

Caveat Usare: Actuarial Schemes in Real Life

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Actuarial schemes regarding sexually violent predators have been developed in the past decade, partly in response to legislative changes in both the United States and Canada.^{1,2} Some suggest that these schemes are so accurate that they should be used in isolation and that clinical assessments not only fail to add to the predictive value, but in fact, may be detrimental to it.³ Others, however, have stated that clinical assessment is still necessary and may be guided by factors associated with recidivism.⁴⁻⁶ Considerable controversy remains about the place of actuarial testing in the assessment of sexual offenders.

Owing to increasing concern over the apparent epidemic of sexual abuse in the community, politicians have passed legislation to increase incapacitation of offenders. In the United States, the Washington State Protection Act in 1990 took a novel approach, establishing a new law for civil commitment of persons found to be sexually violent predators.⁷ Unlike its predecessors, this law was not linked to sentencing but was intended to commit the offender civilly after completion of his prison term.¹ Despite rigorous debate and commentary, similar legislation has been enacted in many jurisdictions in the United States.¹

In Canada, the dangerous-offender laws have evolved from previous legislation, and currently the hearing to establish dangerous-offender status is, generally speaking, tied to sentencing. The only exception is when new information comes to light after

sentencing. The other new provision in Canada is the designation of a category for the "long-term offender" (LTO), an accused who meets the criteria for a dangerous offender, but for whom there is a reasonable possibility of control in the community.⁸ This represents a compromise position that is being used more commonly.

Determining Dangerous-Offender Status

The designation of dangerous-offender status requires mental health professionals to assess sexual offenders and predict the risk of future harm to others. Considerable variability exists in the methods used in the evaluation of offenders, and the debate continues as to whether actuarial tools should be used in isolation³ or whether these schemes should only be used as an *aide-mémoire* or adjunct to comprehensive assessments.^{1,5,9} However, one should recognize that many actuarial schemes depend on clinical skills and are based on clinical consultation.^{6,10} This has led to a concept of "guided clinical assessments"^{5,9} in which the assessor takes into account and addresses factors that have been suggested by research. These factors are then the subject of scrutiny as part of the broader clinical picture, contextualizing the variables within the framework of a clinical assessment. Because the assessments have a significant place in legal proceedings and have profound implications for individual liberties and community safety, various authors have suggested that assessments should be as comprehensive as possible.^{1,5,10,11}

The problems encountered with actuarial tools and the need to include unique factors is best exem-

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Table 1 Risk Assessment Scores

Tests	Dr. A. 1993	Dr. B. 1999	Dr. C. 2001	Dr. D. 2005	Dr. G. 2005
Point at which tests conducted	Institutional placement/parole	Institutional placement/parole	Institutional placement/parole	DO hearing	DO hearing
PCL-R	—	—	Score = 27	Initial score, 24; revised score, 19	—
STATIC-99	—	10% (5 yr)	—	52% (5 yr)	19% (15 yr)
VRAG/VPS	—	—	35% (5-yr)	—	—
SORAG	—	—	—	80% (5 yr)	76% (10 yr)
RRASOR	—	—	7.6%	—	11.2% (10 yr)
LSI	Moderate risk	—	—	—	—
Clinical	—	Moderate	High	Likely to reoffend	More likely than not to offend

DO, dangerous offender; PCL-R, Hare Psychopathy Checklist-Revised; STATIC-99, Static Factors (1999); VRAG/VPS, Violence Risk Appraisal Guide/Violence Prediction Scheme; SORAG, Sex Offender Risk Appraisal Guide; RRASOR, Rapid Risk Assessment of Sex Offender Recidivism; LSI, Level of Service Inventory.

plified in a recent case in which I was asked to review a file for a dangerous-offender hearing. A young adult male had sexually assaulted, or attempted to assault sexually, five females in one and a half years. The victims ranged from young teenagers to women over 65. In one of the assaults, he dragged the victim into a park, hit her with a heavy object, held a knife to her throat, and beat her before having sexual intercourse. In the other instances, he entered the residences of the victims. Perhaps the most egregious assault was on an elderly female who complained that she was having an asthma attack during the assault, to which he responded by putting a pillow over her face.

Although the offender was acquitted of assaults on three other females, he was convicted of the first four assaults and sentenced to 13 years incarceration. (Interestingly, when new legislation was enacted that required mandatory DNA testing, he was convicted of the fifth assault ten years later, triggering the dangerous offender proceedings.)

This offender had previously been assessed by others before I was asked to conduct an evaluation. They were all experts in the field who were highly trained and had access to the most up-to-date actuarial schemes. The first three assessors were government employees (referred to as Drs. A., B., and C.), who assessed him for purposes of either placement within the penitentiary system or for parole. They had no vested interest in the findings, as they were not particularly involved in an adversarial process. The fourth assessor (Dr. D.) was appointed by the court to assess him for a dangerous-offender hearing. I became involved after being retained by the Crown Attorney (prosecutor) for a second opinion in an effort to strengthen their case. Both Dr. D. and I (Dr.

G.) were retained by the prosecution and, although both of us strove for objectivity and honesty, we could be considered tainted by the adversarial process.

