornton et al., 2003) developed as a revision of SACJ-Min and has separate indicators for risk of sexual recidivism, nonsexual assault, and overall violence. Similar to the SACJ-Min, Risk Matrix 2000-Sexual/Violent (RM2000-S/V) uses a stepwise approach to scoring and is broken down into two dimensions—Risk Matrix 2000-Sexual and Risk Matrix 2000-Violent. RM2000-S has three risk items in Step 1 (number of previous sexual appearances, number of criminal appearances, and age), the sum of which is translated into a risk category. Step 2 contains four aggravating factors (any conviction for sexual offence against a male, any conviction for a sexual offence against a stranger, any conviction for a noncontact sex offence, and any single if never lived with an adult lover for at least 2 years), the presence of two or four aggravating factors raises the risk category by one or two levels, respectively. Thornton et al. (2003) reported cross validation on at least two UK samples. ROC AUC coefficients varied from the low 0.7s to the low 0.8s. Translating RM2000-S scores into risk categories followed the published recommendations: RM2000-S, 0 = low; 1, 2 = medium; 3, 4 = high, 5, 6 = very high risk. The second dimension, Risk Matrix 2000-V, consisted of three risk items (age at commencement of risk, number of previous violent appearances, and any history of burglaries). The scores are translated into the following risk categories: 0, 1 = low, 2, 3 = medium, 4, 5 = high, 6+ = very high risk.

## RESULTS

### SAMPLE CHARACTERISTICS

*Offenders with adult or child victims.* Data frequencies using actuarial risk factors for offenders with adult or child victims are reported in Table 1. Significantly more offenders with adult victims were strangers and unrelated to their victims than compared to the offenders with child victims. There were little differences between adult and child victim offenders in terms of deviant sexual interests, previous convictions for sexual offences, 5+ criminal appearances, and previous offences of nonsexual violence. Although not significant, the trend was for offenders with adult victims to have displayed nonsexual violence during the index offence (25.9%;  $\chi^2 = 2.56$ ,  $df = 1$ ,  $p = 0.09$  ns) and to have exhibited traits of personality disorder (51.9%;  $\chi^2 = 3.31$ ,  $df = 1$ ,  $p = 0.056$  ns) than did offenders with child victims. Offenders with adult victims were more likely to be single, have more noncontact sexual offences, and have a history of previous supervision failure than child molesters. Offenders with adult victims physically injured their victims ( $\chi^2 = 8.27$ ,  $df = 1$ ,  $p < 0.01$ ) and had a history of multiple sexual offences ( $\chi^2 = 6.83$ ,  $df = 1$ ,  $p < 0.05$ ) compared to child molesters. Child molesters were

**TABLE 1**  
DATA FREQUENCIES OF OFFENDERS WITH ADULT AND CHILD VICTIMS

<i>Risk Factor</i>	<i>Victim Type</i>		$\chi^2$
	<i>Adult %</i>	<i>Child %</i>	
Features of index offence			
Unrelated victim	96.3	52.7	17.42*
Victim stranger	81.5	13.4	51.63*
Index nonsex violence	25.9	13.4	2.56
Male victim	3.7	27.7	7.05**
Victim harm/physical injury	29.6	8.9	8.27**
Use of weapon	14.8	5.4	2.91
Offending history & convictions			
Prior sex offence	55.6	40.2	2.09
5+ criminal appearances	22.2	20.5	0.03
Prior nonsexual violence	22.2	21.4	0.00
Noncontact sex offence	29.6	6.3	12.35**
Past nonviolent offence	33.3	40.2	0.42
Past supervision failure	22.2	7.1	5.46***
Escalation in frequency of offending	11.1	4.5	1.77
Multiple sex offence type	33.3	12.5	6.83****
Any burglaries	7.4	18.8	2.02
Multiple victims	48.1	33.0	2.15
Developmental influences			
With parents until age 16 years	74.1	71.4	0.07
School maladjustment	14.8	22.3	0.74
History of foster care	11.1	9.8	0.04
Child abuse	22.2	27.7	0.33
Sexual behaviour & interests			
Deviant sex interest	63.0	65.2	0.04
Sex with girl younger than age 14 years	11.1	32.1	4.76***
Psychosocial adjustment			
Single	59.36	30.4	7.89****
Age younger than age 25 years	14.8	17.0	0.07
Employment problems	14.8	14.3	0.00
Minimisation of offending	40.7	50.9	0.89
Attitudes support offence	22.2	22.3	0.00
Unrealistic future plans	18.5	13.4	0.46
Negative attitude to treatment	7.4	20.5	2.54
Clinical factors			
Schizophrenia	0	1.8	0.48
Traits of personality disorder	51.9	33.0	3.31
Alcohol problems	14.8	13.4	0.03
History of mental illness	11.1	17.0	0.55
Suicidal/homicidal ideation	11.1	14.3	0.18
Substance abuse	7.4	7.1	0.00
PCL-R-25 +	3.7	5.4	.012

NOTE: PCL-R: Psychopathy Checklist-Revised (Hare, 1991)

$df = 1$ .

\* $p < 0.001$ . \*\* $p < 0.005$ . \*\*\* $p < 0.05$ . \*\*\*\* $p < 0.01$ .

more likely to offend against a male victim ( $\chi^2 = 7.05, df = 1, p < 0.005$ ) than were offenders with adult victims.

