

Research Summary

Vol. 17 No. 2



March 2012

Combining Risk Assessment Tools

Question: How should we combine the results of different offender risk assessment tools?

Background: Accurate risk assessment is essential to the effective management of offenders in the criminal justice system. Information about offenders' likelihood of re-offending is routinely used in decisions concerning sentencing, community supervision, conditional release, and treatment planning.

Dozens of different risk assessment tools are routinely used in the provincial and federal correctional systems. Research has found that most of these tools have similar accuracy (in the moderate range). The similarity in predictive accuracy is not surprising because these measures target similar content (e.g., criminal persistence) using similar indicators (e.g., number of prior offences).

Although different risk tools usually provide similar conclusions, evaluators and decisionmakers are sometimes required to reconcile divergent findings (e.g., one tool identifies the offender as high risk and the other tool indicates low or moderate risk).

The professional community has yet to reach consensus on how to interpret conflicting results. Arguments have been advanced for selecting the highest, the lowest, an average, or the "best". Given that no measure is clearly superior to the others, selecting the best is equivalent to selecting a personal favourite.

Consequently, further research is needed to examine the extent to which information from more than one risk tool influences predictive accuracy.

Method: A meta-analysis was conducted on the three most common risk assessment tools for sexual offenders: RRASOR, Static-99R and Static-2002R. Each tool estimates the risk of sexual recidivism using commonly available criminal history information. The RRASOR focusses on sexual crime specific items, whereas the Static-99R and Static-2002R include both sexual crime specific items and items measuring general criminality (e.g., total prior convictions). The study included 20 samples, comprising 7,491 sexual offenders from Canada, the US and Western Europe.

Answer: Even though the RRASOR, Static-99R and Static-2002R have very similar items, they each added incrementally to the prediction of sexual, violent, and any recidivism. When two scales provided different estimates of sexual recidivism risk, the observed recidivism rates closely matched the average of the two estimates.

The results were different, however, for violent and general recidivism. For these outcomes, high scores on the measure of sex crime specific criminality (RRASOR) were associated with low (not high) rates of



violent and general recidivism. These results indicate that a) the risk factors for sexual and general recidivism are not identical, and b) certain individuals who are high risk for sexual crimes are less likely than the typical offender to commit non-sexual crimes (e.g., professionals with sexual interests in children).

Policy Implications:

- 1. Until the research has been conducted, it is difficult to know in advance how best to combine the results of different tools.
- 2. Averaging is a plausible option when different tools address the same riskrelevant characteristics. Averaging can degrade prediction, however, when measures are assessing different content. Consequently, it is important for evaluators and decision-makers to understand what is being assessed by particular risk tools.
- 3. Further research is needed to develop standardized measures of the common risk-relevant characteristics underlying the existing risk assessment tools. This would allow evaluators to speak about the psychologically-meaningful factors responsible for recidivism risk, rather than simply presenting a number or a label (e.g., "high risk") associated with a particular score.

Source: Babchishin, K. M., Hanson, R. K., & Helmus, L. (2011). The RRASOR, Static-99R and Static-2002R all add incrementally to the prediction of recidivism among sex offenders (Corrections User Report 2011-02). Ottawa: Public Safety Canada.

For further information:
R. Karl Hanson, Ph.D.
Corrections Research
Public Safety Canada
340 Laurier Avenue West
Ottawa, Ontario K1A 0P8
Phone: 613-991-2831 Fax: 613-990-8295
E-mail: Karl.Hanson@ps.gc.ca

Also available on Public Safety Canada's website at: www.PublicSafety.gc.ca