Table 1 illustrates the variability of scores found using the different actuarial schemes chosen by all the assessors.

Perhaps the most startling result was on Dr. B.'s Static-99, which found a probability of recidivism of 10 percent over five years. This rate does not even appear on the table of recidivism rates for the Static-99. It was clearly an error resulting from misreading the instructions.

My scoring of the Static-99 revealed a score somewhat higher, placing this offender in the middle range. As implied in the instructions for the test,¹² its likely best use is to delineate a very low-risk group and a very high-risk group. This offender did not fall in either group, and so this test was not particularly helpful.

Dr. D. found a score that placed the offender in the highest group, which could only be possible if the first four convictions, as well as the three charges for which he was acquitted, were considered "prior sex offenses." However, this would involve an idiosyncratic interpretation of the specific definitions given by the authors. In fact, the revised rules for scoring the Static-99 address this point and state that these offenses are considered "pseudorecidivism" and are counted as part of the "index cluster."¹³ This point emphasizes the danger of relying uncritically on a numerical score. A simple mistake in scoring, perhaps generated by misreading the instructions, can have disastrous consequences on the liberty of the offender or even perhaps the safety of the public.

The next most glaring inconsistency appears to be the RRASOR score by Dr. C., who found a very low risk of 7.6 percent compared with much higher scores on other tests. According to the author of the instrument,¹⁴ the scale shows moderate predictive accuracy sufficient to justify its use as a screening instrument in settings that require routine assessments. The low score may be due to how the various convictions were interpreted. Although the assessment by Dr. C. was carried out before the fifth conviction, which invoked the dangerous offender hearings, the fifth assault was committed in the same cluster of offenses as the first four assaults. The same problem in scoring highlighted by the Static-99 applies to the RRASOR, since both share the same ancestry. Thus, depending on whether the first four offenses are included in the same cluster as the fifth assault, or as a different cluster, the score can change from 1 to 4. This would change the 5-year adjusted recidivism rate from 7.6 to 32.7 percent and the 10-year adjusted rate from 11.2 to 48.6 percent. However, if the revised scoring instructions for the Static-99 could be assumed to apply to the RRASOR, this maneuver would be invalid. This again illustrates the problems with the rigidity of an actuarial scheme. In addition, the low-risk score found is quite inconsistent with the risk assessments that were based on clinical data.

You will note that there are two scores recorded for Dr. D. on the PCL-R. He did not have access to the client, which could account for the fact that both scores were lower than Dr. C.'s PCL-R score. Although Dr. D. is a highly trained and senior psychiatrist, cross-examination while in the witness stand revealed that he had accidentally made a mathematical error in his calculation of the PCL-R score. He had to revise his position markedly, and the score went down from 24 to 19. Previously, his score of 24 was within three points of Dr. C.'s score, a difference consistent with the standard error of measurement in the PCL-R manual.¹⁵ The revised lower score highlights once again how minor mistakes on scoring can have dire consequences.

It is my belief that all the assessors acted with honesty and integrity. To account for the differences in findings, one might postulate that the offender's scores changed over time due to a treatment effect. However, even though it is documented that the offender in this example made modest improvement in two highly intensive treatment programs in two dif-

ferent years, it can be seen from Table 1 that his scores actually deteriorated over time.

Paradoxically, the clinical assessments by all raters ranged from moderate to high risk, which demonstrates much greater reliability than the actuarial schemes. One factor that the actuarial schemes do not take into account is the likely sexually sadistic nature of the offender's psychic intent. This could only be inferred from a careful examination of the descriptions of his actions, since he did not admit to sexually sadistic fantasies, and phallometrics proved unhelpful in this regard.

Guided clinical assessments are effective because they take into account the factors that have been suggested to correlate with recidivism and apply them to a specific individual and specific circumstances. If, for example, the offender has had a cerebrovascular accident and is in a wheelchair, he is unlikely to resume a career as a predatory rapist. If he is on monitored sex drive-reducing medication, this can be applied to the predictive equation. Specific factors, therefore, can be applied to a unique individual in the context of his history and circumstances, and these factors can be linked with risk management endeavors. In this case, the sexually sadistic nature of the offenses is particularly significant. Other factors include limited improvement in two highly intensive programs, his unsettled lifestyle, likely deportation, lack of future plans, and no social support, all of which should be taken into account.

This case illustrates the unreliability of actuarial schemes in real-life practice. Since these schemes are regularly utilized by experts relied on by courts in hearings that may result in indeterminate sentences, experts in the field should be aware of their shortcomings. While these schemes are useful in guiding our clinical assessment and ensuring that we have taken the most significant factors into account, we should not be overly reliant on them, given the current state of the art.

In a previous paper, I outlined a step-by-step method for assessing sexual predators¹¹ that includes a comprehensive assessment.^{1,5} This assessment includes careful clinical interviews; psychological, medical, and psychophysiological assessment; and collection of extensive collateral information. Actuarial schemes are used to ensure that all factors have been taken into account, but the results are taken as guides rather than fixed predictions. The assessor takes into account risk management and considers

supervision and cascading. It is hoped that this article re-emphasizes this approach and highlights the fallibility of relying on actuarial schemes alone in real-life practice.

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