*Probation and RSU sex offenders.* Data frequencies for Probation and RSU samples are reported in Table 2. Nonprison sexual offenders had significantly more previous convictions, including for sexual offences. They were less likely to know their victim and more likely to be single during the time of the offence. However, clients referred to a RSU for a treatment assessment were scored as having more deviant sexual interests, having engaged in more noncontact sexual offences, having displayed more pro-offending attitudes, being more negative about attending treatment programmes, and having offended against multiple victims. Nonprison sexual offenders experienced more problems with alcohol, expressed more suicidal/homicidal ideation, and reported more symptoms of mental illness (neurotic/psychotic).

#### DIFFERENCES IN RISK CATEGORIES

To assess for differences between offenders with adult and child victims and Probation and RSU samples, risk categories were entered into an independent samples *t* test using the SPSS (Version 10.0.7) (SPSS, 2000). Further analysis was carried out using a chi-square. Perhaps not surprising given their aetiology, Static-99 correlated highly with RRASOR, SACJ-Min, RM2000/V, and RM2000/S. The Thornton and Hanson risk scales also correlated with SVR-20.

*Risk categories and victim type.* Levels of risk of sexual offenders against children and adults ranged from 7% low risk to 62% high risk and 0% low risk to 93% high risk, respectively. When considering differences in risk between offenders with adult or child victims, offenders with adult victims obtained higher mean scores on RM2000/S  $t(137) = 2.551, p < 0.05$ , and SACJ-Min  $t(137) = 5.242, p < 0.001$  than did offenders with child victims who obtained higher mean scores on the RRASOR  $t(137) = 0.399, p < 0.05$  (Table 3).

Table 4 considers differences in risk between offenders with adult or child victims using a chi-square analysis. Depending on the risk assessment measure being used, 85.1% and 92.6% of offenders with adult victims were considered medium high to high risk using Static-99 ( $\chi^2 = 22.5, df = 3, p < 0.001$ ) and SACJ-Min ( $\chi^2 = 9.85, df = 2, p = 0.01$ ) respectively, compared with 83.9% of offenders with child victims considered low to medium-low risk using the RM2000/S ( $\chi^2 = 13.7, df = 3, p < 0.005$ ).

*Probation and RSU risk categories.* Levels of risk for RSU and Probation Service clients ranged from 1% low risk to 66% high risk and 8% low risk to 70% high risk, respectively. Sex offenders referred to a RSU for treatment assessment obtained higher mean scores on RRASOR  $t(137) = 0.607, p < 0.001$  and

**TABLE 2**  
DATA FREQUENCIES FOR PROBATION AND RSU SAMPLES

<i>Risk Factor</i>	<i>Sample</i>		$\chi^2$
	<i>Probation %</i>	<i>RSU %</i>	
Features of index offence			
Unrelated victim	64.7	59.1	0.42
Victim stranger	37.3	20.5	4.66***
Index nonsex violence	13.7	17.0	0.26
Male victim	23.5	22.7	0.01
Victim harm/physical injury	9.8	14.8	0.70
Use of weapon	7.8	6.8	0.05
Offending history & convictions			
Prior sex offence	58.58	34.1	8.05**
5+ criminal appearances	29.4	15.9	3.56
Prior nonsexual violence	25.5	19.3	0.72
Noncontact sex offence	3.9	14.8	3.94***
Past nonviolent offence	37.3	39.8	0.08
Past supervision failure	5.9	12.5	1.56
Escalation in frequency of offending	3.9	6.8	0.49
Multiple sex offence type	11.8	19.3	1.33
Any burglaries	19.6	14.8	0.54
Multiple victims	25.5	42.0	3.84***
Developmental influences			
With parents until age 16 years	74.5	70.5	0.26
School maladjustment	17.6	22.7	0.50
History of foster care	13.7	8.0	1.18
Child abuse	19.6	30.7	2.02
Sexual offence behaviour & interests			
Deviant sex interest	51.0	72.7	6.69****
Sex with girl younger than age 14 years	19.6	33.0	2.84
Psychosocial adjustment			
Single	47.1	29.5	4.30***
Age younger than 25 years	11.8	19.3	1.33
Employment problems	11.8	15.9	0.45
Minimisation of offending	49.0	48.9	0.00
Attitudes support offence	11.8	28.4	5.16***
Unrealistic future plans	11.8	15.9	0.45
Negative attitude to treatment	0	28.4	17.66*
Clinical factors			
Schizophrenia	0	2.3	1.17
Traits of personality disorder	45.1	31.8	2.45
Alcohol problems	21.6	9.1	4.26***
History of mental illness	25.5	10.2	5.64***
Suicidal/homicidal ideation	25.5	6.8	9.53**
Substance abuse	11.8	4.5	2.52
PCLR-25 +	7.8	3.4	1.32

NOTE: PCL-R: Psychopathy Checklist-Revised (Hare, 1991); RSU = Regional Secure Unit.

$df = 1$ .

\* $p < 0.001$ . \*\* $p < 0.005$ . \*\*\* $p < 0.05$ . \*\*\*\* $p < 0.01$ .

**TABLE 3**  
COMPARING RISK SCORES ON SEXUAL OFFENDERS  
WITH ADULT AND CHILD VICTIMS

<i>Risk Scale</i>	<i>Victim</i>				<i>t Values</i>
	<i>Adult (n = 27)</i>		<i>Child (n = 112)</i>		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
RRASOR	2.41	0.50	2.46	0.76	0.399*
Static-99	3.30	0.82	2.38	0.94	-4.622
SACJ-Min	2.93	0.27	2.47	0.73	-5.242**
SVR-20	2.63	1.01	2.42	0.96	-1.007
RM2000/S	2.30	0.95	1.79	0.75	-2.551*
RM2000/V	2.04	0.81	1.80	0.85	-1.297

NOTE: RRASOR = Rapid Risk Assessment for Sexual Offence Recidivism; SACJ-Min = Structured Anchored Clinical Judgment Scale-Minimum; SVR-20 = Sexual Violence Risk-20; RM2000/S = Risk Matrix 2000-Sexual; RM2000/V = Risk Matrix 2000-Violence.

\* $p < 0.05$ . \*\* $p < 0.001$ .

**TABLE 4**  
DIFFERENCES IN ACTUARIAL MEASURES IN  
ASSESSING SEX OFFENDERS WITH ADULT AND CHILD VICTIMS

<i>Actuarial Risk Scale</i>	<i>df</i>	$\chi^2$	<i>p Value</i>
RRASOR	3	4.99	0.173
Static-99	3	22.54	0.000**
SACJ-Min	2	9.85	0.007*
SVR-20	3	1.29	0.731
RM2000/S	3	13.17	0.004*
RM2000/V	3	2.93	0.402

NOTE: RRASOR = Rapid Risk Assessment for Sexual Offence Recidivism; SACJ-Min = Structured Anchored Clinical Judgment Scale-Minimum; SVR-20, Sexual Violence Risk-20; RM2000/S = Risk Matrix 2000-Sexual; RM2000/V, Risk Matrix 2000-Violence.

\* $p < 0.05$ . \*\* $p < 0.001$ .

RM2000/S  $t(137) = 0.101$ ,  $p < 0.05$  than did sex offenders supervised by the Probation Service (Table 5).

Chi-square analysis revealed that Probation sex offenders were more likely to be considered medium-low to low risk (60.7%) using RRASOR ( $\chi^2 = 16.38$ ,  $df = 3$ ,  $p < 0.001$ ) (Table 6). Although not statistically significant, Probation sex offenders were more likely to be considered medium-high to high risk (63.8%) when using Static-99 ( $\chi^2 = 7.50$ ,  $df = 3$ ,  $p = 0.058$  ns).

An analysis of variance (ANOVA) compared differences between the five actuarial risk instruments against the clinically guided risk assessment, SVR-20.

**TABLE 5**  
COMPARISONS BETWEEN RISK SCALES ON  
PROBATION SERVICE AND RSU SEXUAL OFFENDERS

Risk Scales	Probation ( <i>n</i> = 51)		RSU ( <i>n</i> = 88)		<i>t</i> Value
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
RRASOR	2.39	0.90	2.48	0.59	0.607**
Static-99	2.82	0.93	2.41	0.99	-2.430
SACJ-Min	2.59	0.70	2.55	0.69	-0.350
SVR-20	2.53	0.86	2.42	1.04	-0.635
RM2000/S	1.88	0.93	1.90	0.74	0.101*
RM2000/V	1.94	0.88	1.80	0.82	-0.983

NOTE: RSU = Regional Secure Unit; RRASOR = Rapid Risk Assessment for Sexual Offence Recidivism; SACJ-Min = Structured Anchored Clinical Judgment Scale–Minimum; SVR-20, Sexual Violence Risk-20; RM2000/S = Risk Matrix 2000-Sexual; RM2000/V, Risk Matrix 2000-Violence.  
\* $p < 0.05$ . \*\* $p < 0.001$ .

**TABLE 6**  
DIFFERENCES IN ACTUARIAL MEASURES IN  
ASSESSING PROBATION SERVICE AND RSU SEX OFFENDERS

Risk Scale	Degrees of Freedom ( <i>df</i> )	Chi-squared Value	<i>p</i> Value (one-tailed)
RRASOR	3	16.383	.001*
Static-99	3	7.500	.058
SACJ-Min	2	.508	.776
SVR-20	3	7.171	.067
RM2000/S	3	5.748	.125
RM2000/V	3	1.754	.625

NOTE: RRASOR = Rapid Risk Assessment for Sexual Offence Recidivism; SACJ-Min = Structured Anchored Clinical Judgment Scale-Minimum; SVR-20, Sexual Violence Risk-20; RM2000/S = Risk Matrix 2000-Sexual; RM2000/V, Risk Matrix 2000-Violence.  
\* $p < 0.05$ . \*\* $p < 0.001$ .

When considering raw score means, SVR-20 was significantly different from RRASOR  $F(11, 127) = 2.38, p < .01$ ; Static-99  $F(11, 127) = 6.09, p < .001$ ; SACJ-Min  $F(11, 127) = 7.86, p < .001$ ; RM2000/V  $F(11, 127) = 2.66, p < .005$ ; and RM2000/S  $F(11, 127) = 4.81, p < .001$ . A similar pattern emerged when considering differences between risk categories where SVR-20 differed significantly with Static-99  $F(93, 135) = 17.43, p < .001$ ; SACJ-Min  $F(3, 135) = 15.50, p < .001$ ; RM2000/V  $F(3, 135) = 9.55, p < .001$ ; and RM2000/S  $F(3, 135) = 12.84, p < .001$ ; but not with RRASOR  $F(3, 135) = 2.62, p > .05$  ns.

SVR-20 obtained higher risk classification means than RRASOR, RM2000/S, RM2000/V, but not compared with Static-99 and SACJ-Min.

## DISCUSSION

The aim of this study was to compare levels of risk across five actuarial risk measures and one oral risk assessment between offenders with adult or child victims and between the Probation Service and a UK RSU samples.

In spite of strong concurrent validity between the six scales, classifications of risk varied. Levels of risk of sexual offenders against children and adults ranged from 7% low risk to 62% high risk and 0% low risk to 93% high risk, respectively. Depending on the risk assessment instrument being used, 85.1% and 92.6% of offenders with adult victims were considered medium-high to high risk using Static-99 and SACJ-Min, respectively, compared with 83.9% of offenders with child victims considered low to medium-low risk using the RM2000/S.

Similarly, trends and differences in risk between measures was found when considering the referral agency where levels of risk for RSU and Probation Service samples ranged from 1% low risk to 66% high risk and 8% low risk to 70% high risk, respectively. Furthermore, sex offenders supervised by the Probation Service scored significantly higher on Static-99 and RM2000/S than did sex offenders referred to a RSU for a treatment assessment.

Levels and categories of risk between instruments appear inconsistent and vary depending on which measure is being used. As our scientific knowledge surrounding sexual offending develops, so too does our understanding and measure of risk. Indeed, one could expect to find differences between older risk scales and those developed more recently. However recent studies measuring predictive accuracy do not necessarily support this contention. The RRASOR (ROC area = 0.76 developed in 1997 has been reported to outperform more recently developed risk instruments such as Sex Offender Risk Appraisal Guide (SORAG) (see Quinsey et al., 1998) (ROC area = 0.70), SACJ-Min (ROC area = 0.67), and MnSOST-R (ROC area = 0.65) (Barbaree et al., 2001). Furthermore, although it is widely accepted that subgroups of sexual offenders, such as intrafamilial and extrafamilial child molesters and rapists, reoffend at different rates and ages (Hanson, 2001; Hood et al., 2002), suggesting that different mechanisms may be at work, there are as yet no actuarial measures specifically designed to assess risk in subcategories of sexual offenders. The results from this study and that of the literature support the argument that rather than having a generic actuarial risk instrument for sexual offenders, assessments of risk may be more accurate if such instruments are designed to assess specific subcategories of sexual offenders, such as those who offend against children or adults.

The category of risk posed by sexual offenders with child victims ranged from 7% low risk to 62% high risk. A possible explanation for this might be that none of the actuarial instruments contains items specifically related to child victims. Although the risk item male victim may be more relevant to child molesters, it does not make the distinction of the age of the victim. Indeed, the results from this study support the argument that the risk item male victim is more relevant to child molesters than offenders against adults. This is a work in progress, and there are

implications of individual risk items specific to risk categories (child items relate to child victim, etc.) that when considered with empirical actuarial risk instruments might improve predictive accuracy in relation to specific questions of risk.

Furthermore, there are inconsistencies between risk measures. Static-99 has shown good predictive accuracy of sexual offence recidivism (Thornton, 2002) and is intended to be a measure of long-term risk potential. However, given the absence of dynamic risk factors, it would not be suitable to select treatment targets and measures of change or predict when sexual offenders are likely to recidivate. As its name suggests, Static-99 is designed to assess static risk factors and does not take into account dynamic factors. Indeed, in a review of the 12 most commonly used sex offender risk-assessment measures, 10 predominately used static risk factors, and 7 did not consider treatment effects (Craig et al., 2003a). It is not clear to what extent such measures accurately assess longitudinal dynamic risk. Offending behaviour is a multifactorial event, and arguably the dynamic nature of human behaviour lends itself to clinical assessment. Although recent measures, such as Risk Matrix 2000, incorporates age parameters, the assessment of risk using static-based instruments would suggest a lifetime level of risk unaffected by change.

Nevertheless, support for the use of RRASOR and Static-99 (that do not include psychopathy scores) was found in Barbaree et al. (2001) who reported that RRASOR and Static-99 were equal to PCL-R-based (Psychopathy Checklist-Revised) (Hare, 1991) instruments in their reliability and their ability to predict serious and sexual recidivism among sexual offenders. Clearly, this may be good news for Probation officers who are not trained in PCL-R scoring that requires specialised training, lengthy file review, and an interview that can take up to 2 to 3 hours to complete.

One possible explanation for the differences in risk categories between scales may relate to certain assumptions being made in the development of actuarial risk instruments in relation to sexual behaviour and risk. The majority of outcome studies have focused exclusively on the sexual reoffence/reincarceration rate of treated and untreated sex offenders, providing little data that can guide the agent in charge of supervising the sex offender in the community. An alternative explanation may relate to the different population bases on which the risk instruments are derived. For example, *Violent Risk Appraisal Guide* (VRAG) and the *Sex Offender Risk Appraisal Guide* (SORAG) (see Quinsey et al., 1998) are based on atypical forensic psychiatric patients, whereas RRASOR and Static-99 risk factors were identified using meta-analytical technique-based four samples, three of which were Canadian from 1943 to 1995. As with treatment studies and recidivism (Alexander, 1999), there was no uniform definition of outcome, whether recidivism referred to reoffending, arrest, or conviction. Indeed, legal definitions may have changed in the 52-year period from which RRASOR and Static-99 instruments are based. A further critique of actuarial measures is that they are atheoretical, in that they provide no guidance on which psychological risk factors

underlie risk, and hence no indication of how risk can be reduced or when such a reduction in risk has taken place following treatment (Beech, Fisher, & Thornton, 2003). Whereas models and theories of sexual offending behaviour, such as the Quadripartite Model (Hall & Hirschman, 1991), the Precondition Model (Finkelhor, 1984), the integrated theory (Marshall & Barbaree, 1990), and the Relapse-Prevention Model (Marques, 1992; Pithers, 1990; Pithers, Kashima, Cumming, Beal, & Buel, 1998) have influenced assessment and treatment programmes, actuarial risk factors are identified from meta-analytical studies often without a clear theoretical framework.

#### LIMITATIONS & ASSUMPTIONS

Several assumptions were made in collecting the data. Several actuarial risk instruments were excluded from this study, in part, due to the limitations of personal history information and phallometric and detailed psychopathy scores. PCL-R ratings were not commonly carried out unless previously reported in psychology or psychiatric treatment reports. In cases where detailed PCL-R ratings were not recorded in the file, the clinician recorded traits of psychopathy as identified by Hare (1991). Therefore, although it was not possible to clinically assess a PCL-R cutoff score of 25 for a UK sample when completing the SACJ-Min, a rating was made based on a collection of traits considered to reach 25 points. Although the clinician was trained in administering the PCL-R, it is possible that this judgment was a source of error when scoring the SACJ-Min.

The small sample size used in this study may limit the ability to generalise the results. However, it is thought to be representative of the UK Probation Service and of clients referred to a RSU for treatment assessment.

#### FUTURE DIRECTIONS

For the most part, actuarial measures tend to be heavily reliant on static factors and may be of limited use in the case of first-time offenders whose current offence may be unusual or have sadistic elements (Beech et al., 2003). Indeed, most static factors contained with actuarial risk instruments are consistently reported in the literature as being positively associated with sexual recidivism: prior sexual offences (Hanson, Steffy, & Gauthier, 1993; Rice, Quinsey, & Harris, 1991), stranger victims (Hanson & Harris, 1998), and more general offending-related factors such as psychopathy (Quinsey, Rice, & Harris, 1995; Serin, Mailloux, & Malcolm, 2001), nonsexual convictions (Hanson, 1997; Hanson & Thornton, 2000), early-onset conduct disorder (Långström & Grann, 2000), and history of substance abuse (Doyle, 1994). Consistently, the results across the different samples suggest that many of the same factors apply to diverse groups of sexual offenders. However, as this study suggests, there are inconsistencies in levels of risk between measures and subgroups of sexual offenders. Further research is

needed to examine the extent to which the same or different factors apply to subgroups of sexual offenders.

Although several instruments have proved useful as a measurement of risk for general recidivism among sexual offenders, they may not be necessarily sufficient for all types of sexual offenders. For instance, enhanced predictive accuracy has been demonstrated among sexual offenders by combining information from phallometric testing with an assessment of psychopathy (Rice & Harris, 1997). This suggests that different sets of factors are involved in predicting sexual recidivism than those that predict general and nonsexual violent recidivism (Hanson & Bussière, 1998). However, physiological assessment has been criticised for being intrusive and lacking construct validity and standardization; and its accuracy as a risk predictor is questionable (Laws, 2003).

Furthermore, few measures consider more dynamic aspects of risk. Static risk factors are limited regarding the potential for treatment intervention, where changes in dynamic factors would go undetected. Actuarial variables are chosen because they account for the most variance; however, it is not clear as to whether the variables have equal weight from one offender to the next, from subcategory of offenders, or what variables are not included at present but might be better predictors. With the exception of the SVR-20, which is used more as a set of guidelines to improve assessments of risk for sexual violence, most actuarial instruments not only specify the items to consider but also provide direction as the relative importance of each item. Although the risk factors considered by the various instruments share common features pertaining to the index offence, victim characteristics, criminal and developmental histories, and psychosocial adjustment, they vary as to the relative weight each instrument places on the item in respect of general factors and sexual deviance.

Several studies recognise the importance of dynamic risk factors including mental health (McGrath, 1991), employment status (Maletsky, 1991), social support networks (Hanson & Harris, 2000), deviancy (Beech 1998; Fisher, Beech, & Browne, 1999), low self-esteem (Worling & Curwen, 2000), victim empathy and cognitive distortions (Hanson & Harris, 1998), history of substance abuse (Doyle, 1994), childhood sexual victimisation (Matthews, 1993), and victim-to-offender patterns (Pithers et al., 1998). Pithers et al. (1998) reported a 5% to 57% rate of adverse childhood experiences in sexual offenders of children compared with 5% to 12% in rapists. Elliot, Browne, and Kilcoyne (1995) reported a similar rate of 57%.

The concept of deviancy has been factored in with classifications of risk. Fisher et al. (1999) found that high-deviancy men had significantly higher levels of cognitive distortions, significantly poorer empathy for victims of sexual abuse, and significantly higher levels of emotional fixation on children. High-deviancy men have significantly more victims, were more likely to have previous convictions for a sexual offence, were more likely to have committed an extrafamilial offence, and were more likely to have offended against boys than when compared to the low-deviancy group (Beech, 1998). Similarly, Rice et al. (1991) reported

that deviant sexual arousal is predictive of sexual reoffence in child molesters and rapists, which has also been linked with levels of risk. When an actuarial assessment of risk of reconviction (Static-99) was applied to a sample of 53 men attending a Probation sexual offender treatment programme, it was found that factoring in deviancy increases the predictive value of risk by 25% in high-risk cases, 42% in medium-risk cases, and by 86% in low-risk cases (Beech, Erikson, Friendship, & Ditchfield, 2001). More interesting, using Thornton's Structured Anchored Clinical Judgment Scale (SACJ) (1997), Beech (1998) found that the high-deviancy group had only marginally higher scores than the low-deviancy group (1.4 vs. 1.0 out of 4); both groups scoring within the low-medium range. Indeed this is consistent with research where dynamic factors, such as deviancy (Beech, Fisher, & Beckett, 1999; Beech, Friendship, Erikson, & Hanson, 2002), pro-offending attitudes (Hudson, Wales, Bakker, & Ward, 2002), and other dynamic measures (Dempster & Hart, 2002; Thornton, 2002) increase predictive accuracy when combined with static risk factors.

## CONCLUSION

The literature demonstrates the importance of identifying risk factors predictive of sexual offence recidivism. This method is employed in several actuarial risk assessments detailing the nature of current and previous offences and aggravating factors that increase the level of risk. The use of actuarial risk assessments is rapidly gaining popularity with professionals in the criminal justice system as an objective technique to distinguish offenders with high risk of sexual offence recidivism from those of low risk. However, in spite of extensive research demonstrating the predictive accuracy of actuarial approaches over clinical judgment, actuarial measures are limited. Rather than having generic actuarial risk instruments for sexual offenders, assessments of risk may be better served if such instruments are designed to assess specific subcategories of sexual offenders, that is, child molesters, rapists, or even exhibitionists. Because of the heterogeneous nature of sexual offenders, there is no current consistent profile as many of the studies have had opposing findings, and more prospective research practices are needed to determine exactly what dynamic factors are major causes for concern.

Risk changes over time, place and circumstances, and effective management depend on being able to evolve assessments of risk into dynamic systems, and the use of static and the variations of dynamic factors is a promising feature in risk prediction. A more accurate and global assessment of risk will be one that considers actuarial estimates, clinical assessment of changes in dynamic risk, and psychometric measures.

The availability of empirically based risk-assessment instruments redefines the task of assessing risk and predicting behaviour. However, although deviations from actuarial instruments results in worse outcomes, assumptions as to the different types sexual offenders, behaviours, and risk continue to be made.

### NOTE

1. The receiver operating characteristic (ROC) analysis: By plotting the data points for the “hit rate” against the “false alarm rate” produces a curve (area under curve, AUC) from which the hit rate can be calculated as a function of the false alarm rate. The trade-off between the hit rate and the false alarm rate is called the relative operating characteristic.

### REFERENCES

- Alexander, M. A. (1999). Sexual offender treatment efficacy revisited. *Sexual Abuse: A Journal of Research & Treatment, 11*(2), 101-116.
- Barbaree, H. E., Langton, C. M., & Seto, M. C. (2002, October). *Does psychopathy of deviant sexual arousal add to the predictive validity of actuarial risk assessment?* Paper presented at the 21st Annual Conference for the Association for the Treatment of Sexual Abusers, Montreal, Quebec, Canada.
- Barbaree, H. E., Seto, M. C., Langton, C. M., & Peacock, E. J. (2001). Evaluating the predictive accuracy of six risk assessment instruments for adult offenders. *Criminal Justice & Behavior, 28*(4), 490-521.
- Beech, A. R. (1998). A psychometric typology of child abusers. *International Journal of Offender Therapy & Comparative Criminology, 42*, 319-339.
- Beech, A. R., Beckett, R., & Fisher, D. (2002). *Outcome data of representative UK sex offender treatment programmes: Short-term effectiveness and some preliminary reconviction data*. Manuscript submitted for publication.
- Beech, A. R., Erikson, M., Friendship, C., & Ditchfield, J. (2001). A six-year follow-up of men going through probation-based sex offender treatment programmes. *The Research, Development, & Statistics Directorate, 144*(1-4). London: HMSO. Available from [www.homeoffice.gov.uk/rds/pdfs/r144.pdf](http://www.homeoffice.gov.uk/rds/pdfs/r144.pdf)
- Beech, A. R., Fisher, D., & Beckett, R. (1999). *STEP 3: An evaluation of the prison sex offender treatment programme* (U.K. Home Office Occasional Report). London: Home Office Publications Unit. Available from [www.homeoffice.gov.uk/rds/pdfs/occ-step3.pdf](http://www.homeoffice.gov.uk/rds/pdfs/occ-step3.pdf)
- Beech, A. R., Fisher, D., & Thornton, D. (2003). *Risk assessment of sex offenders*. Manuscript submitted for publication.
- Beech, A., Friendship, C., Erikson, M., & Hanson, R. K. (2002). The relationship between static and dynamic risk factors and reconviction in a sample of UK child abusers. *Sexual Abuse: A Journal of Research & Treatment, 14*(2), 155-167.
- Boer, D. P., Wilson, R. J., Gauthier, C. M., & Hart, S. D. (1997). *Manual for the Sexual Violence Risk-20*. Vancouver, British Columbia, Canada: The Mental Health, Law and Policy Institute and the Simon Fraser University.
- Bonta, J., Law, M., & Hanson, K. (1996). The prediction of criminal and violent recidivism among mentally disordered offenders: A meta-analysis. *Psychological Bulletin, 123*, 123-142. Available from [www.sgc.gc.ca/publications/corrections/199805a\\_e.asp](http://www.sgc.gc.ca/publications/corrections/199805a_e.asp)
- Borum, R. (1996). Improving the clinical practice of violence risk assessment: Technology, guidelines, and training. *American Psychologist, 51*, 945-956.
- Craig, L. A., Browne, K. D., & Stringer, I. (2003a). Risk scales and factors predictive of sexual offence recidivism. *Trauma, Violence, & Abuse, 4*(1), 45-69.
- Craig, L. A., Browne, K. D., & Stringer, I. (2003b). Treatment and sexual offence recidivism. *Trauma, Violence, & Abuse, 4*(1), 70-89.
- Dempster, R. J., & Hart, S. D. (2002). The relative utility of fixed and variable risk factors in discriminating sexual recidivists and nonrecidivists. *Sexual Abuse: A Journal of Research & Treatment, 14*(2), 121-138.

- Doyle, C. (1995). *Child sexual abuse: A guide for health professionals*. Norwich, CT: Thomson Learning.
- Elliot, M., Browne, K. D., & Kilcoyne, J. (1995). Child sexual abuse prevention: What offenders tell us. *Child Abuse & Neglect, 19*, 579-594.
- Epperson, D. L., Kaul, J. D., & Hesselton, D. (1998, October). *Final report on the development of the Minnesota Sex Offender Screening Tool-Revised (MnSOST-R)*. Paper presented at the 17th Annual Conference of the Association for the Treatment of Sexual Abusers, Vancouver, British Columbia, Canada.
- Epperson, D. L., Kaul, J. D., Hout, S. J., Hesselton, D., Alexander, W., & Goldman, R. (2000, November). *Cross-validation of the Minnesota Sex Offender Screening Tool-Revised (MnSOST-R)*. Paper presented at the 19th Annual Conference for the Association for the Treatment of Sexual Abusers. San Diego, CA. Available from [http://129.186.143.73/faculty/epperson/mnsost\\_download.htm](http://129.186.143.73/faculty/epperson/mnsost_download.htm)
- Finkelhor, D. (1984). *Child sexual abuse: New theory and research*. New York: Free Press.
- Fisher, D., Beech, A. R., & Browne, K. D. (1999). Comparison of sex offenders and nonsex offenders on selected psychological measures. *International Journal of Offender Therapy & Comparative Criminology, 43*, 473-491.
- Goggin, C. E. (1994). *Clinical versus actuarial prediction: A meta-analysis*. Unpublished manuscript, University of New Brunswick, St. John, New Brunswick, Canada.
- Grove, W. M., Zald, D. H., Lebow, B. S., Snitz, B. E., & Nelson, C. (2000). Clinical versus mechanical prediction: A meta-analysis. *Psychological Assessment, 12*(1), 19-30.
- Grubin, D. (1998). Sex offending against children: Understanding the risk. **EDITORS?** *Home Office Research, Development, and Statistics Directorate research findings, Police Research Series* (Paper 99). London: Research, Development, and Statistics Directorate, Policing and Reducing Crime Unit.
- Grubin, D. (1999) Actuarial and clinical assessment of risk in sex offenders. *Journal of Interpersonal Violence, 14*(3), 331-343.
- Hall, G. C. N., & Hirschman, R. (1991). Toward a theory of sexual aggression: A quadripartite model. *Journal of Consulting & Clinical Psychology, 55*, 111-112.
- Hanson, R. K. (1997). *The development of a brief actuarial risk scale for sexual offence recidivism* (User Report No. 1997-04). Ottawa, Ontario, Canada: Department of the Solicitor General of Canada. Available from [www.sgc.gc.ca/epub/corr/e199704/e199704.htm](http://www.sgc.gc.ca/epub/corr/e199704/e199704.htm)
- Hanson, R. K. (2001). *Age and sexual recidivism: A comparison of rapists and child molesters* (Cat No.: JS42-96/2001). Ottawa, Ontario, Canada: Department of the Solicitor General of Canada. Available from [www.sgc.gc.ca/EPub/Corr/eAge200101/eAge200101.htm](http://www.sgc.gc.ca/EPub/Corr/eAge200101/eAge200101.htm)
- Hanson, R. K., & Bussière, M. T. (1998). Predicting relapse: A meta-analysis of sexual offender recidivism studies. *Journal of Consulting & Clinical Psychology, 66*(2), 348-362.
- Hanson, R. K., & Harris, A. (1998). *Dynamic predictors of sexual recidivism*. Ottawa, Ontario, Canada: Department of the Solicitor General Canada. Available from <http://www.sgc.gc.ca/epub/corr/e199801b/e199801b.htm>
- Hanson, R. K., & Harris, A. (2000). Where should we intervene? Dynamic predictors of sexual offense recidivism. *Criminal Justice & Behavior, 27*(1), 6-35.
- Hanson, R. K., Steffy, R. A., & Gauthier, R. (1993). Long-term recidivism of child molesters. *Journal of Consulting & Clinical Psychology, 61*, 646-652.
- Hanson, R. K., & Thornton, D. (2000). Improving risk assessment for sex offenders: A comparison of three actuarial scales. *Law & Human Behavior, 24*(1), 119-136. (A description of Static-99 can also be found on the Solicitor General of Canada's Web site: [www.sgc.gc.ca/epub/corr/e199902/e199902.htm](http://www.sgc.gc.ca/epub/corr/e199902/e199902.htm))
- Hare, R. (1991). *Manual for the Revised Psychopathy Checklist*. Toronto, Ontario, Canada: MultiHealth Systems.
- Harris, G. T., Rice, M. E., & Cormier, C. A. (2002). Prospective replication of the Violent Risk Appraisal Guide in predicting violent recidivism among forensic patients. *Law & Human Behavior, 26*(4), 377-394.

- Hart, S. D., Webster, C. D., & Menzies, R. L. (1993). A note on portraying the accuracy of violence predictions. *Law & Human Behavior*, 17, 695-700.
- Hood, R., Shute, S., Feilzer, M., & Wilcox, A. (2002). Sex offenders emerging from long-term imprisonment: A study of their long-term reconviction rates and of parole board members' judgments of their risk. *British Journal of Criminology*, 42(2), 371-394.
- Hudson, S. M., Wales, D. S., Bakker, L., & Ward, T. (2002). Dynamic risk factors: The Kia Marama evaluation. *Sexual Abuse: A Journal of Research & Treatment*, 14(2), 103-119.
- Janus, E. S., & Meehl, P. E. (1997). Assessing the legal standard for predictions of dangerousness in sex offender commitment proceedings. *Psychology, Public Policy, & Law*, 3, 33-64.
- Långström, N., & Grann, M. (2000). Risk for criminal recidivism among young sex offenders. *Journal of Interpersonal Violence*, 15, 856-872.
- Laws, R. (2003). Penile plethysmography: Will we ever get it right? In T. Ward, D. R. Laws, & S. M. Hudson (Eds.), *Sexual deviance: Issues and controversies* (pp. 82-102). Thousand Oaks, CA: Sage.
- Litwack, T. R. (2001). Actuarial versus clinical assessments of dangerousness. *Psychology, Public Policy, & Law*, 7(2), 409-443.
- Maletsky, B. M. (1991) *Treating the sexual offender*. New York: Sage.
- Marques, J. K. (1992, March). *Relapse prevention: A self-control model for the treatment of sex offenders*. Paper presented at the 7th Annual Forensic Mental Health Conference, Asilomar, CA.
- Marshall, W. L., & Barbaree, H. E. (1990). An integrated theory of the etiology of sexual offending. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 257-275). New York: Plenum.
- Matthews, J. K. (1993). Working with female sexual abusers. In M. Elliot (Ed.), *Female sexual abuse of children* (pp. 57-73). New York: Guilford.
- McGrath, R. J. (1991). Assessment of sexual aggression: Practical clinical interviewing strategies. *Journal of Interpersonal Violence*, 5, 507-519.
- Monahan, J. (1996). Violence prediction: The past twenty and the next twenty years. *Criminal Justice & Behavior*, 23(1), 107-120.
- Pithers, W. D. (1990). Relapse prevention with sexual aggressors: A method for maintaining therapeutic change and enhancing external supervision. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *The handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 363-385). New York: Plenum.
- Pithers, W. D., Kashima, K. M., Cumming, G. F., Beal, L. S., & Buel, M. M. (1998). Relapse prevention of sexual aggression. *Annals of the New York Academy of Sciences*, 528, 244-260.
- Quinsey, V. L., Harris, G. T., Rice, M. E., & Cormier, C. A. (1998). *Violent offenders: Appraising and managing risk*. Washington DC: American Psychological Association.
- Quinsey, V. L., Rice, M. E., & Harris, G. T. (1995). Actuarial prediction of sexual recidivism. *Journal of Interpersonal Violence*, 10, 85-105.
- Rice, M. E., & Harris, G. T. (1997). Cross-validation and extension of the Violence Risk Appraisal Guide for child molesters and rapists. *Law & Human Behavior*, 21(2), 231-241.
- Rice, M. E., & Harris, G. T. (1999). *A multi-site follow-up study of sex offenders: The predictive accuracy of risk prediction instruments*. Third Annual Research Day of the University of Toronto Forensic Psychiatry Program, Penetanguishene, Ontario, Canada.
- Rice, M. E., Quinsey, V. L., & Harris, G. T. (1991). Sexual recidivism among child molesters released from a maximum-security psychiatric institution. *Journal of Consulting & Clinical Psychology*, 59, 381-386.
- Rogers, R. (2000). The uncritical acceptance of risk assessment in forensic practice. *Law & Human Behavior*, 24(5), 595-605.
- Serin, R. C., Mailloux, D. L., & Malcolm, P. B. (2001). Psychopathy, deviant sexual arousal, and recidivism among sexual offenders. *Journal of Interpersonal Violence*, 16(3), 234-246.

- Seto, M. C., Barbaree, H., & Langton, C. (2002, October). *How should we interpret behavior in treatment?* Paper presented at the 21st Annual Conference for the Association for the Treatment of Sexual Abusers, Montreal, Quebec, Canada.
- Sjöstedt, G., & Långström, N. (2000, November). *Actuarial assessment of risk for criminal recidivism among sex offenders released from Swedish prisons 1993-1997*. Poster presented at the 19th Annual Conference of the Association for the Treatment of Sexual Abusers, San Diego, CA.
- Sjöstedt, G., & Långström, N. (2002). Assessment of risk for criminal recidivism among rapists: A comparison of four different measures. *Psychology, Crime, & Law*, 8(1), 25-40.
- SPSS (2000). *Statistical packages for the social sciences. Manual for professional statistics* (Version 10.0.7). Chicago: Author.
- Thornton, D. (1997, September). *Structured anchor clinical judgment risk assessment (SACJ): Proceedings of the NOTA Conference*. Brighton, United Kingdom.
- Thornton, D. (2002). Constructing and testing a framework for dynamic risk assessment. *Sexual Abuse: A Journal of Research & Treatment*, 14(2), 137-151.
- Thornton, D., Friendship, C., Erikson, M., Mann, R., & Webster, S. (2003). *Cross-validation of a static instrument for predicting sexual recidivism*. Manuscript submitted for publication.
- Thornton, D., Mann, R., Webster, S., Blud, L., Travers, R., Friendship, C., et al. (2003). Distinguishing and combining risks for sexual and violent recidivism. In R. Prentky, E. Janus, M. Seto, & A. W. Burgess (Eds.), *Understanding and managing sexually coercive behavior. Annals of the New York Academy of Sciences*.
- Witt, P. H., DelRusso, J., Oppenheim, J., & Ferguson, G. (1996). Sex offender risk assessment and the law. *Journal of Psychiatry & Law*, Fall, 343-377.
- Worling, J., & Curwen, T. (2000). Adolescent sexual offender recidivism: Success of specialized treatment and implications for risk prediction. *Child Abuse & Neglect*, 24(7), 965-982.

**Leam A. Craig**

The Willows Clinic  
Birmingham, Edgbaston B15 2TT  
United Kingdom

**Kevin D. Browne**

Centre for Forensic and Family Psychology  
University of Birmingham  
Birmingham, Edgbaston B15 2TT  
United Kingdom

**Ian Stringer**

The Willows Clinic  
417A Birmingham Road,  
Wylde Green, Sutton Coldfield  
West Midlands B72 1AU  
United Kingdom